
Recent trends in household financial assets and liabilities

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Financial markets serving households have undergone marked changes since they were fully deregulated from the mid-1980s. This article examines changing trends in the sources and allocation of household financial liabilities and assets since then in the context of a long-run perspective on changes in household wealth.

1 Introduction

The first long-run, comprehensive set of data series for household financial assets and liabilities published in New Zealand was introduced in the June 2000 Bulletin. While most of the data are obtained from regular quarterly and monthly surveys conducted by the Reserve Bank, an annual December survey is required to obtain comprehensive coverage. This article revises and updates the data series to 2000: all data are for calendar years. Unless they have required revision, definitions and explanations for the data series are not repeated here and can be found in the original article, available on the Bank's website (www.rbnz.govt.nz).

This article first provides a five-yearly summary from 1980 to 2000 of the key household financial data and wealth series, with a brief commentary on overall trends. The summary data also serve as a context for a subsequent discussion on the market distribution of household financial liabilities and the disposition of household financial assets. The next two sections are on household financial liabilities and assets, using disaggregated financial aggregates from the summary to show trends in industry practice and household preferences.

2 Overview of key household financial data series 1980 to 2000¹

Key highlights

- Net household wealth, as a ratio of personal disposable income, has declined over 10 per cent from its peak in the mid-1990s to a level now similar to that of the mid-1980s.

- In 2000, housing represented over 80 per cent of the net wealth of New Zealand households, an increase from under 70 per cent in 1980.
- Household real net financial wealth (financial assets less liabilities), which was relatively constant from 1985 to 1995, has declined over 20 per cent since then.
- Household financial assets have increased 80 per cent in real terms since 1980, while household liabilities have increased 240 per cent.

Market structure

Before examining the institutional composition of household liabilities and assets in more detail in the next two sections, it is useful to review the broad context for that exposition. Over the two decades to 2000, the allocation of household financial assets and liabilities among financial market structures has changed markedly, most notably from 1985 to 1995, as the radical restructuring of the financial system that began in 1984 took effect. Table 1 illustrates this changing pattern at five year intervals. The data are influenced by the rate of inflation, which averaged over 10 per cent per annum in the decade to 1990, but less than 2 per cent per annum in the ten years to December 2000.

¹ Minor revisions apart, two notable changes have occurred to these series as a consequence of new work by Statistics New Zealand (SNZ). The implementation of SNA93 (System of National Accounts, 1993) standards for the national accounts, and data revision, delivered a revised series for household disposable income. This is lower than was published previously, increasing data values expressed as a ratio of disposable income. SNZ has also published data for direct equity investment overseas as at June 2000, with values substantially less than the tentative estimates we derived last year. This affects the ratio of financial assets and net financial wealth to household disposable income previously published. A technical discussion of the equity revision is contained in the appendix.

Table 1
Household financial assets and liabilities 1980 to 2000

As at December \$ billion	1980	1985	1990	1995	2000
Financial assets					
Deposit-taking institutions	9	18	32	41	48
Other fixed interest assets	3	5	7	8	8
Life, super and managed funds	6	15	25	37	49
Direct equities	3	10	8	13	15
Total financial assets	21	47	72	100	119
Financial liabilities					
Large deposit-taking institutions	5	10	25	44	70
All other loan sources	2	3	3	4	7
Total financial liabilities	7	14	28	47	77
Net financial wealth	13	33	44	53	42
Housing value	29	69	113	155	184
Household net wealth	42	102	157	208	227

Source: RBNZ, SNZ, NZIER

Wealth

The major household financial asset and liability categories in table 1 are summarised in table 2 and combined with housing value data to provide a wealth perspective, expressed as a percentage of personal disposable income. New data from SNZ on equities held directly overseas has reduced by over 15 per cent the total value of equities that would otherwise have been estimated at December 2000. Net household wealth in consequence is over 3 per cent lower. This fall is masked in comparison to data published last year because of the effect on net household wealth of the revisions to personal disposable income, which raise wealth ratios overall.²

As a percentage of disposable income, household financial liabilities almost doubled in the decade to 2000. Their growth rate outstripped the 1990s' growth in financial assets, which had picked up slightly from the 1980s, with the consequence that net financial wealth fell in 2000 to a level below that of 1980. Table 3 presents these data in real terms so that the relative values of household asset, liability and wealth categories can be more easily followed over time (the ratios to personal disposable income are unaffected, and remain as in table 2). Two striking features of the table are the relatively slow rate of growth of financial assets, and the very rapid growth of households' outstanding debt in the

