## BALANCE SHEET RESTRUCTURING AND INVESTMENT ${ }^{1}$

## INTRODUCTION

There have been two distinct phases in the evolution of corporate balance sheets over the past decade. The first - the period from 1984'85 to 1989/90 - was one of rapid expansion. Corporate profits, recourse by companies to external funding, asset prices and business fixed investment all rose strongly. The corporate sector began to rely more heavily on debt as a source of external funding and consequently leverage increased.

The second phase - the past three years has seen a partial reversal of this process: asset prices have fallen, and corporate balance sheets have been strengthened by a decline in leverage. The process of deleveraging, coupled with the sluggishness of the economy and an uncertain investment climate, has meant that business fixed investment has been extremely weak and, to date, has not become an engine of recovery in the way which would otherwise be expected. When the economy recovers more strongly and uncertainty declines, companies that have restructured their balance sheets should be in a sound position to expand their investment.


#### Abstract

This article documents the evolution of corporate balance sheets over the past decade. The following section quickly outlines the first phase, much of which is already familiar. Then, the recent 'deleveraging' process and its possible implications for investment are considered.


## BALANCE SHEET AND INVESTMENT EXPANSION: 1984/85-1989/90

Following the 1982/83 recession, output rose strongly, and wages policies simultaneously contributed to a rapid restoration in the share of national income going to profits. Consequently, incentives to invest improved. Graph 1 illustrates, using two measures of the rate of return on the aggregate capital stock, and a conventional measure of the ratio of corporate gross operating surplus to GDP. This period of strong profitability, confidence and rising investment continued over several years. Between 1983/84 and 1989/90: aggregate measures of the profit share averaged levels not seen since the late 1960s; real business investment doubled; the private corporate sector's aggregate real capital stock increased by over a quarter in real terms;

1. This article draws on material in 'Balance Sheet Restructuring and Investment', Reserve Bank of Australia Research Discussion Paper, forthcoming, by Karen Mills, Steven Morling and Warren Tease. See also Philip Lowe and Geoffrey Shuetrim 'The Evolution of Corporate Capital Structure: 1973-1990', Reserve Bank of Australia Research Discussion Paper No. 9216.

PROFIT SHARE AND RETURNS ON CAPITAL

*1992/93 data are estimates.

## GRAPH 1

and the share-market value of the listed company sector more than trebled, despite the fall in share prices in October 1987. Graph 2 shows business fixed investment during the 1980s.

The corporate sector relied on a number of sources of finance to fund the expansion in assets. The recovery in profits, the liberalisation of financial markets and the increase in share prices during the 1980s were conducive to increases in all sources of funding. Graph 3 provides some aggregate information on the sources of corporate funding over the 1980 s. ${ }^{2}$ The recovery in economic activity from mid 1983 boosted cash flows, the dominant source of funding for the bulk of companies, which rose continually until reaching a plateau in $1988 / 89$. With the strong incentives to invest and buoyant confidence, investment (in fixed and financial assets) outstripped cash flows and companies increased external raisings of funds. Equity raisings were strong. Companies also increased their debt levels. Higher debt was supported by the rising cash flows and higher equity values, which boosted the perceived collateral of many companies.

The increased use of debt financing in the 1980s implied higher levels of corporate gearing (Table 1). This rise in debt, together

BUSINESS FIXED INVESTMENT


## GRAPH 2

## TABLE 1: GEARING AND INTEREST COVER <br> (Annual Average)

| Period | Gearing <br> (ratio) | Interest Cover <br> (times) |
| :--- | :---: | :---: |
| $1970 / 71-74 / 75$ | 0.44 | 5.64 |
| $1975 / 76-79 / 80$ | 0.45 | 3.94 |
| $1980 / 81-84 / 85$ | 0.49 | 3.04 |
| $1985 / 86-89 / 90$ | 0.71 | 2.19 |

Sources: See Appendix.

SOURCES OF FUNDS


## GRAPH 3

2. The data in this graph are from a sample of 80 large non-financial companies obtained from the STATEX database of the Australian Stock Exchange (ASX).
with high interest rates which prevailed in the 1980 s, meant that the extent to which operating revenues could meet interest expenses - 'interest cover' - declined sharply (Table 1).

