

ORGANISATION CHANGE AND ITS IMPACT ON AUSTRALIAN BUILDING SOCIETIES' PERFORMANCE

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Abstract

The paper examines the relation between changing ownership structure and performance of Australian building societies. An analysis and discussion of the theories of organizational development and change is undertaken to explore the mutual building societies' motivation for change. The financial performance measures, provided by financial ratios of the major mutual building societies in Australia, are examined to assess the behaviour of building societies under different governance structures in the 1980s and 1990s. The theoretical and empirical literature has suggested that mutual deposit-taking institutions should have lower profitability and higher operating expenses than their publicly listed counterparts. Accounting ratios are observed over time to investigate if governance change in mutual deposit-taking organizations accounted for any discernable differences in profitability and cost efficiency pre- and post- demutualization. The study finds support for the contention that demutualized building societies will have higher profitability and lower costs than their mutual counterparts. The study is confined to investigation of the six largest building societies that undertook the demutualization process. It could be extended to the entire building society sector. The results have implications for investors, managers and 'owners' of firms that retain their mutual structure, suggesting the demutualization will benefit these groups. There is no study that compares mutual deposit-taking institutions pre- and post-conversion in Australia.

Keywords: Building societies, organisation change, demutualization, performance.

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Introduction

There has been considerable interest in the theory and practice of organisation change. Similarly there has been a great deal of attention given to the processes that lead to and result from change within organisations. Demutualization, the shedding of mutuality or co-operative ownership for shareholder ownership, has been a global phenomenon of organisational change, concentrated among building societies and life-offices during the 1980s and 1990s. In the United States more than 1,000 mutual savings and loans (S&Ls), the American equivalent of building societies, have converted during the 20-year period (Hemmings and Siler, 1995). In Britain the decline was just as dramatic, falling from 1000 building societies in 1937 to just 137 by 1987 (Drake, 1989). In Australia the number of building societies fell from 139 to 14 between 1980 and 2004 with only three retaining their mutual status (AAPBS, 1989 and APRA Insight 2007).⁴³ Since 1995, none of the

remaining building societies in Australia have converted to bank status; three life insurance companies and one credit union have since demutualized.

Organisational change within the finance industry is of interest to regulators, other industry sectors, investors and consumers alike, as both mutual and stock deposit-taking firms have co-existed for over one hundred years. Authorised deposit-taking institutions (ADIs) that change their governance structures and form of ownership from mutual to publicly listed or stock companies are of even greater interest as these institutions have operated under both forms of ownership.⁴⁴ Observing the performance of these institutions, both before and after organisational change may shed light on the relationship between

the Building Society sector average and with those building societies that have demutualized.

⁴⁴ Mutuals or co-operatives are the terms used to describe a specific ownership structure of ADIs whereby membership entitles the right to deposit or borrow with one vote attached to the membership, regardless of each member's financial commitment to the company. Stock firms or publicly listed companies are the terms used to describe firms that list on the stock exchange and where ownership is represented by shares in the enterprise, with each share representing one vote. In both instances the former terms are the more familiar terms in the U.S. literature, whereas co-operative and publicly listed company are the more common terms in Australia.

⁴³ The three building societies that have maintained their mutual organizational structure are Newcastle Permanent Building Society, Greater Newcastle Permanent Building Society and Heritage Building Society. These three mutuals' performance is compared to

performance and governance mechanisms. This relationship has been well researched in the United States, generally finding that the mutual form of ADI is less efficient and less profitable than its stock counterpart.⁴⁵ While there have been a number of Australian studies investigating the performance of building societies and credit unions, no study has yet been undertaken exploring the effect of the change in ownership on operating performance of Australian building societies that have embarked on the demutualisation process.

This paper explores Australian building societies' impetus for organisational change and examines whether there is a relationship between organisation structure and performance. The first section of the paper provides a brief overview of organisational change and institutional theory in relation to ADIs. It goes on to review the various theoretical and empirical explanations for the expected difference in behaviour of mutual and stock financial institutions. Following sections look at the operating performance of the converting institutions in terms of profitability and cost efficiency ratios pre- and post-demutualization. In the final section some concluding remarks are made and areas for future research are identified.

Theories of Organisational Change and Performance

Van de Ven and Poole (1995, p.510) commence their exposition of organisational change theories with the view that '... explaining how and why organizations change has been a central and enduring quest of scholars in management and many other disciplines'. They postulate four theories of organisational development and change: the life-cycle, teleological, dialectical and evolutionary models. Each model has a different driver motivating change and is relevant to some degree in explaining the reason why a building society takes the step of changing its organizational structure from a mutual to that of a stock-listed firm. Van de Ven and Poole's theoretical models can be applied to the main motivations, which are to continue growth, maintain profitability and reduce the greater regulatory burden faced by non-bank ADIs prior to 1998.

According to Van de Ven and Poole (1995) the teleological model views development as a cycle of goal formulation, implementation, evaluation, and modification of goals based on what was learned by the entity. Mutual building societies can only increase their capital base through retained earnings, while stock ADI firms can raise funds through a variety of external stock and debt offerings. This striking difference in their ability to raise capital has significant implications for the firm's business

practice. Hence the firm moves towards implementing a different organisational structure to accommodate its development and growth by converting from a mutual to a stock-listed ADI.