Table 2
Household financial assets, liabilities and real assets as a percentage of personal disposable income

As at December Per cent	1980	1985	1990	1995	2000
Equities	25	45	34	48	56
Other financial assets	115	127	131	145	131
Total financial assets	141	172	165	193	187
Financial liabilities	49	50	64	91	121
Net financial wealth	92	122	100	102	67
Housing value	197	253	257	299	289
Net wealth	289	375	358	401	356

Source: RBNZ, SNZ, NZIER

² See explanation in footnote 1.

Table 3
Real net financial wealth and net wealth*

As at December \$ billion, 1980 values	1980	1985	1990	<i>ten year growth</i>	1995	2000	<i>ten year growth</i>
Equities	4	7	6	51%	9	11	104%
Other financial assets	17	20	22	28%	26	26	22%
Total household financial assets	21	27	27	32%	34	38	39%
Household financial liabilities	7	8	11	48%	16	24	129%
Household net financial wealth	13	19	17	23%	18	13	-19%
Housing value	29	40	43	47%	53	58	37%
Housing share of total net wealth	68%	67%	72%		75%	81%	
Household net wealth	42	59	59	40%	71	72	21%
Personal disposable income	15	16	17	13%	18	20	22%

* The CPI is used as the deflator

Source: RBNZ, SNZ, NZIER

decade to 2000 compared with the 1990s, when debt nonetheless also grew faster than financial or real assets. Although the housing values that secured much of the increased borrowing by households doubled in the 20 years to 2000, they grew more slowly in real terms in the 1990s than in the 1980s, and in consequence, so did net household wealth.

While New Zealand's household debt has grown very fast since the late 1980s, when full financial market deregulation began to take effect, measured as a share of personal disposable income (see figure 1) it is at similar levels to other countries with deregulated financial markets. The rate of growth of household debt tends to divert attention from the fairly low rate of growth of financial assets, and their relatively low ratio to personal disposable income, in comparison with other developed OECD countries³. Furthermore, the share of household financial assets held in equities, directly and indirectly, at about 30 per cent, is 'in the middle of the pack': the low total financial asset ratio is not a function of asset allocation. Financial asset accumulation has taken second place to borrowing and the financing of housing, which was entirely understandable in the high inflation 1980s. From the early 1990s, strong economic growth, significant net inward migration and the loan market impact of earlier financial market liberalisation boosted borrowing for housing.

The June 2000 Bulletin article that introduced these data series discussed the institutional and other relevant economic

³ See Thorp C and B Ung (2000).

and financial market developments that have influenced the way in which wealth aggregation has unfolded in New Zealand over the past two decades. Caution is required in interpreting these data and ratios in an international context. Net financial wealth, for example, is likely to be affected by home ownership ratios. Over 15 per cent of New Zealand's housing stock is owned directly by households in the form of rental properties⁴. In New Zealand, investment in private forestry plots is a significant alternative to financial investments. Moreover, the value of household investment in businesses not priced through a stock exchange is ignored in wealth calculations of the kind outlined here. Given the degree to which New Zealand commerce is dominated by small unlisted businesses, household wealth measurement using financial market data is underestimated. Other countries may have other, equivalent, non-financial investment practices, which in turn affect their financial market data values.

It should be noted that the household real wealth figure, comprising house values alone, also excludes a number of other sources of real household wealth, including consumer durables. In New Zealand, with its extensive family-based agricultural economy, the exclusion of net farm wealth is particularly significant. A conservative estimate for 2000 suggests that net real farm wealth attributable to households

⁴ Census of Population and Dwellings 1996. Some 29 per cent of private dwellings are not owner-occupied, while Housing New Zealand provides about one fifth of all rented accommodation.

is over \$40 billion⁵, or more than a sixth of the \$227 billion figure shown for 'households' in table 1. The value of household durables and other material household assets may vary among countries to an extent that distorts comparisons based on more narrow definitions. These examples of factors relevant to inter-country comparisons are raised not to invalidate the broad conclusions that may still be drawn, but to indicate some of the limitations of the data in relation to the concept of 'wealth' of the household sector in any economy. Our focus here, however, is on the trends revealed in the New Zealand data through time.