## BALANCE SHEET RESTRUCTURING POST 1989/90

By the end of the 1980 s, interest cover had reached very low levels. The cyclical slowing in the economy in 1990 further reduced the ability of firms to service their debt. In addition, asset prices fell and, therefore, so did the value of collateral backing corporate debt. The period of rapid balance sheet expansion came to an end in 1988/89 and the size of corporate balance sheets has been relatively stable in nominal terms over the past three years.

Around the same time, a long-standing bias favouring debt finance over new equity was breaking down, partly as a result of the elimination of the double taxation of dividends. The real cost of equity was falling relative to that of debt (see Table 2). This gave firms a double incentive: not only was there an urgent need to conserve cash (which meant shedding assets in some cases), but there was an increasing incentive to restructure financial liabilities in favour of greater equity participation.

The effects of these forces can be seen in the sources of funding in Graph 3 and Table 3.

Recourse to external finance fell sharply between 1989/90 and 1991/92. Initially, the corporate sector's demand for both new debt and equity was reduced. The increase in debt of the listed corporate sector in 1989/90 was half that of the previous year. It was negligible the following year, and firms actually reduced debt outstanding in 1991/92. Equity raisings, the other main source of external funds, were negligible through 1989/90 and 1990/91, as a weakening share market discouraged new equity raisings.
Declining cash flows initially meant that firms could not restructure their finances without repercussions for operating procedures and asset structures. Operating costs had to be cut, and this had implications for employment. Firms also began to reduce their holdings of financial assets in 1989/90 and 1990/91 in an attempt to fund the reduction in debt (Table 3). In addition, investment in fixed assets was pared back sharply as balance sheet restructuring exacerbated the normal effects of a slowdown in the economy on investment (Graph 2). The fall in investment has, as a result, been very large by historical standards. A big fall in non-residential construction was to be expected given the oversupply of commercial property space in most central business districts. The fall in plant and equipment was even more dramatic: by 1991/92, at around 6 per cent of GDP, it was at its lowest point in the past 40 years.

As a result of this process of balance sheet restructuring, aggregate gearing has been

TABLE 2: REAL AFTER-TAX COST OF DEBT AND EQUITY
(\%)

| Period | Debt | Equity | Cost of Equity over Debt |
| :--- | :---: | :---: | :---: |
| $1969 / 70-73 / 74$ | -3 | 14 | 17 |
| $1974 / 75-78 / 79$ | -6 | 17 | 23 |
| $1979 / 80-83 / 84$ | -2 | 14 | 16 |
| $1984 / 85-88 / 89$ | 2 | 11 | 10 |
| $1989 / 90-91 / 92$ | 5 | 10 | 5 |

Source: See Appendix.

## TABLE 3: CHANGE IN CORPORATE FINANCIAL POSITION

(\$ billion)

|  | $\mathbf{1 9 8 9 / 9 0}$ | $\mathbf{1 9 9 0 / 9 1}$ | $\mathbf{1 9 9 1 / 9 2}$ | $\mathbf{1 9 9 2 / 9 3}$ <br> Sept qtr |
| :--- | ---: | :---: | :---: | :---: |
| Change in: |  |  |  |  |
| Liabilities | 22.0 | 9.2 | 1.6 | 0.0 |
| -Debt | 21.1 | 9.4 | -8.4 | -1.9 |
| -Equity | 0.9 | -0.1 | 9.9 | 2.0 |
| Financial Assets | -7.2 | -4.5 | -5.4 | -1.9 |

Source: ABS Financial Accounts, Cat. No. 5232.0 (September quarter 1992).
reduced. Graph 4 contains a number of measures of corporate indebtedness. The first plots gearing - the ratio of debt to the book value of equity - of the 80 companies taken from the STATEX sample. This measure shows that gearing peaked at around 75 per cent in 1988/89 and then fell by around 8 percentage points to 67 per cent in 1991/92. This probably understates both the rise and subsequent fall in gearing, because the data

CORPORATE DEBT


GRAPH 4
are based on a sample of companies which had been in operation continuously over the ten years ending in 1991/92. Companies that geared up significantly during the 1980s and subsequently failed are excluded from this sample. Adding back some of these companies (the second line in Graph 4), shows a much bigger rise and fall in gearing during the late 1980s. ${ }^{3}$

Comprehensive balance sheet data are only available up to 1991/92 but the ratio of business credit to GDP - the line in the lower panel of Graph 4 - has fallen further. This suggests that the process of deleveraging has continued during 1992/93, a conclusion supported by the Financial Flow accounts for the September quarter. New equity raisings also gathered pace in 1992 (Table 3), as expectations of recovery led to somewhat higher share prices. This enabled a more rapid reduction in debt without major asset sales.