Hegel's dialectic model, postulated by Kane (1977, 1981, 1984) and Thomson and Abbot (2001) is a means to explain the changing forces within the banking and finance industry. These authors outline the confrontation and conflict between opposing entities that generate this dialectical cycle as the financial institutions and the regulators colliding to produce avoidance behaviour. This is followed by the synthesis, where the finance regulators deregulate or re-regulate ADI behaviour, which in time becomes the thesis for the next cycle of a dialectical progression. Thomson and Abbott (1998) found that the main motivations for organisational change by building societies have been regulatory costs, incentive-conflict between owners and management (principal-agent issues) managerial motives and access to capital. This dialectical view is further supported by evidence from the second wave of building society demutualizations that occurred in the first half of the 1990s. Regulatory costs were major factors driving the demutualization process in Australia and may help explain the near demise of the building society industry worldwide as the antithesis stage of the dialectic. Since the formation of the new regulatory body, the Australian Prudential Regulatory Authority in 1998 (the synthesis), and the application of a level regulatory playing field for all ADIs, there have been no further conversions from mutual building societies to stock-listed ADIs.

Van de Ven and Poole (1995) outline their evolutionary model of change and development as a repetitive sequence of variation, selection, and retention events among entities in a designated population. Competition for scarce resources between entities generates natural selection among competitors and suggests that firms will need to choose an organisational structure that enhances performance. The transaction cost, principal-agent and X-inefficiency literatures are relevant to ADIs that evolve their organisational structure from mutual to stock-listed firms with consequent implications for performance. Berle (1932) and Coase (1937) recognized that ownership structure (the assignment of property rights within the firm) affects firm performance. The separation of ownership and control, the existence of information asymmetries, agency problems and the fact that managers of mutuals cannot participate in the 'profitable performance' of the firm by stock options causes them to maximize non-profit maximizing goals. Instead mutual managers participate by means of excessive salary and perquisite behaviour. The theory of decision-making in mutual organizations suggests that operating expenses in mutuals will reflect a marked 'expense preference' behaviour on the part of managers. Deshmukh et al (1982) suggests, that in view of the negligible pressures exerted by the

⁴⁵ See for example, Hester (1968), Brigham and Petit (1969), Nicols (1967), Verbrugge, Shick and Thygerson (1976), O'Hara (1981), Masulis (1987) Mester, (1987, 1991, 1992, and 1993), Cummins et al (1999).

'nominal owners' (customers/owners), the more appropriate behavioural assumption on the manager's part would be personal utility maximization. This can be achieved by profit diversion without fear of takeover, as the mutual ADI's value cannot be sold in the market. This principal-agent view of the problem is further supported by Leibenstein (1966) who believes that in the absence of competitive market forces, managers may pursue goals of maximizing their own self-interest via the accumulation of excess staff, salaries and additional emoluments rather than the goal of profit maximization.⁴⁶ The lack of internal efficiency, due to organisational structure, implies that mutual associations should have higher expenses, be less cost efficient and have lower profitability than stock-listed companies. Earlier U.S. empirical studies (see Footnote 3) examining the relative performance of stock compared to mutual ADIs tend to favour the stocks in terms of operating efficiency. More recent studies by Cole and Mehran (1997) find that firm performance of mutual S&Ls improves significantly after demutualization. Similarly, Cummins, Weiss and Zi (1999) discover that consistent with the expense-preference hypothesis, stock property-liability insurers are more cost efficient than their mutual counterparts.

Berger and Humphrey's (1997) international survey summarizes and critically reviews 130 studies of financial institution efficiency. They find, similar to Leibenstein, that X-inefficiency – the differences in management's ability and willingness to control costs or promote revenues – appear far more important than either scale or scope efficiencies. Worthington (1998a, 1998b, 1999, 2000a and 2000b) addresses the lack of Australian studies measuring the efficiency of non-bank ADIs by examining the sources of efficiency differences (X-inefficiency) of Australian credit unions and building societies. Worthington (1998a) finds that the institutional and regulatory frameworks under which mutual credit unions operate appears to be the most important determinant of their efficiency or inefficiency. Worthington's (2000a) paper addressing cost-efficiency in credit unions found that the typical credit union's costs were 30% above what could be considered efficient on the basis of observed best practice. This has relevance to building societies as prior to the regulatory changes in 1998, that brought all deposit-taking institutions under the same regulatory umbrella, building societies and credit unions were supervised by the Australian Financial Institutions Commission hence would expect similar regulatory impact on their operating performance.

⁴⁶ Neo-classical theories of the firm traditionally have assumed that factor inputs are used within the firm as efficiently as possible, ie operating at lowest cost possible. Leibenstein (1966) challenged this view and approached the issue of operating efficiency by suggesting that firms do not allocate resources in an optimal fashion if least cost combination of factor inputs are not used. This sub-optimal use of resources is evidence of X-inefficiency.

