

# Extended measures of financial assets and credit

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## Introduction

The Reserve Bank collects and publishes monthly statistics for registered banks and other M3 Financial Institutions (M3FIs). A variety of organisations compile data on broader financial sector activity. Articles in earlier Reserve Bank Bulletins have brought together statistics from a range of such sources to compile broad measures of financial assets and credit. This article updates these measures and provides comment on some recent trends.

The article also outlines Reserve Bank proposals to compile more consistent, comprehensive statistics on financial intermediation in New Zealand. These are designed to address some gaps and deficiencies in existing statistical collections. The proposals, if implemented, would provide a substantially better overview of the broader, less segmented financial sector that has developed in New Zealand following extensive deregulation.

## I. Household financial assets

### 1. Liquid financial assets

An extended measure of household liquidity was published for the first time in the September 1993 Reserve Bank Bulletin. This is updated in Table 1 below. This measure

of household liquidity has been extended to include retail superannuation products because these are similar in many respects to unit trusts and life insurance bonds.

Table 1 shows that funding to M3FIs, which mainly comprises deposits at banks, was almost \$34.0 billion at the end of September 1994. This is still the most important form of household financial savings. Deposits at solicitors' trust accounts have shown some modest growth over the last twelve months, but private individuals' direct holdings of government securities have been declining steadily for some years.

Household savings in the form of retail investment products, (eg unit trusts and life insurance bonds), have been growing especially strongly for several years. In September 1989 they were \$2.3 billion, or 8 percent of household liquidity. By September 1994 these figures had risen to \$10.1 billion and 21 percent respectively. This is illustrated in Figure 1. In the United States, by comparison, the value of mutual funds is equivalent to about 90 percent of bank deposits. Further significant growth in retail investment products may therefore be possible. However, recent falls in share and bond prices may temper some investors' enthusiasm for these products.

