CORPORATE PROFITABILITY, INFLATION, AND THE AUSTRALIAN CAPITAL MARKET

by

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INTRODUCTION
The purpose of this article is to briefly present some evidence on a significant trend in the real profitability of the Australian corporate sector since the early 1970s and to relate this trend, together with Australia's experience of inflation, to some substantial changes which have occurred over the past ten years both in the financial policies of Australian corporations and in the primary and secondary dimensions of the Australian capital market.

Due to the constraints of brevity, the article is not designed to be rigorous in its analysis of the issues it raises, nor definitive in the conclusions it draws. Rather, its thrust is somewhat exploratory, with the intent of highlighting some major developments in the Australian capital market which may warrant further research.

THE SECULAR DECLINE IN AUSTRALIAN CORPORATE PROFITABILITY
The first graph presented overleaf plots the gross operating surplus of the Australian corporate trading enterprises sector as a percentage of Australian Gross Non-Farm Product over the period from 1959-60 to 1981-82. This percentage variable essentially measures that proportion of the value added in the Australian non-farm sector which is attributable to trading (i.e. non-finance) corporations after wages, salaries and supplements have been paid to the labour which they employ. It represents an indication, therefore, of the real profitability (before depreciation, interest and income tax but after the stock valuation adjustment) of Australian trading corporations taken as a whole.

In the 14 financial years from 1959-60 to 1972-73, the corporate trading enterprises sector's share of Gross Non-Farm Product averaged 15.5 per cent. The precipitous decline in this income share in the two years 1973-74 and 1974-75 and the causes of that decline have been well publicised. Suffice to say, no sustained recovery in the corporate sector's income share has been recorded and in the 9 financial years completed since 1972-73 that income share has averaged only 12.7 per cent.

This decline in income share has occurred in the context of considerably subdued economic growth in Australia. Accordingly, an absolute rather than merely a relative redistribution of value added has occurred in the Australian non-farm economy from the corporate sector to the wages and salaries sector, with adverse consequences for corporate profit margins and real rates of return. The maintenance of its income share at the dramatically lower levels since 1972-73 suggests, therefore, that a secular decline in the real profitability of the Australian corporate sector has occurred.

Profits reported by Australian trading corporations have to a large extent, however, masked the severity of this decline. Graph 2 plots some estimates of the historical cost after tax profits of the Australian corporate trading enterprises sector in each financial year since 1963-64. These profit estimates have been prepared by the Institute of Applied Economics and Social Research at the University of Melbourne on the basis of Australian National Accounts data and are plotted as an index with a base of 100 in 1963-64.

Comparison of this index with the index of the Australian non-farm product implicit price deflator reveals that the growth in the reported after tax profits of the corporate sector has been virtually equivalent to general price inflation recorded since 1972-73, whilst out-performing general price inflation over the period as a whole.

After tax profits determined on the basis of historical cost accounting conventions, however, normally overstate a company's actual earnings performance in times of inflation. Overstatement is primarily due to both the inclusion in trading profits of "holding gains" on inventory and the deduction from those profits of...
depreciation charges based on the historical rather than the replacement costs of fixed assets.

The Institute of Applied Economic and Social Research calculates adjustments to its estimates of the reported profits of the Australian corporate trading enterprises sector in order to remove the effects of holding gains on inventories and of insufficient charges for the consumption of the services of capital equipment. The resultant concept of profit, defined as the gross value of receipts less all costs (including capital costs) measured at current values, is something akin to that proposed by the Australian accounting profession in its initial versions of Current Cost Accounting.

The Institute’s estimates of “current cost” after tax profits are also plotted in index form in Graph 2 over the period since 1963-64. A comparison of this index with that of the unadjusted profits reveals that, with the onset of double digit inflation in the early 1970s, an extremely large and increasing divergence has arisen between the historical cost profits reported by the Australian corporate sector and the profits it has actually earned in terms of current net margins obtained from current production.

On the basis of the Institutes estimates, “current cost” profits were only 26.5 per cent of historical cost profits for the Australian corporate trading enterprises sector in 1981-82. The size of this discrepancy highlights the extent to which historical cost profits for the corporate sector as a whole have become largely illusory after the recent sustained period of relatively high price inflation experienced in Australia since the early 1970s.