Organisational change and performance

Despite the large number of studies examining financial institution performance there are no studies exploring the effect of organisational change on the operating performance of demutualizing Australian building societies. Mutual and stock-listed ADIs continue to exist and operate along side each other in a competitive environment. Hence a review of pre- and post-demutualization performance of the major Australian building societies may provide useful insights for other industry sectors that have mutual organisations (for example, credit unions, health funds and motoring associations) and policy implications for regulators.

Primary source data was used to examine the pre- and post-conversion financial performance of the six largest converting building societies from 1983 to 1994. These institutions were located across the mainland states of Australia and included Advance Bank (1985, NSW), Challenge Bank (1987, Western Australia), Bank of Melbourne (1989, Victoria), Metway Bank (1988, Queensland), St. George Bank (1992, NSW) and Adelaide Bank (1994, South Australia) with the year of demutualization and state of origin in brackets. Secondary source data, from the KPMG Financial Institutions Surveys, was used to compare the performance of the demutualizing ADI sector (these six institutions) relative to the building society sector average, the three remaining mutual building societies and where data was available for the major banks over the period 1988 to 1994.⁴⁷

The comparison of pre- and post-conversion data was accomplished by setting the year of conversion for all ADIs as year zero, with pre- and post-conversion years designated as 'years one and two years before' and 'years one and two after' respectively, to give a comparative five year window on each converting ADI.⁴⁸ The five year window is considered to be an adequate period to consider change as Esho and Sharp's (1995) investigation of the characteristics of the cost functions of Australian building societies found that the speed of adjustment to long-run equilibrium costs is quite rapid with almost 83% of the total adjustment completed in the initial period. Event studies normally compare share price movements before and after an event to evaluate

⁴⁷ A smaller number of ratios and shorter time frame were utilised in the comparison of demutualizing versus mutual building societies to ensure the use of consistent ratios. A severe limitation in comparison of data over time is the lack of consistency in ratios included in the KPMG Financial Institutions Surveys. For the demutualizing building societies, the ratios were calculated from their financial statements and annual reports.

⁴⁸ This five-year period occurs at a different time for each demutualizing ADI as the conversion dates occurred at random times over the decade, but it provides a time period of t-2 to t+2 years either side of the year of conversion to allow each ADI to be compared at an identical phase in their demutualizing process.

its significance. In the case of a demutualizing firm there is no market value information or share price to compare before and after the event. Instead using accounting ratios and time-trend analysis provides a history and a standard of the ADIs past versus its current performance. Esho and Sharpe (1996) justify using accounting ratios in their study examining the X-efficiency of Australian building societies. They found that accounting ratios - averaged over seven to ten year periods - produced efficiency rankings similar to those obtained with the more complex stochastic econometric frontier approach utilized in their study.

Edey and Gray (1996) likewise suggest that despite the lack of sophistication of accounting ratios, the use of output measures based on financial statement data effectively illustrates trend behaviour. For example, they found that changes in total assets illustrated the major increases that have occurred since the early 1980s in financial-sector productivity. They suggest that the relatively sophisticated stochastic cost frontier approach to measuring X-efficiency and firm performance rankings may have little advantage over simple accounting expense ratio analysis.

The pre- and post-conversion ratio results of the individual building societies are listed in Table 1. The accounting ratios chosen for analysis were the key ratios for profitability and cost efficiency. They include return on average equity, operating expenses/average assets, non-interest income/average assets, operating income/operating expenses and other ratios found to be significant in prior research.⁴⁹ Table 2 compares the performance of demutualizing building societies with those building societies that retained their mutual structure, the building society sector average and some limited comparison with the major banks. The relative averages of the various financial sectors are important for comparison purposes as these demutualizing ADIs come from one sector and enter another upon completion of the demutualization process. The regulatory body, at the time, the Reserve Bank of Australia required these organisations to undertake a two-step process; demutualize and convert to bank status.

Profitability Measures

Profitability is most important to the basic notion of a firm's success. It ultimately determines the extent to which the owners' interests are served, and for mutual institutions the extent to which earnings are generated to support the capital position of the firm. A number of ratios such as return on average equity (ROAE), net interest margin, and total income/average assets are used to measure profitability. If most or all of these ratios indicate a difference pre-and post-

demutualization it would seem to indicate a link between organizational change and performance.

Return on Average Equity

Profitability has not been a major criterion for measuring performance in building societies due to their mutual status and their inability to raise external capital. The equity component of the capital base of the stock-listed banks is clearly defined as share capital, reserves and retained profits. For mutual buildings societies equity should be defined on a comparable basis to that of banks. The appropriate measure for this purpose is the general reserves of building societies. A firm with relatively high profitability measures can be considered to be efficient in the sense that it provides a high rate of return on funds (profit after tax) to investors and shareholders. The rate of return on equity can be examined as the mutual evolves into a stock ADI. The evidence from Table 1 provides general support for the contention that ADIs will report higher profitability as they move from mutual status to stock-listed entities.

