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THE EFFECT OF CHANGE ON PORTFOLIO STRUCTURE

Introduction

That is an ambitious title for a paper and certainly was not of my choosing. So, I propose to modify the subject somewhat and discuss those aspects of some important recent economic and technical changes that have influenced or could influence the policies of portfolio managers and corporate treasurers and hence the structure of their portfolios.

In this context, 'portfolio' means holdings of what might be termed 'money market securities', i.e. Australian Government Treasury bonds and Treasury notes, debentures and promissory notes of semi-governmental bodies, bills of exchange, promissory notes of corporations and negotiable certificates of deposit. The term 'portfolio' as used here, does not include equities or company debentures and notes.

Interest rates

Perhaps the most important influence on the structure of portfolios in recent times has been the increased frequency of change in interest rates and the amplitude of those changes.

Moreover, accelerating and persistent inflation has required higher levels of interest rates to achieve monetary restraint.

Non-bank financial intermediaries and other investors have sought to reduce their exposure to capital losses from rising interest rates by taking steps to reduce the length to maturity of their portfolios. The trend towards investment in shorter dated securities, which has occurred in other countries also, seems unlikely to be halted permanently until governments maintain disciplined anti-inflationary policies.

Portfolio management performance

Another development over the past year or two has been the increasing emphasis placed on portfolio management performance. This is largely an evolutionary development but has been given impetus by the problems inflation has caused for fixed interest managers.

In pursuit of better returns from their investments, portfolio managers have switched funds on deposit with banks and market intermediaries into short dated securities such as bills, promissory notes and negotiable certificates of deposit. Institutions have moved from simply holding securities to maturity or for some pre-determined period to being prepared to sell for a profit. Others are engaged in riding the yield curve and in switching.

This increasing readiness of portfolio managers to trade in securities has helped to deepen the market. Only limited statistics are available of the very considerable growth over the past year or two in the volume of transactions in money market securities. Some idea of the magnitude might be gauged from the turnover of authorised dealers in securities which in 1979/80 at $35,000 million approximately was over 30 per cent higher than in 1978/79.

The increase in trading activity has also lead to an increased demand for short dated securities and to a shortening of the average length to maturity of investors portfolios.

The move by investors to hold (and trade in) short term securities in preference to or in addition to lodging funds on deposit with authorised dealers and merchant banks implies that the balance sheet aggregates of those intermediaries have expanded more slowly than might otherwise have been the case and demands on their shareholders for capital have, consequently, been less.

Tap and tender system

Let us turn now to the recent fundamental changes to the arrangements for selling government securities.

It is far too early to attempt to assess the effect on the structure of portfolios of the tap system for issuing Treasury bonds and the tender system for issuing Treasury notes. However, the new tap and tender system has important implications for investment managers and for that reason it is proposed to discuss the subject in some detail.

It will be recalled that under the previous cash and conversion loan system, issues of bonds were made for a limited period of days, three or four times a year, at a fixed price and yield. Under the tap system, new bonds of some description are available on tap more or less continuously at a price and yield which are subject to variation on any day.

In the case of Treasury notes, these were available on a tap basis at prices and yields that were changed infrequently. Under the tender system, the amount or volume of notes available is limited and the prices and yields are determined by the successful bidders.

In moving to a tap and tender system, the authorities aimed to achieve:

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- greater flexibility in the adjustment of official interest rates and hence greater scope for responsiveness to market forces;
- potentially more scope for influence over the quantity of securities issued;
- greater flexibility in the maturity of securities issued;
- greater certainty for investors as to the prospective availability of new securities;

and overall a recognition by the authorities of the market's proper role in determining the yields at which securities are sold." 1.

In short, the new arrangements seek greater efficiency in the marketing of public sector paper and in the conduct of monetary policy.

The move from a system of periodic cash loans to a tap system has important implications for the Reserve Bank's open market operations. The Bank is now more concerned with growth in the monetary aggregates than with the level of interest rates.