Examination of the index of “current costs” profits relative to the inflation index is, perhaps, even more revealing. On the Institute’s estimates, the current cost earnings of the Australian corporate sector in 1981-82 were only a little more than one and one half times greater than those recorded 18 years earlier in 1963-64. Over the same period, the non-farm product deflator has increased by a multiple of over four times. Moveover, aggregate “current cost” profits of the sector have grown by only 16.6 per cent since 1972-73, compared to an increase in the general level of prices of 79.7 per cent since then.

This comparison adds considerable perspective to the developments highlighted in Graph 1 and serves to emphasize the seriousness of the decline in real profitability experienced by the Australian corporate sector since 1972-73.

**IMPLICATIONS FOR AUSTRALIAN CORPORATE FINANCIAL POLICIES**

The decline in real corporate profitability in Australia since 1972-73, when related to the prima facie formulation of dividend decisions on the basis of growing but largely artificial historical cost profits, has in the past led to some concern that internal sources of funding for Australian corporations have been seriously debilitated, with a consequent increase in the extent to which external sources of finance have been required in order to fund capital expenditure.

The information provided in Graph 3 casts considerable doubt on the basis of this concern. It plots the magnitude of internal sources of funds available to the corporate trading enterprises sector from undistributed income and depreciation allowances as a percentage of the volume of capital formation (gross fixed capital expenditure and inventory investment) undertaken by that sector in each of the financial years from 1959-60 to 1980-81.

As might be expected, the value of the resultant variable fluctuates markedly from year to year. In order
to assist in the detection of any trend, the variable has been averaged in respect of each of the four business cycles completed (from peak to peak) over the period under analysis.

The plot of these business cycle averages reveals no definite trend over the period under examination, with the average of 76.7 per cent in respect of the cycle just completed only modestly below that of the average in the first cycle (79.5 per cent). This suggests that the retention of funds from operations by the Australian corporate sector has broadly kept pace with its gross capital outlays over the period from 1959-60 to 1980-81.

To a certain extent this result can be attributed to the decline in the relative magnitude of gross capital formation actually undertaken by the Australian corporate sector since 1973-74; which decline is, prima facie, a direct consequence of the decimation of the real profitability of that sector since the early 1970s. In the three full business cycles completed over the period 1959-60 to 1973-74, gross fixed capital expenditure and inventory investment by the corporate trading enterprises sector averaged 9.55 per cent of Gross Non-Farm Product. In the business cycle extending from 1974-75 to 1980-81, this proportion declined sharply to 6.39 per cent.

It is postulated, however, that another factor has also been responsible for the maintenance of the level of internal funding of capital expenditure. Ostensibly, Australian corporations have recognised the increasing artificiality of reported historical cost profits in times of sustained high price inflation and have made concomitant efforts to limit the level of dividends paid out of those profits.

Some evidence on this score is presented in Graph 4, which plots for the years 1960 to 1981 the dividend payout ratio (ordinary and preference dividends to historical cost after tax profits) of the All Industrials Constant Group as measured in the Reserve Bank of Australia’s annual survey of the financial accounts of companies in Australia.

From a peak of 68.6 per cent in the recession year of 1962, the payout ratio of the industrial companies surveyed has shown a virtually steady decline to its level of approximately 47 per cent in 1981. In the 8 year period from 1974 to 1981 the payout ratio averaged 48.2 per cent, an appreciable reduction from the average of 58.5 per cent recorded in the preceding 14 year period.

Moving away from a consideration of the direct implications of the secular decline in Australian corporate profitability, the theme of the adaptation of corporate financial policies to an inflationary environment can be developed further. Whilst the level of external raisings of new funds by corporations relative to their gross capital formation has been more or less constant over the past two decades, there is some evidence which indicates that within the aggregate of new external funds raised the magnitude of equity capital has declined relative to that of debt capital.

Graph 5 plots the ratio of new equity capital raisings to total new external fund raisings (trade credit, financial debt and equity) for the Australian corporate trading enterprises sector over the period from 1965-66 to 1980-81.