Figure 1

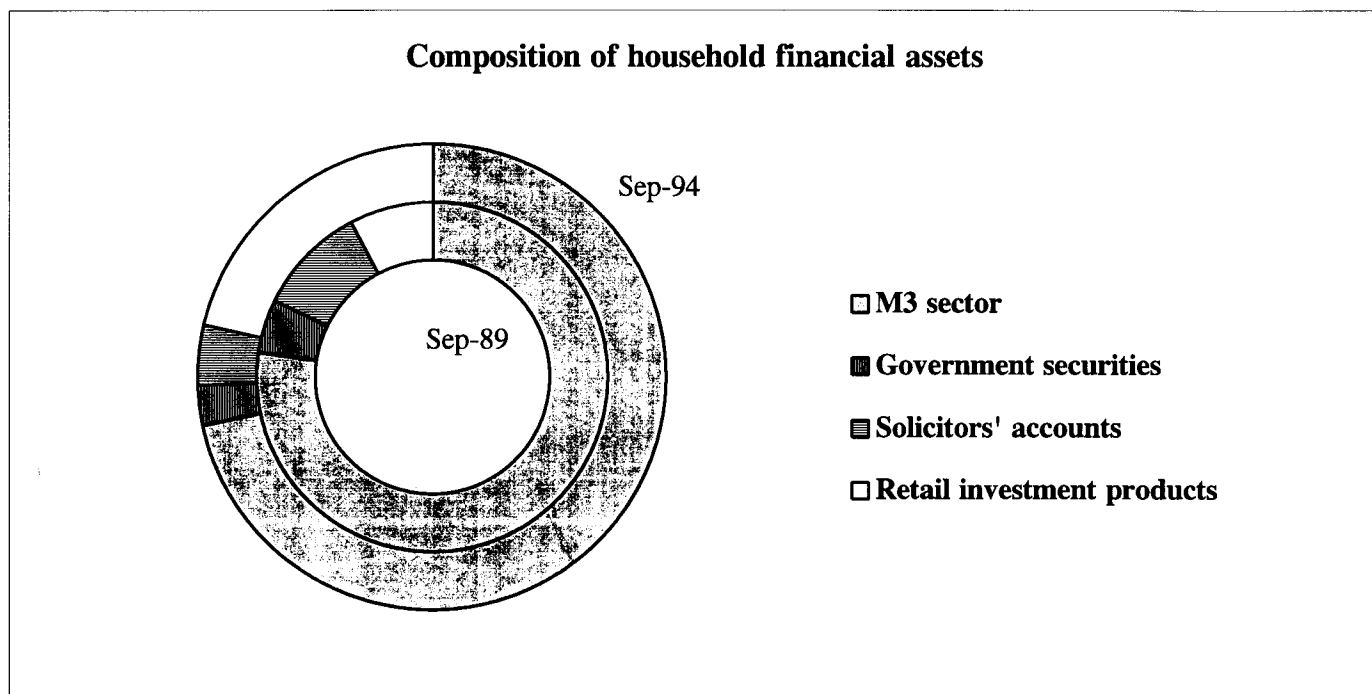


Table 1

**Household liquid financial assets**  
(Annual percentage changes are shown below relevant totals)

Item	Dec 89	Dec 90	Dec 91	Dec 92	Mar 93	Jun 93	Sep 93	Dec 93	Mar 94	June 94	Sep 94
a. Household funding to M3 institutions	23,898 (%) 21.8	29,116 3.6	30,153 2.2	30,829 (-0.5)	30,300 2.9	31,347 3.5	31,692 3.1	31,780 5.8	32,045 6.1	33,251 7.2	33,968
b. Government securities	1,638 (%) 25.9	1,708 4.3	1,699 (-0.5)	1,609 (-5.3)	1,541 (-4.9)	1,471 (-9.5)	1,347 (-15.2)	1,254 (-22.1)	1,224 (-20.1)	1,214 (-17.5)	1,299 (-3.6)
c. Solicitors' trust accounts	2,786e (%) 11.1	2,356e (-15.4)	1,903 (-19.2)	1,712 (-10.0)	1,759 16.0	1,761 (-11.6)	1,877 (-3.3)	1,714 0.1	1,991 13.2	2,085 18.4	1,993 6.2
Retail managed funds:											
d. Retail managed funds sub-total (e,f,g)	2,397 (%) 13.5	2,721 18.9	3,968 45.8	5,624 41.7	5,943 43.0	6,410 37.7	7,290 42.7	8,555 52.1	9,278 56.1	9,631 50.2	10,081 38.3
Of which -											
e. Unit trusts and group inv funds	926 (%) 70.4	1,101 18.9	1,522 38.2	2,073 36.2	2,159 35.5	2,311 31.8	2,637 38.8	3,182 53.5	3,439 59.3	3,628 57.0	3,837 45.5
f. Life insurance bonds	1,198 (%) 10.7	1,232 2.8	1,387 12.6	1,795 29.4	1,860 31.9	1,951 25.9	2,093 25.2	2,316 29.0	2,431 30.7	2,442 25.2	2,555 22.1
g. Retail superannuation	273 (%) 45.2	388 42.1	1,059 172.9	1,756 65.8	1,924 66.9	2,148 59.0	2,560 66.3	3,057 74.0	3,408 77.1	3,561 65.8	3,689 44.1
h. Total (a,b,c,d)	30,719 (%) 16.9	35,901 16.9	37,723 5.1	39,774 5.4	39,543 4.8	40,989 5.8	42,206 7.5	43,303 8.9	44,538 12.6	46,181 12.7	47,341 12.2

## Notes

a,b: Source: RBNZ.

c: Source: NZ Law Society. Figures marked (e) are estimated.

e,f,g: Source: FPG Research Ltd.