Table 2 compares the value-weighted average ROAE of demutualizing building societies relative to the other industry sectors. The demutualizing building societies' ROAE remained positive throughout the study but fell to a low of 5.9 per cent, while the major banks experienced negative 1.2 percent ROAE in 1992. This illustrates that the riskier commercial portfolios show up in the downturn of the business cycle following the significant 1991 recession in Australia. By contrast the Building Societies Sector Average (BSSA) and the Mutual Building Societies Average (MBSA) showed steady ROAEs throughout the period. This anomaly can be explained by the higher quality of the mutuals' loan portfolios and the lower risk associated with home lending.

Net Interest Margin

The behavioural characteristics of the mutual ADI lead to expectations of lower net interest margins relative to a stock-listed entity. This is confirmed by Smith's (1986) test of the variant objective function hypothesis (borrower-saver accommodation) for co-operatives, finding that they are neutral between the interests of their borrowing and saving member/owners. The narrower the margin between the deposit and lending rates the more a society can benefit both types of member, but in practice, market forces will constrain a society's discretion over its deposit and lending rates. The firm's competitive pressure and amount of fixed interest loans would constrain any possible rise in margins after conversion. The value-weighted average for the demutualizing building societies' net interest margin ranged from 3 per cent to 3.8 per cent during 1988 to 1994.

⁴⁹ For example, see Hannan and Mavinga (1980), O'Hara (1981), Mester (1987, 1991, 1992, 1993), Maclachlan (1993), Esho and Sharpe (1995), Ralston (1995), Worthington (1998).

Table 1. Demutualizing Building Societies Performance Data - Pre- and Post-conversion

	2 years before	1 year before	Year of Conversion	1 year after	2 years after
<u>Adelaide Bank *94</u>					
Non-interest Expense/ AA	5.0	4.0	3.2	2.5	2.2
Total Quality Capital / Total Assets	7.0	7.1	7.0	6.2	7.0
Total Expenses / Total Income	92.6	91.0	86.5	87.1	86.5
Operating Expenses / Average Assets	4.9	3.8	3.2	2.3	2.0
Growth In Profits After Tax	4.2	26.0	26.2	25.2	23.9
Growth In Total Assets	72.5	-1.3	32.1	29.5	-1.9
Operating Income / Average Number Of Employees	132.4	109.9	119.2	128.7	136.1
Fixed Assets / Total Assets	9.4	3.8	2.6	1.8	1.6
Operating Income / Operating Expenses	121.0	125.3	139.1	153.1	165.9
Operating Expenses / Operating Income	82.6	79.8	71.9	65.3	60.3
Profits After Tax / Average Equity	12.2	14.6	15.1	14.4	15.6
Total Income / Assets	6.0	5.0	4.5	3.7	3.5
Net Interest Margin	3.9	3.3	3.1	2.5	2.5
<u>Advance *85</u>					
Non-interest Expense/ AA	2.8	2.6	2.7	3.2	3.0
Total Quality Capital / Total Assets	4.6	4.8	7.2	7.1	6.7
Total Expenses / Total Income	94.5	91.6	92.6	94.0	92.7
Operating Expenses / Average Assets	2.8	2.6	2.7	3.1	3.0
Growth In Profits After Tax	9.5	55.8	2.0	35.3	29.7
Growth In Total Assets	18.0	15.8	13.2	23.4	35.3
Operating Income / Average Number Of Employees	na	53.9	57.3	70.5	84.0
Fixed Assets / Total Assets	5.1	4.8	4.6	4.4	5.3
Operating Income / Operating Expenses	127.2	141.0	133.9	126.7	137.4
Operating Expenses / Operating Income	78.6	70.9	74.7	79.0	72.8
Profits After Tax / Average Equity	10.1	12.0	8.2	8.0	8.3
Total Income / Assets	3.6	3.7	3.7	4.0	4.1
Net Interest Margin	3.2	3.9	3.9	3.6	3.2
<u>Bank of Melb *89</u>					
Non-interest Expense/ AA	2.6	3.0	3.2	2.8	2.8
Total Quality Capital / Total Assets	4.8	5.9	7.6	6.1	7.0
Total Expenses / Total Income	98.1	93.1	92.9	93.9	88.7
Operating Expenses / Average Assets	3.0	3.3	2.9	2.9	3.1
Growth In Profits After Tax	337.4	125.3	27.2	5.2	31.3
Growth In Total Assets	-3.2	13.1	21.9	30.1	11.9
Operating Income / Average Number Of Employees	68.2	82.3	81.4	91.2	109.7
Fixed Assets / Total Assets	3.0	3.2	2.5	2.0	2.3
Operating Income / Operating Expenses	108.6	121.3	129.4	130.1	118.3
Operating Expenses / Operating Income	92.1	82.5	77.3	76.9	84.5
Profits After Tax / Average Equity	7.8	12.4	10.6	8.9	10.8
Total Income / Assets	3.3	4.1	3.9	3.8	4.2
Net Interest Margin	3.4	4.4	3.8	3.6	3.7

Source: Financial Statements from the Annual Reports of the ADIs. Various years 1983-1996