The ratio varies considerably, as the pattern of equity capital raisings in Australia is one of marked cyclicity, largely due to the close nexus between the primary issue market for equity securities and the secondary market for those securities and the fact that price levels in the stockmarket anticipate and reflect the vicissitudes of both the international and the domestic business cycle. Accordingly, averages for the three full
business cycles completed in the period under analysis have also been plotted on the graph.

An examination of the graph suggests that a major structural change occurred in the early 1970s with respect to the basic mix of new funds raised in the Australian capital market. From an average of almost 30 per cent in the late 1960s, the proportion of new funds raised by means of equity securities underwent a major downward shift between 1968-69 and 1971-72 and has averaged approximately 20 per cent from 1969-70 onwards.

The negative effect of this structural change on the financial gearing levels of Australian industrial companies is highlighted in Graphs 6 and 7. Graph 6 plots the ratio of total liabilities (excluding minority interest) to equity (shareholders’ funds plus minority interest) for the Reserve Bank’s All Industrials Constant Group of companies over the period from 1960 to 1981.

This ratio is shown to increase almost relentlessly over the period as a whole, from level a of 68.1 per cent in 1962 to over 100 per cent in 1981. The one and one half times increase in this ratio, however, overstates the increase in the actual gearing levels of industrial companies over the 22 year period.

A superior measure of financial gearing is provided by the ratio of total liabilities (excluding minority interest) to gross cash flow (net profit after tax plus depreciation allowances). This ratio is plotted in respect of the Reserve Bank’s All Industrials Constant Group of companies over the period from 1960 to 1981 in Graph 7. The ratio is shown to increase dramatically from 537.4 per cent in 1973 to 669.2 per cent in 1974, but has subsequently eased from that level to record an approximately one and one third times increase over the period as a whole.

The discrepancy in the relative increase in the total liabilities of Australian industrial companies measured by the two ratios arises primarily because the denominator of the first ratio is understated due to the deficiencies of historical cost accounting techniques. That is, figures for shareholders’ funds in conventional accounts do not, asset revaluations notwithstanding, fully incorporate the unrealised gains which arise in times of general price inflation in respect of fixed assets and investments held by companies.

The greater increase recorded in total liabilities relative to shareholders’ funds than that recorded relative to gross cash flow suggests that Australian industrial companies have recognised the impact of inflation on asset values and the concomitant decline in the real (i.e. purchasing power) value of debt in times of inflation. As a corollary they have, it seems, been prepared to increase the magnitude of their liabilities in nominal terms (and, hence, relative to historical cost levels of shareholders’ equity) in order to maintain their levels of financial gearing in real terms — that is, gearing measured relative to cash flows and current asset values.

This effect would undoubtedly be a contributing force behind the major change in the basic mix of new funds raised in the Australian capital market since the early 1970s. Nevertheless, Graph 7 does indicate that there has been quite a significant increase in the real gearing levels of Australian industrial corporations over that period.

The total liabilities to gross cash flow averaged 646.7 per cent in the 8 year period from 1974 to 1981, compared to an average value of 532.9 per cent in the 14 year period from 1960 to 1973. This increase suggests that other factors have contributed strongly to the structural change in the mix of capital raisings.
One of these other factors might well be a deliberate move towards the adoption of less conservative financial structures by the Australian corporate sector generally. It is contended, however, that a primary contributing factor to the relative decline in the importance of equity raisings has been the increased difficulty of raising new equity funds in the Australian capital market since the early 1970s. This point is elaborated on in the next section.

**IMPLICATIONS FOR THE AUSTRALIAN STOCKMARKET**

Graph 8 plots an index of the ratio of the Australian Stock Exchanges All Ordinaries Share Price Index to the Australian Gross Domestic Product Implicit Price Deflator (a measure of general price changes in the economy) over the period from January 1960 to December 1982. The graph indicates that Australian share price levels, expressed in real (purchasing power) terms, suffered a prodigious decline in the financial year 1973-74; from which decline no sustained recovery has been achieved, despite a substantial stockmarket bull phase in 1979 to 1980.