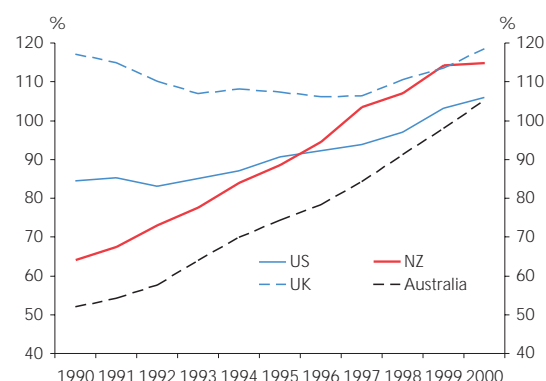
3 Household debt in the 1990s

Key highlights

- Household debt is highly concentrated, with five large banking groups holding over 90 per cent.
- Household debt market concentration increased markedly in the 1990s as government and solicitors' mortgage market sources became insignificant.
- Housing loans are about 85 per cent of household debt.
- Student loans have become the largest non-housing debt category.

New Zealanders are somewhat more indebted than households in most other countries, in relation to their income. Figure 1 compares the ratio of household debt to disposable income in Australia, the United States and United Kingdom to that of New Zealand since 1990⁶. These four countries' household sectors are among the most heavily indebted of members of the Organisation for Economic Co-operation and Development (OECD), a group of 30 developed nations. The four have similar home ownership ratios and household lending practices among financial institutions. New Zealand and Australia began the decade with much lower household indebtedness than the United Kingdom and the United States, largely because controls on household lending until the mid-1980s had constrained antipodean

Figure 1
Household debt as a percentage of personal disposable income



Source: RBNZ, RBA

households. Since then, the pace of borrowing 'down under' has been faster than in the United States and United Kingdom, as individual households have borrowed to levels similar to those that obtained earlier in the United Kingdom and United States (although without the favourable tax treatment accorded housing borrowing in these two countries)⁷.

Lending market developments in the 1990s

This section examines the relative size and structure of the financial 'channels' that have delivered loans to households in the decade of rapid borrowing growth that has brought the ratio of household sector debt to disposable income to such relatively high levels.

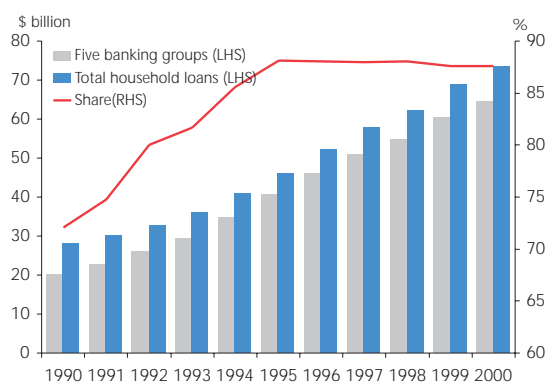
Savings banks and building societies already serving the household sector registered as banks, forming three of the seven large retail banking groups serving households at the beginning of the decade. At the turn of the millenium, mergers had reduced these seven to five banking groups. Already providing about 60 per cent of total household finance in 1990, their share had increased sharply to 88 per cent by 2000 (now represented by five banking groups), and over 90 per cent for residential mortgages. Adding the next five largest lenders to the household sector gives a total 94 per cent market share for the 10 largest institutions in the

⁵ Estimate based on information from the Meat & Wool Economic Service of New Zealand and the Livestock Improvement Corporation.

⁶ Student debt is excluded in these comparisons, as comparable data have been unobtainable.

⁷ The main reasons for the New Zealand household borrowing trend from 1980 are canvassed in Thorp C and B Ung (2000).

Figure 2
Top five banking groups' share of total household debt



household lending market (excluding student loans) as at December 2000. For residential mortgages alone the concentration ratio is even higher, at 97 per cent for the ten largest lending groups. For non-residential household lending, the top ten have a market share of about 70 per cent, with about half of this lending in the form of credit card advances. This degree of concentration is greater than in Australia, Canada and the United Kingdom (countries with similar banking systems) and much greater than in the United States, for example.

