

Australian net private wealth

Treasury has published annual estimates of Australian net private sector wealth since the Summer 1990 Economic Roundup. This article updates previous estimates, and provides preliminary estimates for net private sector wealth as at June 2001.

The market value of Australian net private sector wealth grew by 7.9 per cent in the year to 30 June 2001. In real terms (that is, after allowing for inflation), wealth grew by 2.8 per cent. Real wealth per Australian grew by 1.6 per cent.

Wealth definitions and uses

From an economic perspective, wealth can be defined as 'a store of spending power that can be carried into the future' (Jones and Perkins 1986, p. 150). Therefore, wealth includes a wide variety of assets, both financial assets, such as cash, shares and bonds, and non-financial assets such as dwellings, factories and other business assets that can be used to generate future income.

Measurements of the *store* (or 'stock') of spending power, such as wealth, complement measurements of the *production* (or 'flow') of income, such as gross domestic product (GDP). Wealth thus provides a useful additional measure of living standards as well as a benchmark for examining trends in such aggregates as external liabilities and private sector debt. In addition, wealth appears to be a significant determinant of future aggregate private consumption.

Wealth can also include a variety of other less tangible assets that are sometimes referred to as 'human wealth'. Human wealth includes, for example, the skills, education and social structures that contribute to an increased capacity to generate income in the future.

In addition, a broader definition of wealth might include such assets as natural resources or even leisure time or aesthetic qualities.

Measuring wealth

From a practical perspective, some components of wealth can be extremely difficult to quantify. In particular, it is difficult to value those assets that are

not readily tradeable and hence for which there are no readily observable prices. This is often the case for the various components of human wealth and some natural resources. As a result, the estimates in this article relate only to financial assets and non-financial (or physical) assets in those cases where there are well-developed markets and observable prices.

The scope of the estimates presented in this article is the Australian private sector. This consolidation of the private household and business sectors greatly simplifies the calculation of private sector wealth.¹ However, this consolidation does result in loss of detail on the liabilities of these two sectors. Consequently, the data on asset types contained in the attached tables and charts should not be used to infer relative ownership by either the household or business sectors, or the level of personal wealth.²

A number of assumptions and approximations are required to construct these estimates, particularly for the current year where much of the data remain provisional. Together with inevitable revisions to historical data, these limitations imply that the estimates should be interpreted as indicative of trends and broad orders of magnitude, rather than precise estimates.

The Australian Bureau of Statistics (ABS) also publish estimates of wealth. Please refer to the Appendix for a discussion of the relationship between these estimates and the Treasury estimates.

Methodology – How is wealth measured?

The wealth estimates presented in this article are a measure of the value of net domestic and foreign assets owned by the Australian private sector. These estimates are constructed using the inventory approach³, largely following the methodology of Callen (1991). This approach involves aggregating across

1 Consolidating the private household and business sectors implies that the bulk of financial instruments held by households (such as bank deposits, debt instruments and superannuation) are netted out in the analysis.

2 Details on assets by sector are available in the ABS publication Australian National Accounts: National Balance Sheet (ABS Catalogue No. 5241.0), and Bacon (1998) discusses household wealth estimates in detail.

3 Other approaches for constructing estimates of wealth include the portfolio and estate methods. Piggott (1987) provides a useful summary of these approaches.

different asset types and adjusting for the public and/or foreign ownership⁴ of assets. The estimates are largely based on ABS estimates of the dwelling stock, business capital stock, stock of consumer durables and Australia's international investment position. Reserve Bank of Australia (RBA) data are used for holdings of public securities and RBA liabilities. Some private sector data and estimates from previous studies also enter the estimates.

Treasury estimates of net private sector wealth are calculated on both a market value and replacement cost basis. The market value of an asset represents the value that would be obtained if assets were to be sold in current market conditions. The replacement cost of an asset is the cost of reproducing that asset.⁵ Detailed wealth estimates since 1960 are presented in the attached tables.

Private saving and wealth

From an economic perspective, private saving can be defined as the change in the real private sector wealth from one period to the next.⁶ Therefore, the annual change in real private sector wealth can be interpreted as the annual economic saving of the private sector.

As a measure of private saving, the change in private wealth is superior to net household saving as derived by the ABS. The main advantages are that it has a broader scope (since it covers the private sector as a whole) and it captures valuation effects (that is, changes in asset prices). However, these valuation effects can mean that it is more volatile than measures that exclude them. The coverage limitations that apply to the wealth estimates will also affect the implied measure of private saving. While these limitations suggest that caution should be exercised when interpreting short-term movements, the change in

4 The wealth estimates presented in this article measure wealth owned by Australians, regardless of where that wealth is located. For example, an Australian-owned factory located overseas contributes to Australian net private wealth, while an overseas-owned factory located in Australia does not.