Table 1 cont'd
Demutualizing Building Societies Performance Data - Pre- and Post-conversion

Challenge * 87	2 years before	1 year before	Year of Conversion	1 year after	2 years after
Non-interest Expense/ AA	3.3	3.3	1.3	3.0	3.1
Total Quality Capital / Total Assets	2.8	3.0	5.8	6.5	5.7
Total Expenses / Total Income	97.1	97.6	89.5	90.6	92.1
Operating Expenses / Average Assets	3.2	3.2	1.2	2.7	2.8
Growth In Profits After Tax	-45.7	28.8	30.7	172.0	-9.6
Growth In Total Assets	16.9	6.5	11.0	26.2	22.1
Operating Income / Average Number Of Employees	61.5	64.4	36.8	94.7	110.1
Fixed Assets / Total Assets	1.2	1.3	0.9	0.8	0.8
Operating Income / Operating Expenses	112.4	111.9	163.5	159.7	145.3
Operating Expenses / Operating Income	89.0	89.3	61.2	62.6	68.8
Profits After Tax / Average Equity	9.2	10.5	8.2	14.6	11.4
Total Income / Assets	3.7	3.7	2.0	4.7	4.4
Net Interest Margin	2.8	3.0	1.8	4.1	3.5
<i>Metway * 88</i>					
Non-interest Expense/ AA	3.6	3.6	3.5	3.3	3.9
Total Quality Capital / Total Assets	1.0	1.0	1.0	5.1	6.4
Total Expenses / Total Income	97.4	97.9	90.6	85.1	91.2
Operating Expenses / Average Assets	3.6	3.6	3.5	3.3	3.8
Growth In Profits After Tax	44.1	-24.6	136.5	292.3	15.8
Growth In Total Assets	11.9	7.6	19.9	16.6	34.5
Operating Income / Average Number Of Employees	62.1	55.8	70.7	85.6	96.9
Fixed Assets / Total Assets	1.9	1.7	1.5	1.3	1.4
Operating Income / Operating Expenses	110.1	108.4	136.0	163.6	140.5
Operating Expenses / Operating Income	90.8	92.2	71.9	61.1	71.2
Profits After Tax / Average Equity	20.5	13.2	20.8	28.3	16.1
Total Income / Assets	7.3	7.1	7.7	7.8	8.5
*Net Interest Margin	3.7	3.6	4.4	4.7	4.8
<i>St George *92</i>					
Non-interest Expense/ AA	2.9	3.0	2.9	2.9	2.4
Total Quality Capital / Total Assets	4.9	6.3	6.0	6.2	6.4
Total Expenses / Total Income	94.0	91.7	89.8	86.6	81.6
Operating Expenses / Average Assets	2.8	2.7	2.6	2.5	2.4
Growth In Profits After Tax	0.3	0.1	12.7	29.7	53.7
Growth In Total Assets	11.7	10.6	9.8	25.9	35.0
Operating Income / Average Number Of Employees	92.3	97.7	107.8	123.8	158.0
Fixed Assets / Total Assets	4.7	4.6	4.3	3.6	2.6
Operating Income / Operating Expenses	135.4	145.0	150.3	153.3	170.4
Operating Expenses / Operating Income	73.8	69.0	66.5	65.2	58.7
Profits After Tax / Average Equity	12.7	11.3	11.5	12.4	13.4
Total Income / Assets	3.9	4.2	4.2	4.2	4.1
Net Interest Margin	3.8	4.0	4.0	3.9	3.7

Source: Financial Statements from the Annual Reports of the ADIs. Various years 1983-1996

Table 2. Comparison of Demutualizing Building Societies Relative to the Building Societies Sector and Major Bank Averages

Demutualizing Building Societies Value-weighted average *	1988	1989	1990	1991	1992	1993	1994
Profit After Tax / Average Equity	12.8	12.2	10.8	9.7	5.9	13.3	17.0
Net Interest Margin	3.9	3.7	3.4	3.8	3.7	3.6	3.6
Operating Expenses / Average Assets	3.1	2.9	2.8	2.7	2.5	2.6	2.5
Operating Income / Operating Expenses	139.9	139.2	138.2	144.8	150.1	150.8	158.4
Operating Income / Average Assets	4.3	4.1	3.9	3.8	3.8	3.9	4.0
Operating Expenses / Operating Income	71.5	71.8	72.4	69.0	66.6	66.3	63.0
Total Income / Average Assets	4.2	3.9	4.1	4.4	4.4	4.1	4.0
<i>Building Societies Sector Average #</i>							
Profit After Tax / Average Equity	na	na	11.9	10.2	11.1	10.5	10.6
Net Interest Margin	na	na	na	na	na	na	na
Operating Expenses / Average Assets	3.0	3.0	3.1	3.2	3.2	3.6	na
Operating Income / Operating Expenses	1.33.2	133.5	131.7	na	142.8	na	na
<i>Mutual Building Societies Average ^</i>							
Profit After Tax / Average Equity	na	na	16.2	12.8	14.6	13.1	13.6
Operating Expenses / Average Assets	3.4	3.4	3.2	3.6	3.6	3.8	3.4
Operating Income / Operating Expenses	146.1	146.2	159.1	159.3	153.0	Na	na
<i>Major Banks^^</i>							
Profit After Tax / Average Equity	13.7	15.6	10.6	7.0	-1.2	8.9	14.3
Net Interest Margin	5.7	5.3	4.9	4.6	4.4	4.4	na
Operating Expenses / Average Assets	na	3.4	3.3	3.2	3.4	3.5	na

Source: Financial Statements from the Annual Reports of the ADIs and from KPMG Financial Institutions Performance Surveys, Various years.