The lower gearing of the corporate sector has boosted its cash flow and interest cover. This has been greatly aided by the reduction in nominal interest rates which, in turn, reflect the progressive easing of monetary policy and the sharp reduction in inflationary expectations (Graph 5). Cash flows and interest cover have risen and are now significantly above their troughs, even though the recovery in profits before interest payments has been relatively modest.

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GRAPH 5

## IMPLICATIONS FOR INVESTMENT

In the short term, some focus on financial restructuring may remain. A few firms are still highly geared and have problems to work through. For many firms, however, the process of restructuring appears to have advanced a long way (though the extent to which it has been completed is conjectural - there is no good yardstick of the appropriate level of gearing). Overall, these developments suggest that the imperative for most firms to reduce debt should now be considerably reduced, and that many firms should be in a better position to expand their operations if other conditions are favourable.

Some of these conditions are already falling into place. For example, operating profitability per unit of output - measured as the share of gross operating surplus in nominal GDP - has remained higher than in other periods of weakness in the economy - for example in the mid 1970s and early 1980s. Aggregate rates
of return on capital also remain relatively high compared with the 1970s and early 1980s (Graph 1). Furthermore, the strong recovery in equity prices in recent months suggests that expectations are for further solid gains in profits.

Cash flows have also been improving. The recovery in cash flows is much the same as that experienced after the 1982/83 recession and stronger than after the 1974/75 recession (Graph 6). There are some important differences, however, in the behaviour of cash flows in the present cycle.

CASH FLOW OVER THE CYCLE


GRAPH 6

The most important is that the pick-up in cash flows has not reflected a substantial rise in corporate sales and revenue - which might signal a rise in demand that would encourage physical investment. Rather it has resulted from cost cutting and productivity gains, and from the reduction in interest payments due to reduced corporate debt levels and significantly lower nominal interest rates. The sluggishness in corporate revenues reflects the fact that output growth has been relatively weak during the recovery from the trough in June 1991. This weak output growth has meant that firms are operating well below capacity; available measures suggest that firms are operating with excess capacity at around the levels of the 1982/83 recession. An acceleration of growth and reduction of excess capacity will be important for the recovery in investment.

## CONCLUSION

The early 1990s to date has been a period of balance sheet repair. Borrowings have been cut back and repaid. New equity raisings have taken place. Aggregate measures of gearing have declined. This process exacerbated the effects of other factors holding back investment. As a result, investment has fallen more sharply than in earlier downturns despite
the strength of operating revenues relative to earlier episodes.
With firms' balance sheets in better shape and interest cover improved, however, companies are in a good position to respond to improved economic conditions in the future. An acceleration of growth and recovery of confidence would mean that companies could focus less on financial restructuring and more on the positive underlying fundamentals for investment. This should be compatible with relatively rapid growth in new capital spending.

## APPENDIX: DATA SOURCES AND METHODS

The data in Graphs 3 and 4 are based on a sample of 80 large non-financial companies taken from the STATEX database of the Australian Stock Exchange. In Graph 4, the line 'including non-survivors' is obtained by adding in the amount of debt and shareholders' funds for 13 failed companies, taken from previous STATEX samples, to the totals for the most recent 80 -company sample.
In Table 1, the gearing ratio is the ratio of debt to equity at book value. For the 1980s, this is taken from the STATEX 80-company sample. Earlier data are taken from the Reserve Bank Bulletin Company Finance Supplements. Interest cover is the ratio of net operating surplus to net interest payments for private corporate trading enterprises, taken from the National Accounts.

In Table 2, the cost of equity measure is based on a simple earnings/price model in which the required return on equity equals the sum of the after-tax earnings-price ratio and the expected growth in real earnings. The latter was estimated as a 10-year moving average of growth in real non-farm GDP. The cost of debt was calculated using the average overdraft rate, adjusted by the marginal corporate tax rate and deflated by the four-quarter-ended change in the implicit consumption deflator from the National Accounts.

The data in Graphs 1, 2, and 6 are from ABS Cat. No. 5204.0 and 5221.0, Australian National Accounts, Income and Expenditure and Capital Stock releases.


[^0]:    3. See Appendix for the method of calculation of the 'including non-survivors' line.