It is clear that tap issues, coupled with the Treasury note tenders, have brought about the possibility of far greater flexibility in interest rates in response to market pressures. There are now bonds continuously available, the demand for which, over a period, will determine whether changes are required in the location or shape of the yield curve.

The Reserve Bank will, of course continue to conduct its open market operations taking, as it has done, initiatives to buy securities or, as has mostly been the case, to sell securities from its portfolio.

"Yields on new issues and on secondary market sales should now move up or down together whenever movement is dictated by market conditions and/or the need to place additional government paper." 2.

There are two minor aspects relating to the tap system that are perhaps worth mentioning. Firstly, the weekly releases by the Treasury of the total subscriptions to each tap issue should be interpreted with great care if one is looking to that source as a guide to the degree of success of the Government's debt raising programme or as an indicator of the relevance of the current level of yields on government securities. Secondly, variations made to prices and yields of current tap issues should not necessarily be taken as an indication of the official view of the possible future trend of interest rates generally.

Treasury notes

Before leaving the subject of bonds and notes, I would like to draw attention to some technical aspects of the secondary market in notes.

The major holders of, and traders in, Treasury notes have been the trading/savings banks and the authorised dealers. Of the $3,800 odd million of Treasury notes outstanding immediately before the seasonal rundown in liquidity got under way in April this year, holders of Treasury notes, other than banks and authorised dealers, accounted for $225 million or about 6 per cent of that total.

The lack of interest in Treasury notes by other than banks and dealers has been attributed to the lower yields obtainable compared with those on other short term instruments, such as bank bills and certificates of deposit.

As the issue yields on Treasury notes are now more directly determined by market forces, it is expected that the gap between yields on bank paper and on Treasury notes will narrow sufficiently to attract investors, other than banks and authorised dealers, into those notes.

1. A.R.G. Prowse – "Aspects of the Tap and Tender System" – The Securities Institute of Australia Seminar, Melbourne 11 July 1980.

2. M.J. Phillips – "The Central Bank and Government Securities" – The Securities Institue of Australia, Melbourne 11 July 1980.

There is also another factor that could, at times, lead to authorised dealers offering to sell Treasury notes to their clients at yields well above those at which they were originally issued at tender. To explain the background to that point, authorised dealers feel that because of their special relationship with the authorities, they (the dealers) have an obligation to ensure that the Treasury note tender system functions as intended and that no tender closes without bids for the full amount offered. That approach of authorised dealers, referred to as 'covering the tender', means that they must have the capacity or room in their portfolios to take up the notes for the full amount of the tender. In turn, dealers, at times, will undoubtedly need to make forced sales of Treasury notes already in portfolio to make room for the notes acquired in the latest tender. Those forced sales will, of their nature, be at above market yields and more often than not at a loss to the dealers.

Portfolio or investment managers, might, therefore, care to take a new look at Treasury notes – in particular, when the volume being offered at weekly tenders is repeatedly high, there should be some bargains around.

In any case, if large volumes of notes are put up at tender, dealers will be forced to seek out buyers beyond the banks and public authorities.

Some indication of the magnitude of Treasury note requirements in the future might be got from the fact that non-official holdings of liquid assets and government securities fall by about $2,000 million in the period mid March to mid June. It would be reasonable to assume that this financial year the authorities will be aiming to issue sufficient notes to avoid the need in the final quarter to monetise non-government paper.

Earlier speakers have, rightly, reminded us that the Treasury note, in this country, is the most liquid asset for any portfolio. Even life offices are now recognising the need for a primary liquidity buffer. It is said that in the U.S.A. virtually all major industrial and finance companies carry a portfolio of Treasury bills (their equivalent of our Treasury notes) as a first line of liquidity.

Some funds managers would probably keep note, at least for their general information, of the average yields at which Treasury notes are being issued. Fewer, perhaps, enquire as to the yields at which notes are subsequently traded. Tables I and II illustrate that the grossed up yield available from riding the yield curve can be much higher than the original issue yield and can compete with some other forms of short term investments.