The poor real price performance of the Australian stockmarket since 1973 can be attributed to a number of factors. Particularly important would be the general lowering of real growth expectations for the economy compared to the growth rates achieved in the 1960s which holds adverse implications for prospective cash flows attributable to equity investments; and also the historically high level of interest rates which has prevailed since 1973, which affects adversely the required rate of return used to discount future cash flows attributable to equity investments.

However, it is contended that the previously outlined decimation of the real profitability of the Australian corporate sector in the mid-1970s and its failure to recover since has been a factor of equal significance. This factor has severely impinged upon share prices by operating to materially deflate prospective returns to equity investments.

It appears to be quite evident that the stockmarket, in impounding the secular decline in the real profitability of Australian corporations into share prices, has not been deceived by the illusory earnings figures reported under historical cost accounting techniques. That the stockmarket has not been deceived is by no means surprising, as in its determination of share prices it focuses upon real and not nominal variables; with most of the information on real variables provided, in fact, by sources outside of the accounting results reported by companies (i.e. macroeconomic and industry-wide information).

An illustration of the stockmarket’s efficiency in this regard is provided by Graph 9 which plots the unweighted earnings yield for the Melbourne Stock Exchange’s survey group of 100 Other (Industrial) Stocks over the period since January 1960. It is apparent that the earnings yield has fluctuated about a distinctly higher level since 1973, the year from which the upsurge in the Australian inflation rate dates.

This suggests strongly that the stockmarket has recognised historical cost earnings in times of inflation to be of a much lower quality than in times of stable prices. In the pricing of industrial shares, the one ex-post variable most relevant to the projection of future cash flows is the company’s maintainable level of potentially distributable earnings. Potentially distributable earnings are those which can be fully distributed to shareholders without impinging upon the company’s real earnings capability.
As manifest by the Institute's figures discussed earlier, in times of inflation, historical cost earnings substantially overstate potentially distributable income. The stockmarket in demanding a higher level of historical cost earnings for each dollar of share value is, in effect, discounting reported historical cost earnings figures in order to correct for that overstatement.

Turning to the final contention raised in the previous section, the poor performance, in real terms, of the Australian stockmarket since 1973 has operated to considerably accentuate the difficulty of raising new equity funds in the Australian capital market; a factor which, in turn, has contributed to the structural change in the mix of Australian capital raisings since the early 1970s.

Some evidence of the impact of the poor real price performance of the Australian stockmarket on the primary issue market for equity securities is presented in the final graph. Graph 10 plots the ratio of the magnitude of new equity raisings by Australian listed companies to the total market value of listed equity securities for each of the financial years from 1966-67 to 1981-82. This ratio measures the relative "heaviness" of demands placed on the capital market for new equity funds.

A distinct upward trend in the ratio over the duration of the period is manifest. The average of the ratio in the period from 1966-67 to 1972-73 was 1.37 per cent. The average almost doubled to 2.50 per cent in the period from 1973-74 to 1981-82. The implication is that the real price performance of the Australian stockmarket since 1973 has been of such paucity that in order to raise an average volume of new equity funds not appreciably greater, in real terms, than that raised previously, Australian listed companies have been forced to almost double their demands on equity investors for new funds relative to the market value of their existing equity investments.

**CONCLUSION**

The developments in the financial policies of the Australian corporate sector and in the primary and secondary dimensions of the Australian capital market presented in this paper and their postulated relationships with trends in Australian corporate profitability and inflation are, due to the inherent limitations in the data employed and the brevity of the analysis, tentatively based and by no means amenable to rigorous conclusions. More than all else, they perhaps indicate some potentially fruitful avenues for comprehensive research into the Australian capital market.

Nevertheless, it is possible to draw one broad conclusion from the evidence presented. That is, in the context of the masking of the secular decline in Australian corporate profitability since 1973 by historical cost accounting techniques, it would seem that there is considerable efficiency in both the corporate sector and the capital market in Australia. The evidence presented suggests that participants in each area concentrate their analysis on, and formulate their decisions with respect to, real and not nominal variables, regardless of how those real variables are reported (or not reported) in corporate financial statements.

NOTE: All graphs were prepared by Potter Partners Computergraphics system.