5 The (depreciated) replacement cost is the price which would have to be paid for an identical asset which is in the same condition and expected to yield the same flow of services as the original asset. It is the relevant concept for physical assets such as consumer durables, the stock of dwellings and the business capital stock. The equivalent concept is the face value, which in the case of debt, for example, represents the price (excluding any accrued interest or dividends) which the borrower promises to repay the lender on expiry of the loan.

6 See the article, "The Measurement of Saving in Australia", in the Spring 1999 *Economic Roundup*.

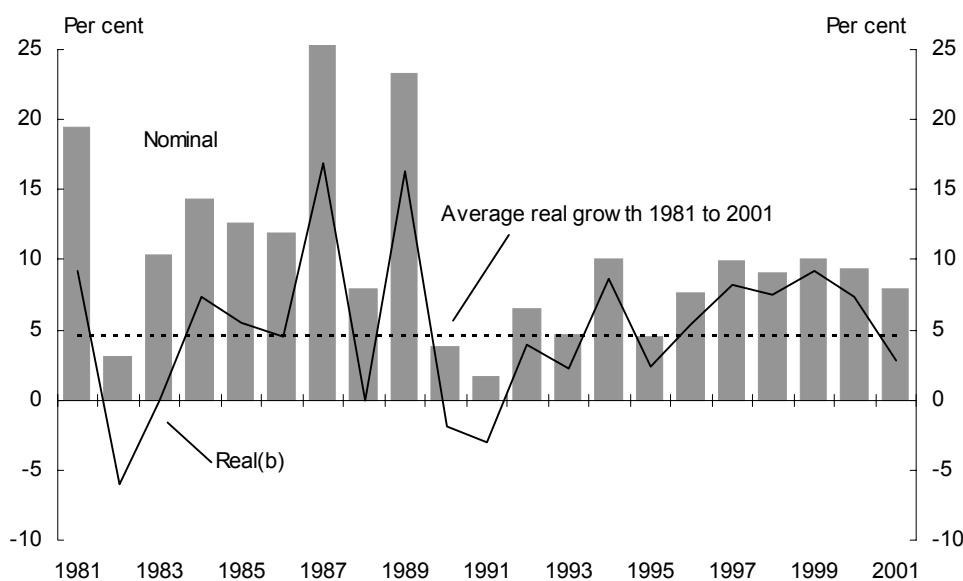
the market value of private wealth provides a useful measure of saving by Australia's private sector.

Movements in Australian private sector wealth in 2001

Through the year to 30 June 2001, Australian net private sector wealth at market value grew by 7.9 per cent in nominal terms, 2.8 per cent in real terms, and 1.6 per cent in real per capita terms. Tables 1(a), 1(b), 1(c) and 2 provide further detail.

Although real net private sector wealth continued to grow during the year to June 2001, the growth rate was below the longer-term trend after five years of above average growth (see Chart 1).

Chart 1: Growth in Australian net private sector wealth at market value^(a)



(a) As at June 30.

(b) Real wealth is determined using the consumption deflator. This includes the transitional impacts of the New Tax System.

In current prices, Australian net private sector wealth was approximately \$3,431 billion at market value and \$2,453 billion at replacement cost on 30 June 2001. This represents around:

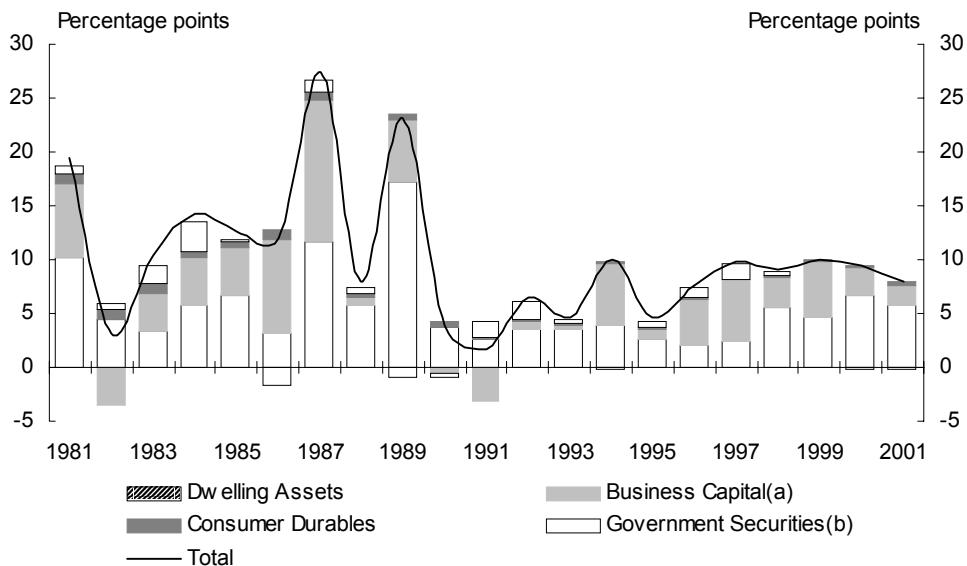
- \$167,100 per Australian (\$126,500 on a replacement cost basis); and