Table 2

**Superannuation statistics**  
(Annual percentage changes are shown below relevant totals)

	Jun 89	Dec 89	Jun 90	Dec 90	Jun 91	Dec 91	Jun 92	Dec 92	Mar 93	Jun 93	Sep 93	Dec 93	Mar 94	Jun 94	Sep 94
a. Registered superannuation schemes															
i. Published figures <sup>(1)</sup>	10,580	10,071	11,000	11,323	11,000	11,323	11,323	11,323	2,951	2,951	3,106	3,365	3,266	3,241	3,521
	(-0.4)	(-4.8)	9.2	2.9	9.2	2.9	2.9	2.9	(-11.4)	1.2	6.3	20.7	16.1	9.8	13.4
ii. Adjusted series <sup>(2)</sup>	11,591	11,033	11,000	11,323	11,000	11,323	11,323	11,323	2,148	2,148	2,560	3,057	3,408	3,561	3,689
	(-0.4)	(-4.8)	(-0.3)	2.9	(-0.3)	2.9	2.9	2.9	66.9	59.0	66.3	74.0	77.1	65.8	44.1
Of which -															
iii. Life office superannuation <sup>(3)</sup>	3,781	4,165	3,774	3,262	3,293	2,961	2,915	2,788	2,814	2,951	3,106	3,365	3,266	3,241	3,521
	15.8	26.4	(-0.2)	(-21.7)	(-12.7)	(-9.2)	(-11.4)	(-5.8)	(-3.6)	1.2	6.3	20.7	16.1	9.8	13.4
iv. Retail superannuation <sup>(4)</sup>	226	273	327	388	919	1,059	1,351	1,756	1,924	2,148	2,560	3,057	3,408	3,561	3,689
	35.3	45.2	44.7	42.1	181.0	172.9	47.0	65.8	66.9	59.0	66.3	74.0	77.1	65.8	44.1
b. Government Superannuation Fund <sup>(5)</sup>															
i. Net assets of GSF					2,500e	2,789	2,854	2,937	3,059	3,059	3,164	3,164	3,164	3,068	
					6.574	6.818	7.176	7.730	7.840	7.840	7.757	7.757	7.757	7.946	
ii. Unfunded liability					9,074	9,607	10,030	10,667	10,899	10,899	10,921	10,921	10,921	11,014	
					10.5	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
iii. Total					15.574	16.396	17.184	17.797	18.798	18.798	18.880	18.880	18.880	18.960	
c. Superannuation premiums <sup>(6)</sup>															
i. Personal premiums	107	121	132	144	155	176	187	205	207	220	230	245	256	265	274
	16.3	16.3	23.4	19.0	17.4	22.2	20.6	16.5	13.7	17.6	17.9	19.5	23.7	20.5	19.1
ii. Employee premiums	254	235	225	238	217	235	225	222	221	219	216	209	211	207	192
	(-5.2)	(-14.5)	(-11.4)	1.3	(-3.6)	(-1.3)	3.7	(-5.5)	(-0.9)	(-2.7)	(-2.7)	(-5.9)	(-4.5)	(-5.5)	(-11.1)
iii. Total premiums	361	355	357	382	372	411	412	427	428	439	446	454	467	472	466
	0.3	(-6.3)	(-1.1)	7.6	4.2	7.6	10.8	3.9	5.7	6.6	6.7	6.3	9.1	7.5	6.2

## Notes:

- (1) Source: Annual Reports of Government Actuary.
  - (2) Adjusted for accounting and other changes. See text for further explanation.
  - (3) Value of superannuation funds managed by life offices. Source: Reserve Bank survey of Life Office Assets.
  - (4) Source: FPG Research Limited.
  - (5) Source: Government Actuary's Office and Government Superannuation Fund.
  - (6) Source: Life Offices Association.
- e Estimated.

## 2. Superannuation

Statistics on New Zealanders' superannuation savings are updated in Table 2. The Government Actuary's statistics on registered superannuation schemes are the most comprehensive in New Zealand because all schemes must be registered if they are to pay tax-exempt benefits. The most recently published figures show that the total value of funds in registered schemes was \$11.3 billion in June 1992. The adjusted series, which makes allowance for accounting and classification changes, shows that superannuation savings showed very little change between 1989 and 1992.