* The value-weighted average is for the six demutualizing building societies.

The Building Society sector average includes all building societies, both mutual and stock-listed institutions

^ The three remaining mutual building societies

^^ Major banks data has been obtained from J.B. Were

More important than the movement in the net interest margin around year of conversion is the fact that prior to demutualization, the net interest rate margins experienced by the building society sector were significantly narrower than the Australian major banks. The net interest margin for the major four banks was above 5 per cent from 1989-1990, and 4.5 per cent in the following years (RBA, International Comparisons of Bank Margins, 1994) reflecting their different lending philosophies. Convergence in net interest margins across all financial institutions has occurred since 1991 reflecting the more competitive nature of the markets that ADIs operate within. Table 2 provides the data on sector average interest margins of the demutualizing ADIs.

Asset utilisation

Asset utilisation can be used to evaluate either profitability or operational efficiency as it reflects whether assets are being employed as earning assets. Table 1 indicates that the majority of the building societies operated within a close range of each other with little deviation from the value weighted-average demonstrated in Table 2.

The broad conclusion drawn from the empirical data is that the level of profitability of converting

building societies rises after conversion. This is borne out in the data in Table 1 that shows growth in profits after tax, general increases in the ROAE, and asset utilisation after conversion. The significantly lower interest margins at the time of conversion supports the theoretical and empirical explanations that mutuals would have lower profitability than their stock-listed counterparts.

Cost Efficiency Measures

Management is responsible for the trading performance and risk profile of their ADI relative to industry peers therefore any significant and ongoing change in accounting ratios that reflect performance can be attributed to management decisions. In the absence of accounting ratios that measure managerial expenses explicitly a number of measures that look at operating cost ratios can be used as crude proxies. These include non-interest expense/average assets, operating expenses/total assets, operating expenses/operating income and operating income/operating expenses.

Sinkey (1975) suggests that the following ratios reflect the manager's ability to control the performance of the ADI. High operating expenses to operating income and fixed assets/total asset ratios are likely to reflect preferences by mutual managers for perk-taking behaviour. Expense preference theory and prior studies by Edwards (1977) and Taggart (1978) suggest that in the absence of pressure from owners and/or competitive market conditions, mutual managers may expend firm resources in the form of higher levels of staff expenditure, more expenditure on physical office surroundings and other managerial amenities. Accordingly, looking at the various expense ratios can assess cost efficiency.

Operating Expense Ratios

The operating expenses/total assets ratio provides a good indicator of operating efficiency if all deposit-taking institutions produce a homogeneous output and pay identical prices for factors of production. Australian building societies operate under the same regulator, produce very similar financial services and products and have little room for price differentiation. In these circumstances it is reasonable to assume that products and prices are homogenous. Multiple regression techniques can be employed in an attempt to hold constant output mix and factor prices. Whilst these techniques are useful and have been used in many United States studies in relation to the issues of behaviour and performance, multivariate analysis is inappropriate in this study due to small sample size.

Four of the six demutualizing building societies experienced declining operating expenses/total assets in the 5-year window around their demutualization, providing support for the contention that stock ADIs should improve their cost ratios post-demutualization. A clear picture regarding efficiency comparisons for both demutualizing ADIs and mutuals ADIs for the period 1988 to 1994 is provided in Table 2. The comparison of the demutualizing ADIs value-weighted average with the BSSA and MBSA shows that the formers' operating expenses/average assets decline over the period, confirming expectations of lower costs for demutualizing ADIs, whereas the BSSA and MBSA increases over the period supporting the findings of higher operating costs for mutuals in earlier empirical studies.

Operating Expenses/Operating Income is a measure of overall cost efficiency. Falling ratios post-conversion suggest the view that stock-listed ADIs exhibit greater cost efficiency. Table 1 illustrates a general fall in operating expenses/operating income, the lower ratio reflecting an improvement and therefore an upward trend in productivity for all building societies post-conversion. Those demutualizing ADIs experiencing significant falls in this ratio in the year of conversion were: Adelaide Bank 9%, Challenge 28% and Metway 30%. St George Bank experienced a fall of 11% in 1988, five years pre-conversion. From an examination of St

George's balance sheet, it appears that it actually began to operate more like a bank than a building society from that time.⁵⁰ Advance Bank initially rises post-conversion and then steadily falls whereas Bank of Melbourne's is the only institution that offers little support for the hypothesis that operating expenses will be lower following conversion with variable ratios over the entire time period. Table 2 demonstrates that the VWA of the demutualizing building societies fell continually from 71% in 1988 to 63% in 1994. Long run improvement across the entire ADI industry is likely to reflect the impact of deregulation of the financial system and technology improvements in addition to organizational change improvements.