In 1990, \$4 billion, or 14 per cent of total household lending, was provided by non-bank institutions owned by the government. A further \$2 billion, or nearly 7 per cent of the market, is estimated to have been supplied through the solicitors' trust and contributory mortgage market. The latter may now be only 10 per cent of this size, and the government's current role, represented principally by the Housing Corporation, is negligible. Today's five large banking groups, compared on a 'like for like' basis in 1990 by adding back the merged financial institutions now part of them, dominated the private sector market in 1990, with well over 70 per cent of it. Figure 2 shows how they were able to acquire the government and solicitors' market shares between 1990 and 1995, from which time their loans to households, and those of all other lenders, have grown at the same rate.

Different types of loans to households can be allocated among classes of institution. Table 4 illustrates the distribution of several loan categories, on and off-balance sheet, among banks (not banking groups) and other lending sources. In December 2000, ten of the 18 banks then registered recorded \$60 billion of lending for housing. Several of them have managed fund subsidiaries offering units in fixed interest residential mortgage trusts. Together with other

Table 4
Household liabilities by type and holder

As at December 2000	
\$ million	
	Housing loans
Banks (on-balance sheet)	60000
Non-banks	1500
Managed fund assets	1500
Securitised mortgages, <i>net</i>	2000
Total	65000
	Other loans
Banks	2000
All credit/charge card loans	2800
Non-banks	
Hire purchase	2000
Other loans	500
Securitised loans (HP)	500
Store cards	500
Total	8300
Student loans	3700
Total household liabilities	77000

Source: RBNZ, The Treasury

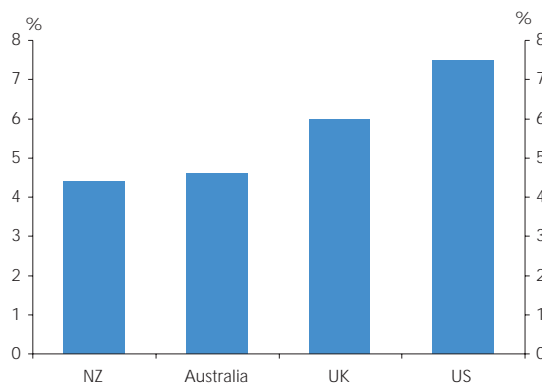
managed funds (including life and superannuation funds), these vehicles held around \$1.5 billion of residential loans or mortgage-backed paper. Building societies, credit unions, solicitors' trust and contributory mortgage sources, and more than twenty other institutions in our survey accounted for another \$1.5 billion in residential mortgage loans. Finally, the survey identifies about \$2 billion of securitised mortgages outstanding (not included elsewhere in portfolio), by far the bulk of them originated by banking groups.

Credit card debt has grown relatively quickly in New Zealand in the last few years, although it remains less than 4 per cent of total household debt. As noted elsewhere, several factors have contributed to this growth. Increased use of telephone and 'e-shopping', as well as the acceptance of credit card payment in supermarkets, have led to an increase in outstanding borrowing on credit cards, if only because the size of the 'float' not attracting an interest charge has increased with greater use. This use has been encouraged also by 'loyalty' programmes, offering airpoints and other forms of non-price inducement. Finally, a new market entrant and better software, enabling interest rates to be 'tiered' according to the amount borrowed, have reduced credit card loan costs.

Figure 3 illustrates the extent of credit card borrowing as a ratio of personal disposable income, indicating that the ratio in New Zealand is similar to that of several other countries. The figures for the US are slightly overstated, as they include other forms of personal non-residential revolving credit. (An estimate for store cards has been removed from the original flow of funds data.)⁸

It is important to recognise that the channels, or products, showing the forms in which householders borrow, and the classes of institution involved, do not correspond perfectly to the uses of funds borrowed implied by the label on the loan product or the name of the channel. This is particularly true of the housing loan category. 'Housing' loans in table 4 are all secured on residential property, but a proportion will not be for housing purposes. We have previously suggested, on the basis of industry estimates, that perhaps 10 per cent

Figure 3
Credit card debt outstanding as a ratio of household disposable income, December 2000



Source: RBNZ, RBA, Bank of England and Federal Reserve

of the \$60 billion shown as housing loans in table 4 is applied to a business purpose, rather than to housing.