One large superannuation scheme which is not included in the Government Actuary's figures is the Government Superannuation Fund (GSF) for public servants. The GSF is now closed to new members but it is likely to remain an important scheme for some years to come. Table 2 shows that the net assets of the GSF were \$3.1 billion in June 1994. These represent members' contributions and accumulated earnings. The GSF also had an unfunded liability of \$7.9 billion, so the value of members' claims on the scheme was \$11.0 billion. This is almost exactly the same as the total value of all registered schemes. However, the accumulated contributions to the GSF are only 27 percent of the value of funds in registered schemes.

Life offices, as shown in Table 2, have traditionally managed a substantial portion of registered superannuation funds. The value of schemes managed by life offices declined on an annual basis from March 1990 to March 1993. Since then, however, they have started to rise again. At the end of September 1994 the total value of funds managed by life offices was \$3.5 billion.

Retail superannuation schemes have shown consistent, strong growth for several years. They rose from \$250 million in September 1989 to \$3.7 billion in September 1994.

The steady level in the total value of superannuation funds and the strong growth in retail schemes suggest that traditional employer-sponsored schemes are declining in importance. This view is supported by data on superannuation premiums collected by the Life Offices Association. Table 2 shows that employee premiums for schemes managed by life offices have been steadily declining for several years. They fell from \$254 million in the June quarter 1989 to \$192 million in the September quarter 1994.

## II. Household credit

An extended measure of household credit was first published in the June 1992 Reserve Bank Bulletin. This is updated in Table 3 which shows that extended household credit was \$38.3 billion at the end of September 1994. Extended household credit rose by 17.3 percent in the 12 months to September and by an average annual compound rate of 11.8 percent since September 1989.<sup>1</sup>

The decline in interest rates over the last few years has almost certainly been an important factor contributing to the growth in household borrowing. Most of the debt included in extended household credit probably attracted an interest rate close to the weighted average first mortgage rate published each month by the Reserve Bank (see Table 15 of this Bulletin). Table 3 shows the estimated annual cost of servicing household debt (excluding principal payments). The trends in extended household credit, the first mortgage rate and interest payments are illustrated in Figure 2, where each variable is expressed as an index (set at 100 in September 1989).

Estimated annual interest payments declined from almost \$4.0 billion in December 1990 to \$2.6 billion in March 1994, despite the higher level of debt and incomes. However, interest payments rose sharply, to \$3.4 billion, in September 1994 reflecting recent increases in mortgage rates and continued growth in borrowing. The first mortgage rate has subsequently risen further, so debt servicing costs will also have risen.

## III. Business sector credit

The extended measure of business sector credit, which was first published in the June 1992 Bulletin, is updated in Table 4. The components of the extended business sector credit measure are illustrated in Figure 3. Table 4 shows that lending by M3FIs to the non-finance business sector rose by almost \$3.0 billion, or 8.8 percent, in the year to June 1994, reaching \$36.6 billion. Lending by life offices has been rising at a similar rate but on a much lower base. It was \$2.4 billion at the end of June.

Business sector borrowing from overseas, by contrast, fell by about \$4.8 billion, or by 17.6 percent, in the year to June 1994. The overall effect of these changes was a fall

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1 It should be noted that the Housing Corporation and Mortgage Corporation have been designated as M3FIs with effect from July 1992. Their lending has always been included in extended household credit so this did not affect the total. However, there are discontinuities in component series in September 1992. Lending by life offices to households is now the sole component of Other Borrowing.