A further measure of operating efficiency is operating income/operating expense,⁵¹ which indicates the productivity of the deposit taking institutions. Productivity increases would be expected post-conversion and translate to increased cost efficiency. Table 1 shows steep upward growth in productivity for Metway, St. George, Bank of Adelaide, and Challenge, although this was followed by subsequent falls in productivity for Challenge, Metway and Bank of Melbourne, but post-conversion they were still significantly higher than the one year pre-conversion data (Advance experienced variable results in its operating income/operating expenses over the period of demutualization) but considering the group of ADIs as a whole, there is a positive upward trend in productivity post-conversion.

Likewise, comparing the operating income/operating expense ratios of the demutualizing ADIs with those that have retained their mutual status, finds support for the demutualized building societies having higher productivity than the mutuals (see Table 2). While both the building society sector average and the value-weighted average of the demutualized ADIs are increasing, the latter illustrates higher productivity in the stock-listed ADIs than the mutuals in the years 1988 to 1992.⁵²

Proxy Measures for Managerial Expenses

The fixed assets/total assets ratio provides a proxy measure of managerial expense behaviour in the absence of detailed information associated with expenditure on personnel and office operations and should be included in a discussion of cost efficiency.

⁵⁰ A comparison of the 1987 and the 1988 Annual Report's balance sheet reveals a shift away from the traditional operation of the mutual ADI to one that closely resembles a bank balance sheet operation. Discussion re this point with a St George spokesperson from the Finance Department confirmed my opinion. Verbal discussion with Bill Jones from the RBA further supported this view but indicated that senior management changes at St Georges in 1987-88 may also contribute to the changed behaviour.

⁵¹ Operating income is calculated from net interest income minus (bad and doubtful debt) plus other income.

⁵² Operating Income/Operating Expenses data is unavailable in the KPMG Financial Institutions Surveys for mutuals building societies after 1992.

All demutualizing building societies illustrate declining ratios immediately post-conversion and part from Advance Bank (see Table 1) these ratios continue to decline to less than 2.6 per cent. These results are extremely supportive of the hypothesis that mutuals will engage in expense preference behaviour. Although these findings must take into account that some converting ADIs operated predominantly in regional markets where property and office space were considerably cheaper than in major capital cities of Sydney and Melbourne.⁵³

Non-interest expenses/Average Assets provides another measure of implicitly measuring managerial expense behaviour. To be consistent with the expense-preference hypothesis, mutual ADIs would be expected to have higher non-interest expenses/average assets than publicly listed ADIs. There is no marked change around year of conversion; rather, Table 1 shows an overall downward trend apart from Metway Bank's increase two years post-conversion providing cautious support for the hypothesis.

In the absence of data that explicitly captures managerial expense preference behaviour a further measure is operating income/average number of employees. It can be used to provide a measure of cost effectiveness of staff. Trend data for each ADI shows strong upward movement over the six-year time span, but this may overstate the cost effectiveness of staff as inflation and greater use of information technologies as well as the contingences of the business cycle will impact on these ratios. The improved return per employee may be due in part to factors other than efficiency improvements. The GDP implicit deflator was used to remove the inflation effect on monetary variables and the data figures were deflated to the base year 1989/90. There are significant improvements in demutualizing ADI's operating income to average number of employees in the year of conversion or the preceding year (see Table 1). These results provide support for the hypothesis of lower costs and greater efficiency in the converted associations compared to their pre-conversion data.

In terms of cost efficiency the broad conclusion that can be made from the empirical data presented is that most cost efficiency measures have shown improvements for converting ADIs. This supports the contention that stock ADIs will have lower costs than mutual ADIs as evident in the falls in Operating Expenses/Average Assets, Operating Expenses/Operating Income and improvements in productivity (Operating income/Operating expenses) in Table 1. The proxy measures for managerial expense behaviour; Fixed Assets/Total Assets is supportive

whilst Non-Interest Expenses/Average Assets shows mixed results. Other factors, such as deregulation of the financial system in the 1980s and significant improvements in technology in the 1990s have been important and had an impact on cost efficiency.

Implications

For industries that continue to have mutual firms operating alongside stock-listed counterparts there are clear benefits in terms of improving total quality capital to total assets. Apart from Adelaide Bank, which had a strong capital position pre- and post-conversion, all demutualizing building societies had significant improvements in this ratio (See Table 1). For investors in financial stocks the pre- and post-conversion data provides evidence of the most cost efficient and profitable ADIs to invest in. By the second year post-conversion two of the regional banks stand out as investment opportunities. St George Bank and Adelaide Bank have both been far more effective in reducing their cost ratios (operating expenses/operating income), to 58.7 and 60 per cent respectively. Both ADIs have increased their productivity levels (operating income/operating expenses) substantially compared to the other demutualized building societies. St George increased from 135 per cent in 1990 to 170 per cent in 1994 and Adelaide Bank increased from 121 percent in 1992 to 165 per cent in 1996. While their other financial ratios are generally superior relative to the other ADIs there is not a lot of difference between the two institutions (see Table 1). Retrospectively assessing these two ADIs by comparing their share price at listing to the present time shows that St George Bank would have generated the best returns. St. George Bank shares listed at \$5.83 on the 2/07/1992 and Adelaide Bank shares listed at \$4.15 on 1/1/1994. Current share prices as at 1/1/2008 are \$29 for St. George Bank and \$15.50 for Adelaide Bank (Commsec, 2008).