The issue yields on Treasury notes under the tender system fluctuate weekly and will continue to do so, quite substantially at times. These fluctuations will often be a reflection of technical influences, such as the desirability or otherwise of the maturity date, the need to maintain statutory holdings (e.g. the requirement that savings banks hold 7½ per cent of deposit liabilities in the form of balances with the Reserve Bank and Treasury notes), the availability of money, etc.

Accordingly, movements in Treasury note issue yields should not be interpreted as indicative of the direction in which yields on other government securities might be headed. Similarly, too much should not be read into changes that are made to the rediscount rate for Treasury notes under a tender system.

Volatility of bond prices

The wider and more frequent fluctuations in the yields on government securities over recent years, has prompted investment managers to take a closer look at the volatility of bond prices.

It is generally understood that for a given change in yields, the movement in price of a bond varies directly with its length to maturity.

However, two other factors also affect the degree of movement or volatility of bond prices. These are the interest coupon rate and the general level of bond yields.

These three causal factors are usually summed up in the following rules:

> All other things being equal, for the same percentage change in yield, the volatility of the price of a bond increases
>
> (i) as maturity lengthens
> (i.e. the longer the maturity, the greater the price volatility);
>
> (ii) as the interest rate coupon falls
> (i.e. the lower the coupon, the greater the price volatility);
>
> (iii) as yields rise
> (i.e. the higher the level of yields from which an interest rate or yield movement starts, the greater the volatility).

The practical application of these three points might be summarised as follows:

- For maximum capital gains from falling yields, long dated low interest rate coupon bonds are preferable.
- For minimisation of capital losses from rising yields, short dated high interest rate coupon bonds are preferable.
- the risks and rewards from investment in bonds (both Australian Government and semi-governments) are greater in high yield markets, such as we have at present, than in lower yield markets such as prevailed a few years ago.

Tables III, IV and V illustrate the effect of these three points. Many switches, of course, have as their basis one or another of these principles.

Semi-government securities

The moves over the past few years towards the syndicated underwriting by banks, merchant banks and others in addition to the traditional underwriters, the stockbrokers, have enabled semi-government bodies to raise considerably more funds.

Portfolio managers who previously have not invested in semi-government debentures are now receiving offers from underwriters to take up these securities at the primary issue stage.

The recently announced arrangements agreed by the Loan Council affecting the marketing of semi-government debt have been described as the most significant changes since the Gentlemen's Agreement was adopted in the mid 1930's.

The changes represent a more flexible and market-oriented approach to borrowings by semi-government and local authorities. The maximum interest rates for semi-government borrowings are now more immediately locked into movements in yields on Australian Government Treasury bonds. The maximum rates to apply are now announced usually weekly, on Fridays.

Changes made to the underwriting or placement fees should improve the return available to investors in longer dated new issues.

The issue of promissory notes by two semi-government authorities is referred to in the next section of this paper.

Promissory notes (or commercial paper)

The trend towards investing in shorter dated securities has been facilitated, somewhat by coincidence, by new issues of short term claims from public and private sector borrowers.

The issue over the past year or two of promissory notes by two Commonwealth statutory authorities (Telecom Australia and Australian Wheat Board) and by two semi-government authorities (State Electricity Commission of Victoria and State Energy Commission of Western Australia) has widened the range and substantially increased the volume of short dated, top quality, negotiable paper available to portfolio managers and corporate treasurers.

This paper is highly liquid, enjoys 30/20 status and has the added advantage over bills that when onsold no contingent liability is incurred. Moreover, the semi-government notes carry the guarantee of the state government.

These notes generally trade in the market place at yields in the vicinity of those available on bank bills of similar maturity. There is a view, however, that the notes of Commonwealth statutory authorities should be traded at yields as much as one quarter per cent below bank bills.

Perhaps one might add that the issue of promissory notes and also bank bills by the Wheat Board in huge volume and within brief time spans has provided banks, merchant banks and authorised dealers with new underwriting opportunities. Those institutions have, of course, the capacity to absorb those securities into their own portfolios and then sell them in an orderly manner.