Table 3

Extended measure of household credit  
(Annual percentage changes are shown below relevant totals)

	Dec 89	Dec 90	Dec 91	Dec 92	Mar 93	Jun 93	Sep 93	Dec 93	Mar 94	Jun 94	Sep 94
M3 Institutions: <sup>(1)</sup>											
Housing	13,455	15,467	18,486	24,688	24,781	26,526	26,294	27,378	28,649	30,855	31,815
Other	4,933	6,407	5,148	6,206	5,630	5,685	5,831	6,104	6,295	5,600	5,958
Total	18,388	21,874	23,634	30,894	30,410	32,211	32,125	33,482	34,943	36,455	37,773
	(%)	19.0	8.0	30.7	23.5	29.7	8.7	8.4	14.9	13.2	17.6
Other borrowing <sup>(1)</sup>	4,236	4,280	4,230	509	514	513	511	511	506	468	495
	(%)	1.0	-1.2	-88.0	-87.3	-86.7	2.0	0.5	-1.5	-8.9	-3.1
Extended household credit	22,624	26,154	27,864	31,402	30,924	32,725	32,637	33,993	35,449	36,923	38,268
	(%)	15.6	6.5	12.7	7.9	14.0	8.6	8.3	14.6	12.8	17.3
First mortgage rate	14.8	15.2	11.3	8.9	9.6	8.9	7.9	7.8	7.4	7.9	8.8
Interest payments	3,348	3,975	3,149	2,795	2,969	2,912	2,578	2,651	2,623	2,917	3,368

(1) Up to and including June 1992, "Other Borrowing" includes lending to households by life offices, the Housing Corporation and Mortgage Corporation. After June 1992, the Housing Corporation and Mortgage Corporation are included among M3 Institutions.

Table 4

Extended measure of business credit  
(Annual percentage changes are shown below relevant totals)

	Dec 89	Dec 90	Dec 91	Dec 92	Mar 93	Jun 93	Sep 93	Dec 93	Mar 94	Jun 94
Source of borrowing										
The M3 sector <sup>(1)</sup>	30,464	32,543	32,467	32,437	33,634	33,642	34,592	35,322	35,594	36,611
	(%)	6.8	-0.2	-0.1	0.3	-0.1	0.6	8.9	5.8	8.8
Life offices <sup>(2)</sup>	1,807	2,051	2,076	2,157	2,265	2,219	2,350	2,411	2,421	2,408
	(%)	13.5	1.2	3.9	9.7	12.8	13.5	11.8	6.9	8.6
Business sector borrowing from the M3 sector and life offices	32,271	34,594	34,543	34,595	35,900	35,860	36,942	37,733	38,015	39,019
	(%)	7.2	-0.1	0.2	0.8	0.6	1.3	9.1	5.9	8.8
Offshore <sup>(3)</sup>	25,583	29,581	29,867	26,918	24,990	27,028	23,851	23,984	23,812	22,265
	(%)	15.6	1.0	-9.9	-17.7	-3.3	-12.7	-10.9	-4.7	-17.6
Extended business sector credit measure	57,854	64,175	64,410	61,513	60,890	62,888	60,794	61,718	61,827	61,284
	(%)	10.9	0.4	-4.5	-7.7	-1.1	-4.7	0.3	1.5	-2.6
Base lending rate	15.8	16.3	12.7	10.4	11.0	10.5	9.8	9.5	9.0	9.2
Interest payments	9,141	10,460	8,180	6,397	6,698	6,603	5,958	5,863	5,564	5,638