Some lenders' systems do enable them to track separately business and household borrowing secured on residential property. For this reason, the residential property data obtained from banks' disclosure statements, calculated from capital ratio data, are higher in aggregate than those provided here. The overstatement of personal lending that occurs when the security designation is used to indicate purpose should be borne in mind in considering the degree of indebtedness of households in tables 1, 2, and 3. The practice of using residential properties to secure borrowing by small businesses was not common before the 1990s, and will have exaggerated the trend growth rate of housing borrowing in these tables and figure 1.

For similar practical reasons, a significant amount – perhaps over \$2 billion – represented as housing lending, is likely to have been lent for personal non-housing purposes. These purposes will include the financing of cars (which is probably the major share of such lending), but they will also include borrowing for holidays, boats and share purchase, for example. A very large element of the 40 per cent share of floating rate loans secured on housing in New Zealand is provided with loan products that may be freely repaid and redrawn within the original limit, using telephone or internet banking transfers to a current account, for instance. Making loan use even more flexible, banks have introduced loan accounts, secured by residential mortgage, with chequebook

⁸ Credit card totals for New Zealand are slightly lower than last year, as a revised survey has identified personal card borrowing only. New Zealand data in figure 3 includes a minor personal charge card component.

access, accounting now for about 15 per cent of the \$25 billion floating rate residential mortgage loan total. While most of the loan amounts in this category will be for house purchase, it will all be reported as house lending, as there is no way with such a product to distinguish purpose. Personal debt may in the main originate with the purchase of a house, but it is also used to support consumption. Loan practices introduced through the 1990s have made this easier to do than was the case earlier.

Financial liabilities summary

There were three principal channels through which households borrowed at the start of the twenty year period covered by the tables in this survey. These were the government-owned Housing Corporation and a solicitors' and contributory mortgage market for housing loans, and a fragmented and varied institutional market (not dominated by banks) for housing and other personal purposes. Major financial policy and institutional changes, including the removal of funding constraints on financial institutions, took full effect from the second half of the 1980s in the context of widespread economic reform. Financial institutions found that they could fund new lending in a less constrained way than was previously the case, particularly from wholesale international sources.

These changes enabled households to increase their borrowing in relation to their income. The changes also whetted financial institutions' appetite for household lending. Households' strong demand for loans, coupled with financial market reform, led to the development of a highly concentrated financial market serving households' borrowing needs.

4 Household financial assets

Key highlights

- Since 1990, households have directed more of their financial assets to managed funds than to deposits.
- Personal deposits in banks have increased very little since 1997.
- Unit trusts have been the fastest growing sector of managed funds.

- Since 1990, managed funds have switched the bulk of their equity investment overseas.

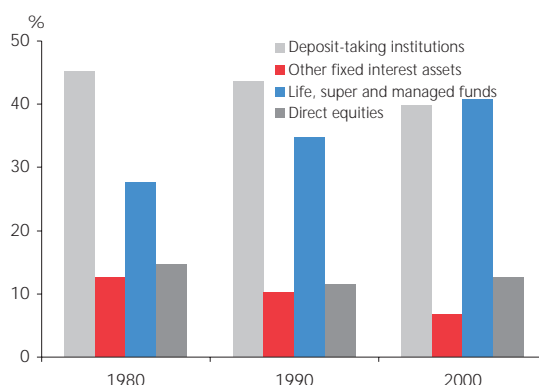
Deposit-taking institutions

Twenty years ago the largest proportion of households' financial assets, nearly 45 per cent, was in the form of deposits with different classes of financial institution. While still large, that proportion is now lower and ranks second in size to financial assets held in life, superannuation and other managed funds (see figure 4). Other fixed interest assets are relatively less important now, as a result of the decline in demand for funds from the solicitors' trust mortgage market. Although equity investment has increased, this has mostly occurred indirectly through managed fund investment.

The legislation and regulations governing deposit-taking institutions in 1980 varied among banks, finance companies, savings banks and building societies, to name just four groups. These institutions were just beginning to adapt to the removal of deposit controls over the previous few years when controls were re-imposed from 1981 to 1984. The five commercial banks had the largest market share of household deposits in 1980, at over 25 per cent. The deregulation that occurred from the mid-1980s promoted more than ten years of consolidation of the institutional deposit market for household savings. By December 2000, deposits with the five largest banking groups accounted for over 80 per cent of total household deposits.