The increasing number of promissory note issues by major corporate borrowers has provided portfolio managers with an investment opportunity similar to top quality non-bank bills. Over 30 companies have now become issuers of promissory notes.

The yields available on corporate promissory notes are slightly lower than those available on prime non-bank bills; again, for the reason that no contingent liability is incurred if onsold.

Portfolio managers have a responsibility in this market to ensure that only 'blue-chip' paper is acceptable. Borrowers lacking 'blue-chip' status should use bank bills or non-bank bills where a second name gives added protection to the investor.

The future

When the market was formally established not much over 20 years ago, its business was simply the lodgement of funds by clients with dealers against the security of Commonwealth Treasury bonds maturing within three years. In those days, attractive short term government or private paper was not available in large amounts nor was there a market for whatever paper was available.

Today there is an active, reasonably deep and highly competitive market in Treasury bonds maturing within five years and in other securities since introduced: Treasury notes in 1959, bills of exchange in 1965, CDs in 1969 and promissory notes in 1977.

There is available to portfolio managers a relatively greater number of market intermediaries – authorised dealers, stockbrokers, merchant banks and banks – with whom to do business than in any other money or securities market anywhere.

And what factors are likely to influence the investment and trading policies of portfolio managers in the immediate future?

To begin, expectations of changes in interest rates will continue to be the dominant factor in determining portfolio structure.

Secondly, the growing tendency of clients of the market to buy securities and to trade in them will not only increase the total demand for short dated government and private paper but, in the case of institutional type clients, reduce the average length to maturity of their portfolios.

Thirdly, the expected easing of the liquidity requirements on savings banks and, possibly, also, on trading banks, as well as the likely progressive relaxation of the 30/20 provisions, will prompt banks, life offices and super-

annuation funds to consider investing in shorter dated government securities in anticipation of that greater freedom.

With those factors tending to concentrate demand for short term securities, government and private borrowers will continue to find it difficult to raise long term loan moneys.

Another development in the immediate future seems likely to be the greater use of promissory notes by semi-government borrowers and more positive steps towards creating a secondary market for semi-government debentures. A significant shift from private loan raisings by semi-governments to public raisings is expected to result.

Finally, portfolio managers will appreciate that, following the introduction of the tap system for issuing Treasury bonds, there has been a major change to the ground rules of the market in which they are transacting business. Bond yields are key indicator rates and as they will now be more readily responsive to market pressures, more flexibility in interest rates generally can be expected.

Stockbrokers, authorised dealers, banks and merchant banks whose views and actions will, in future, more strongly influence the level of interest rates have now the responsibility of exercising caution and experience in this sensitive area.

TABLE I

Purchase of Treasury note with 62 days to maturity at a yield of 10.8% p.a.	$981,985
Sale of that Treasury note with 32 days to maturity at a yield of 10.5% p.a.	990,878
Profit represents a return of 11.02% p.a.	$ 8,983

TABLE II

Purchase of Treasury note with 32 days to maturity at a yield of 10.5% p.a.	$990,878
Sale of that Treasury note with 10 days to maturity at a yield of 9.75% p.a.	997,336
Profit represents a return of 10.81% p.a.	$ 6,458

TABLE III

Longer Maturity — Greater Price Volatility

	Capital Price $		Capital Gain	
	11.80%	10.80%	$	%
10.20% 2/85	94.39	97.83	3.44	3.64
10.20% 2/90	90.91	96.44	5.53	6.08

TABLE IV

Lower Coupon — Greater Price Volatility

	Capital Price $		Capital Gain	
	11.80%	10.80%	$	%
5.4% 5/87	70.41	74.25	3.84	5.45
10.4% 5/87	93.50	98.07	4.57	4.89

TABLE V

Higher Level of Yields — Greater Price Volatility

10.2% 2/82 bond
Yields fall by 10%

Capital Price $		Capital Gain	
7%	6.3%	$	%
104.82	105.93	1.11	1.06

Capital Price $		Capital Gain	
11%	9.9%	$	%
98.81	100.42	1.61	1.63