Conclusion

Van de Ven and Poole's (1995) theories of organizational development and change provide a means to classify the drivers that motivate ADIs to undertake the process of demutualization. Evolution, life-cycle and teleological theories explain the changing needs of these ADIs, whilst the dialectical theory is powerful in explaining the role of financial institutions and regulation. The investigation of the Australian building societies' conversion experience during the period 1983 to 1994 found evidence to support the initial claim that mutual deposit takings institutions are less efficient when compared to their stock-listed counterparts. Cost efficiency of the building societies that demutualized did improve after conversion with these findings particularly applied to the institutions converting in the 1980s. Operating expenses/average assets fell significantly in the demutualizing ADIs whilst the cost ratio rose for

⁵³ Adelaide Bank, which operated as a mutual until 1994, had extremely high ratios of 8-14 per cent of fixed assets to total assets compared to the demutualizing weighted average of 2.4-3.7 per cent. It experienced a dramatic drop in the year prior to conversion falling from 9.4 per cent to 3.8 per cent (see Table 1).

mutuals over the same period. Productivity, as measured by operating income/operating expenses, rose for both demutualized and mutuals ADIs over the 1988-1994 time period but the rise in productivity occurred sooner and was significantly higher for the demutualizing ADIs.

There are less significant changes occurring in the behaviour of the mutual deposit-taking institutions undertaking conversion in the 1990s. St George Bank provides some evidence for this view with its look-alike "bank balance sheet" from 1988 onwards although it did not demutualize until four years later in 1992. This view is further supported by Mester's (1993) study of S&Ls using 1991 data. The more efficient mutual S&Ls in this later sample suggested that deregulation of interest rates and increased competition may have had the predicted effect of curtailing agency problems in mutual S&Ls. While there may be advantages for the stock form of organisation resulting from greater access to capital markets, Worthington, (2000b) provides growing evidence that building societies have improved their efficiency over time with technological advances and changes in the regulatory regime being the driving forces. As these ADIs become publicly listed companies the threat of takeover also becomes important. Of the six institutions investigated three of these institutions have merged or been taken over. St George Bank absorbed Advance Bank to become the fifth major bank in Australia and Westpac absorbed Bank of Melbourne. Metway Bank merged with the life insurance company Suncorp. The introduction of competitive neutrality to the financial system under the APRA regulatory regime in 1998 seems to have removed the regulatory incentives for further demutualization of building societies with the last demutualization of a building society occurring in 1995 seemingly providing support for this view.

The building societies investigated differed significantly in size, as measured by their total assets. This potential influence on the performance ratios chosen for comparison has been mitigated by expressing balance sheet items as a percentage of average total assets, resulting in common-size statements. Where comparisons are made cross-sectionally, the size issue is overcome by comparing the individual institution to the value-weighted average of the ADIs as opposed to the equal-weight average.⁵⁴ A comparison of the converted and the mutual building societies financial ratios was performed using industry averages. Peacock et al (2003) suggests that an industry average may not provide a desirable target ratio or norm and at best an industry average provides a guide to the financial position of the average firm in the industry. Despite the potential problems, industry averages do provide a yardstick against which performance can be measured

The study undertook an investigation of behavioural change of the same institutions pre- and post-conversion. A limitation of the study is that it only investigates the six largest building societies demutualizing during 1983 to 1994. Further investigation could be undertaken to examine the change in governance mechanism and relationship to performance by utilising data envelope analysis and extending the sample size to include all 14 remaining building societies. Comparison of the performance of remaining mutual building societies with those building societies that have listed on an Exempt Exchange or the Australian Stock Exchange would be of value as the demutualizing ADIs have remained as building societies where the earlier demutualizations examined in this study required both conversion to bank status and listing on the stock exchange simultaneously. Despite the shortcomings, the exploration of proxy measures for the performance of ADIs that undertook the conversion process from mutual building society to stock bank, found support for the contention that demutualized building societies will have higher profitability and lower costs than their mutual counterparts. These results have implications for managers and 'owners' of firms that retain their mutual structure. The study is informative for investment strategies as it is able to identify the higher performers post-demutualization and indicate areas of strengths and weaknesses for the individual ADIs to concentrate on. The evidence of improved performance suggests that there are benefits to these firms demutualizing unless narrower interest rate margins and other non-tangible benefits exceed the higher costs.

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⁵⁴ This technique has been used by the Reserve Bank in its publication *International Comparisons of Bank Margins* (1994).

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