The growth of personal deposits at banks and other deposit-takers has been vastly outstripped over the twenty years to

Figure 4
Household financial assets: share of total



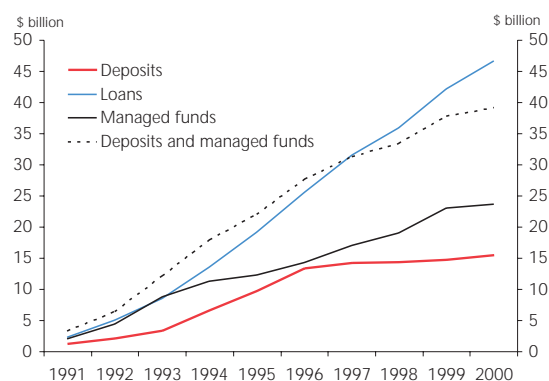
Source: RBNZ, SNZ

2000 by their personal lending. The appetite of households for loans was far greater than for deposits, and so deposit-taking institutions changed from being net borrowers from households in the 1980s, to net lenders to them in the 1990s. In many other OECD economies, banks' efficiency in lending to households has also outrun the attractiveness of their basic deposit products to the same market. Reflecting this, in some of these countries, household loans have been securitised, that is, sold off the balance sheet. These loans have mostly been bought by long-term savings vehicles and various types of managed fund. The funds' liabilities in turn are owned by the household sector. As a result, although banks generate more housing loans than they can fund from households on their balance sheets, households fund a substantial proportion of household lending by funding the longer term savings vehicles.

Securitisation has happened only to a limited extent in New Zealand. To make up their funding shortfall, banks have borrowed from non-residents. At December 2000, over 35 per cent of the total net deposits of 'M3 institutions' (all but one a banking group) was from non-residents. Figure 5 shows that from 1990, net new loan growth exceeded deposit growth by 1994 and the total of net new deposit and managed fund growth was surpassed by borrowing from deposit-taking institutions by 1998.

Since 1997, non-bank deposit-taking institutions have increased their share of household deposits from about 6 to 8 per cent of the total. A group of 15 to 25 smaller building societies and finance companies have increased their household deposits by 40 per cent, while bank deposits increased very little. This contrasts with the 1990 to 1997 period, when banks obtained 40 per cent of the total growth in household financial assets. In general, since 1997, the smaller institutions have paid higher deposit rates and earned the greater revenues to pay them from lending for non-housing purposes, particularly hire purchase lending, property development (often residential) and commercial mortgages. They have been able to attract deposits easily at the margins they pay over bank deposits, with their growth constrained only by the availability of higher return lending opportunities. In the process, the balance sheets of a number of institutions originally focused on household lending have over the past

Figure 5
Growth in household loans, deposits and managed funds from 1990



Source: RBNZ

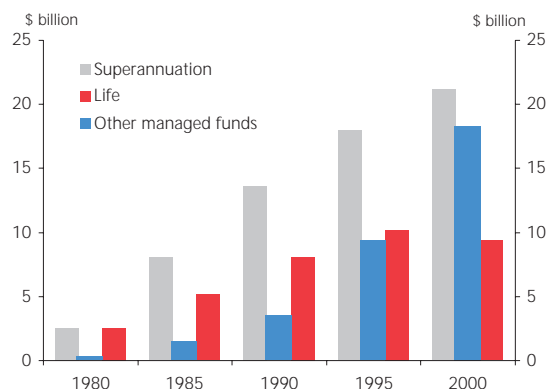
decade become more heavily weighted towards loans of a commercial nature.

Managed funds

'Managed funds', throughout this article, refers to households' funds under management that are sourced from registered superannuation products, products with a life insurance component and other fund management products (almost all unit trusts). Life offices manage the greatest proportion of funds, having broadened their role to become fund managers and offer all three main product classes. Several registered banks have established managed fund subsidiaries, and there are a number of fund managers specialising in unit trust business. Merger and ongoing concentration has been a feature of this industry in the 1990s, as economies of scale have been sought. Unit trust products have grown fastest in the last decade, with life product assets under management declining. Trends in the value of assets invested in superannuation, life and other managed funds from 1980 are illustrated in figure 6.

Life insurance contributions were favoured with a taxation advantage over other forms of saving until the mid-1980s. The removal of this incentive and the growth of a vigorous term life insurance market meant that endowment and whole of life insurance products lost momentum in the 1990s. Superannuation funds under management in figure 6 include the funded portion of government employees' superannuation contributions.