1 Net of M3 inter-institutional claims.

2 Source: RBNZ Survey of Life Office Assets.

3 Source: Department of Statistics.

Figure 2

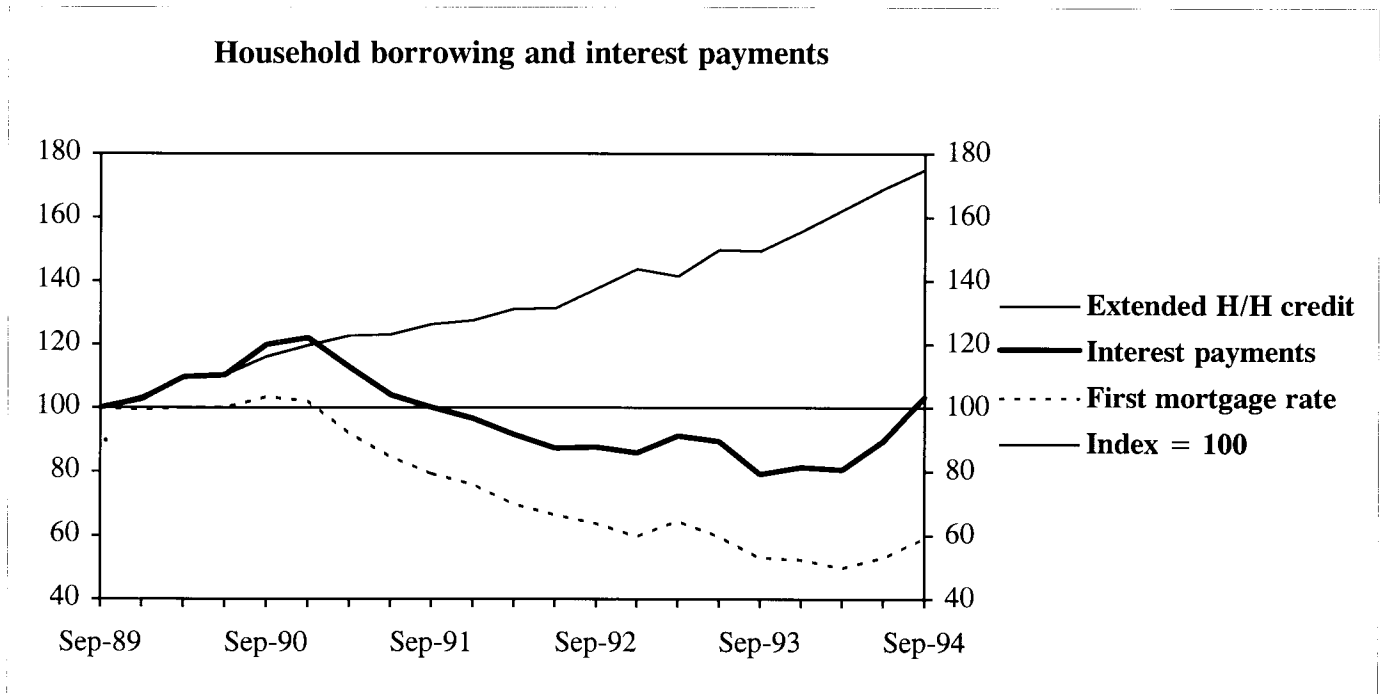
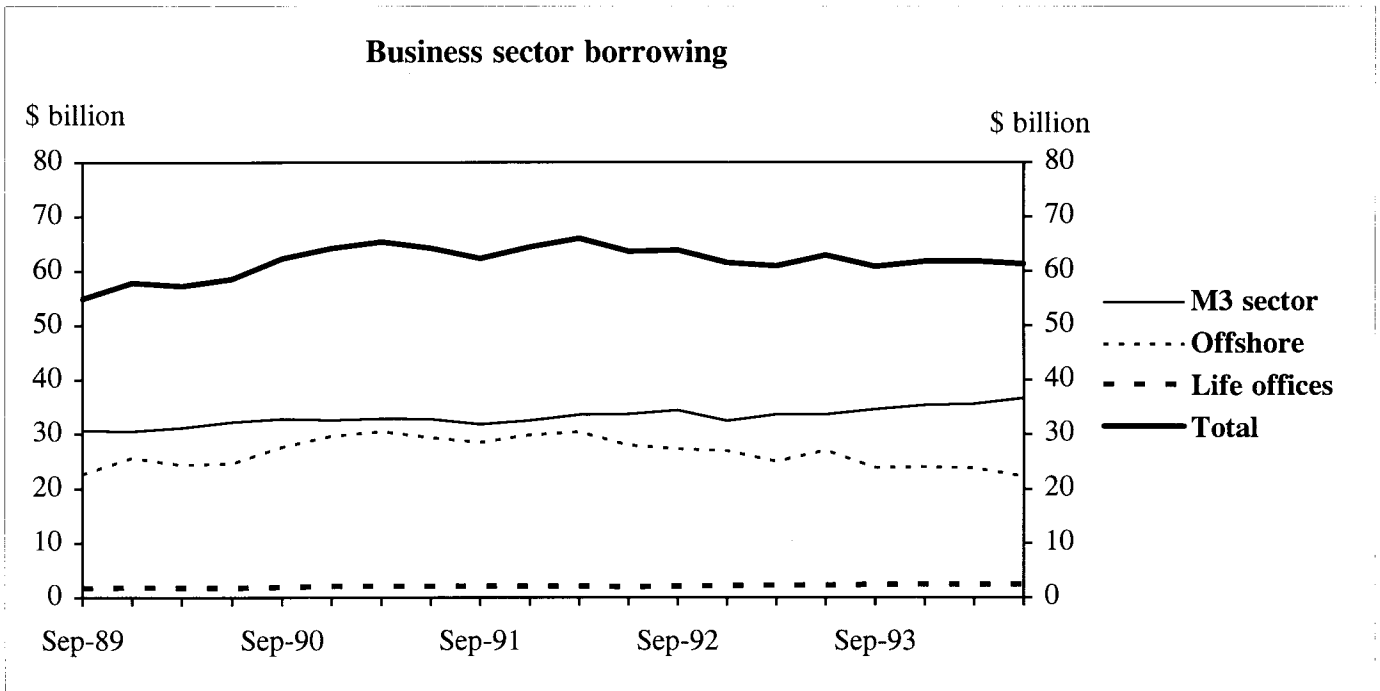