Figure 6
Superannuation, life and other managed funds



Source: RBNZ, The Treasury

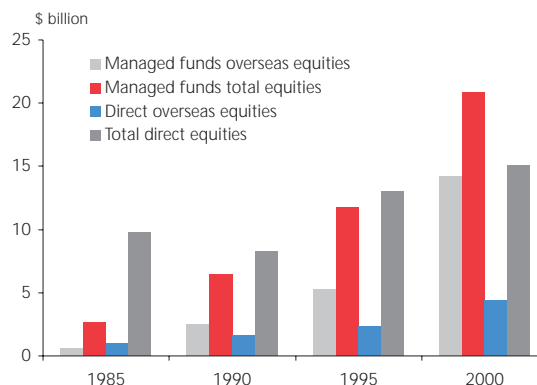
Funds managed in group investment funds offered by trustee companies are included with unit trusts in the “other managed fund” category, as is a small proportion of household funds under management in private portfolios. One reason for the stronger growth of unit trust assets since 1995, compared to superannuation, has been the different portfolio balance adopted; in particular, the degree to which unit trusts have invested abroad in equity markets, with currency impacts accentuating this in recent years. Within the superannuation category, employer-related superannuation became less common from the late 1980s. Retail superannuation products grew quite strongly from then and now represent almost 40 per cent of the superannuation market, exclusive of the funded proportion of the government employees’ scheme.

Equities

The New Zealand domestic sharemarket had a predominance of directly held household shareholdings in the early 1980s, but by 2000 only a fifth of the market was held directly by New Zealanders. The growth of the managed funds industry offered diversification possibilities and undoubtedly encouraged more people to save in long-term vehicles, which in turn invested in the sharemarket. However, since 1995, managed funds have directed a greater share of their equity investment to overseas markets. By 2000 two-thirds of the value of their equity portfolios was invested overseas. Until 1984, households and institutions alike were prevented by exchange control regulations from owning shares overseas,

except under limited circumstances. From 1985, their overseas equity holdings have grown relatively rapidly, driven by the managed funds industry. Estimates of direct overseas shareholdings by New Zealand households suggest they did not grow as fast, but are nonetheless around 30 per cent of total direct equity holdings. Figure 7 illustrates this growth from 1985. The high proportion held offshore (50 per cent) of the total of equity holdings of New Zealanders in 2000 is unusual among OECD countries.

Figure 7
Managed fund and direct holdings of equities



Source: RBNZ, SNZ

Other fixed interest assets

Other fixed interest assets comprise local authority and government stock holdings, including retail issues of around \$1 billion, and retail bonds, estimated loans from households through solicitors and contributory mortgage companies, financial assets in property syndication and funds in solicitors’ trust accounts held in banks. The aggregate of these categories grew quite rapidly in the 1980s as demand for housing finance from solicitors attracted household funding and the government offered very competitive interest rates on its retail issues. Since 1990, both these markets have declined, with retail bonds and some growth in property syndication until recently roughly replacing these financial asset values, together with some growth in solicitors’ trust account funds at banks. This market is a relatively small proportion of total household financial assets, as a ratio of household disposable income, compared to the more developed and deeper markets in several other OECD

countries. No estimate is made for direct overseas holdings of fixed interest securities and bank deposits.

Financial assets summary

Growth of household financial assets across all markets and products in the last twenty years has in aggregate been slow in New Zealand in comparison to such growth in other countries. This has been the case despite relatively high real interest rates. One reason is likely to have been the drive to invest in housing from 1985, after the preceding 15 years of high inflation had demonstrated the value of doing so, and given the relatively low gearing of the household sector that then prevailed. Another possible explanation is that the domestic capital market has not been as attractive to domestic investors as has been the case elsewhere. International equity markets were relatively difficult to access directly before the mid-1990s. The ratio of financial wealth to real wealth in housing in New Zealand is one to four, which is low in relation to the range of results for OECD countries with relatively similar institutional and home-owning conditions. In 2000 there has been some evidence that the pace of housing investment has slowed. Over the next five years we might expect to see some improvement in the value of the gross net financial assets of households, as they rebalance their wealth holdings.

5 Conclusion

The borrowing needs of households in New Zealand are well catered for. The lending market's high degree of concentration is associated with vigorous competition for market share and efficient delivery of home loans. The transformation of the channels and sources of household loan delivery over the past fifteen years coincided with a period of economic restructuring and liberalisation. Up until 1985, households' access to housing finance had been

restricted. When controls were removed, much freer access to loans, and the lessons of the previous fifteen years of inflation, led New Zealanders to increase their borrowing for housing at a rapid rate. Financial industry development facilitated this, and in turn was spurred by the strong demand. These factors carried the momentum of household borrowing growth strongly into the late 1990s, despite the sharp fall in inflation from the start of the decade, and significantly higher real interest rates than were experienced on average in the 1970s and 1980s. Since 1998 there have been indications that households' appetite for loans has abated, as evidenced by flat house prices and, during 2000, the slowest rate of growth of borrowing experienced for more than twenty years.

With over a decade's experience of inflation averaging more than 10 per cent prior to 1980, the household sector received little encouragement to preserve its wealth in financial assets over this period. The removal of controls on financial markets in the second half of the 1970s was reversed early in the 1980s, retarding growth in innovation and flexibility in the household financial asset market. Once controls (including overseas exchange control) were fully removed from 1985, and with the new regulatory regime in place for banks by 1987, financial institutions were able to offer a greater range of products and channels for saving. The strong household investment in housing has been one reason household financial asset growth has been relatively slow. Also, over the last two decades, growth in household incomes has been slow, another reason for sluggish growth in household financial assets. In the 1990s, the managed fund industry in particular has rationalised its structure, with the emergence of fewer larger fund managers being a recent feature of this market. If the current relatively slower rate of growth of borrowing for housing persists, as seems likely, a faster rate of accumulation of wealth in financial assets may begin to be observed in the next five years.

Appendix 1

Equity holdings

The publication last year of data series for household equities separated households' equity holdings into four categories: direct and indirect, domestic and overseas. Indirect holdings, through managed funds, were available from existing surveys, as were direct domestic holdings. There was no ongoing survey to draw on for direct overseas holdings. A 'one-off' 1985 Reserve Bank survey of direct holdings in Australia had revealed almost \$1 billion of equities owned by New Zealanders in only 31 large companies. We adjusted this figure to \$1.6 billion to incorporate assumptions about greater Australian coverage and direct equity investment elsewhere. We revalued this over time by currency and equity market index changes. We then assumed that a further net \$3 billion had been invested directly overseas in the course of the 1990s and arrived at a total of \$11 billion in direct overseas equity holdings. This total was split roughly equally between Australia and the rest of the world.

Working with data from the Australian Bureau of Statistics, Statistics New Zealand has estimated a June 2000 figure for

direct equity investment in Australia by New Zealanders of about \$2.7 billion, or a little less than half of the 'guesstimate' our methodology would have produced for December 2000. Statistics New Zealand has further estimated that holdings elsewhere were \$2.1 billion. For Australia, these data imply that the value of the equity in the original survey has simply increased in line with changes in the values of the two currencies and the 'All Ords' index, with no net additional investment. One reason why this might have occurred is fairly rapid growth of managed funds from 1985, which may have encouraged people to exchange their direct holdings for the advantage of diversification in units in trusts invested in Australia. Another possibility is that equity holdings were exchanged for property ownership, to take advantage of the rapid growth in residential property values in Australia that occurred over this period.

We have recalculated our series for direct overseas holdings to align with the latest SNZ data. The results (with previous values in italics) are set out in table 5.

Table 5
Household equity holdings

As at December \$ billion	1985	1990	1995	1999	2000
Managed funds holdings					
Domestic	2	4	7	8	7
Overseas	1	3	5	12	14
Managed fund total	3	7	12	20	21
Direct holdings					
Domestic	9	7	11	13	11
Overseas	1	2	2	4	4
<i>RB overseas estimate</i>	2	2	5	11	12
Direct total	10	8	13	17	15
Total household equities	12	15	25	37	36
<i>RB estimate</i>	13	16	27	43	44
Ratio of total disposable income*					
Equities to disposable income now	45%	34%	48%	61%	56%
<i>Former ratio</i>	48%	35%	52%	72%	69%

* SNA 93 basis in both cases

Source: RBNZ, SNZ, NZIER