Figure 3



in extended business sector credit of 2.6 percent in the year to June.

Taking a longer perspective, extended business sector credit was 6.2 percent lower in June 1994 than at its peak in March 1991. The limited range of statistics on the business sector's sources of funds makes analysis of this trend difficult. It is likely, however, that rising profits have allowed many firms to finance investment from retained earnings. New issues of equity may also have been used to repay debt.

Table 4 also shows the weighted average base lending rate to provide an estimate of the business sector's debt servicing costs. This estimate is probably somewhat conservative as some borrowers may be paying a significant margin above the base lending rate. The estimates do suggest, however, that annual business sector interest payments have fallen substantially since 1991.

#### IV. Proposals for improved statistics

The statistics analysed above are collected and published by a number of different organisations. Each statistical collection was designed to meet particular needs, rather than to contribute to an overview of financial intermediation in New Zealand. As a result, users of these statistics face difficulties due to:

- Gaps in the coverage of some groups of financial institutions;
- Gaps in the coverage of some financial instruments or forms of intermediation;
- Different classifications of financial instruments, so that figures from different sources are not directly comparable;
- Problems with obtaining timely statistics.

Some particular shortcomings of the existing range of statistics are as follows.

- There are no statistics collected on private individuals' holdings of shares and most interest-bearing securities.
- No statistics are available on the (surrender) value of life insurance policies held by New Zealanders.
- There is no regular survey of the value of securities issued by New Zealand companies.

The Reserve Bank believes that a more consistent, comprehensive overview of financial intermediation in New Zealand would be valuable to many people. Private analysts would be able to construct more comprehensive measures of financial assets and debt. Financial institutions would be able to calculate more meaningful market share statistics.

The Reserve Bank is preparing draft proposals for more consistent, comprehensive statistical collections. We intend to give all interested parties the opportunity to comment on these proposals. They will be distributed to external users and providers of statistics for their comments early next year.

#### References

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- Hodgetts, B. (1992) "Some extended measures of business and household credit", *Reserve Bank of New Zealand Bulletin*, vol. 55(2), pp. 113-130.