- 5.1 times the value of the annual nominal gross domestic product of the economy (3.6 times on a replacement cost basis).

In the year to June 2001, the main factor contributing to the growth in private wealth was growth in the market value of dwelling assets, which contributed 5.7 percentage points, marginally above the long-term average contribution to growth of 5.5 percentage points. This is shown in Chart 2.

The other main contribution to growth in wealth over the period was from business assets (net of net foreign liabilities), which contributed 3.8 percentage points. This was above the previous years' contribution of 3.7 percentage points, but below the long-term average growth of 4.5 percentage points.

Chart 2: Contributions to growth in nominal Australian net private sector wealth at market value^(c)



(a) Includes Australian investment abroad and excludes foreign liabilities.

(b) Includes money base.

(c) As at June 30

Valuation ratios for Australian net private wealth

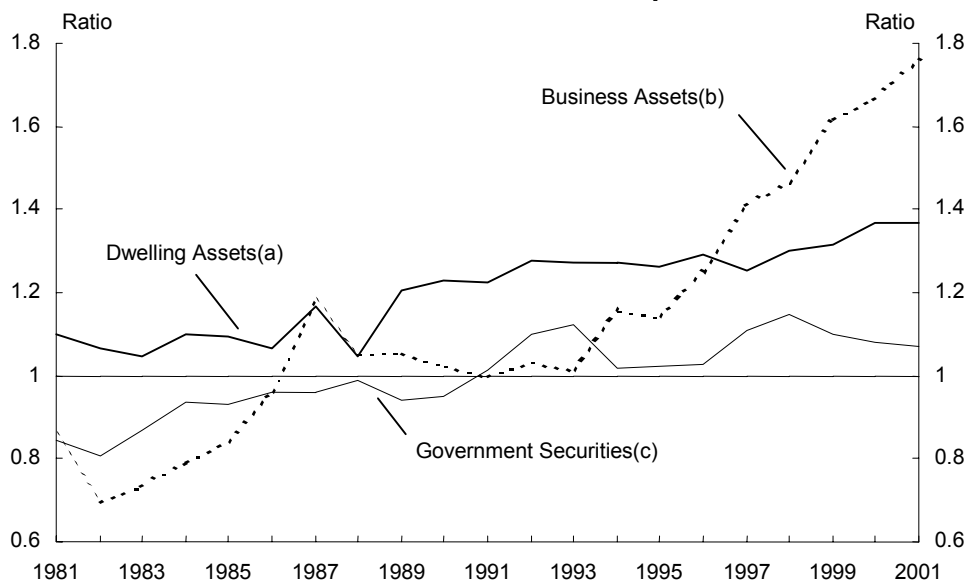
Valuation ratios for individual components of wealth (Table 3) provide a measure of the relationship between the market value and the replacement cost for that component. For dwelling assets, the valuation ratio represents the ratio between the price of established houses and the cost of building new dwellings (inclusive of land). The valuation ratio for business assets is the ratio

between the price of existing business assets (as valued by the stock market), and the price of new business investment. The valuation ratio for government securities is determined by current interest rates relative to the interest rates at the time the securities were issued. If there is an unanticipated fall in interest rates relative to the interest rate at the time of issue, then the value of the security rises and vice versa.

Changes in market conditions for particular components of wealth (for example, dwellings) will affect the valuation ratio for that component. Changes in market sentiment and business confidence will lead to changes in individual valuation ratios and fluctuations in the total market value of private sector wealth. The value of wealth at replacement cost is not directly affected by these changes in sentiment or confidence, and hence is more stable.

Over time, the valuation ratios of the different components have performed differently (Chart 3).

Chart 3: Valuation ratios for selected components of wealth



- (a) Established house prices divided by the deflator for dwelling investment.
- (b) Equity prices divided by the deflator for business fixed investment.
- (c) Market price divided by face value.

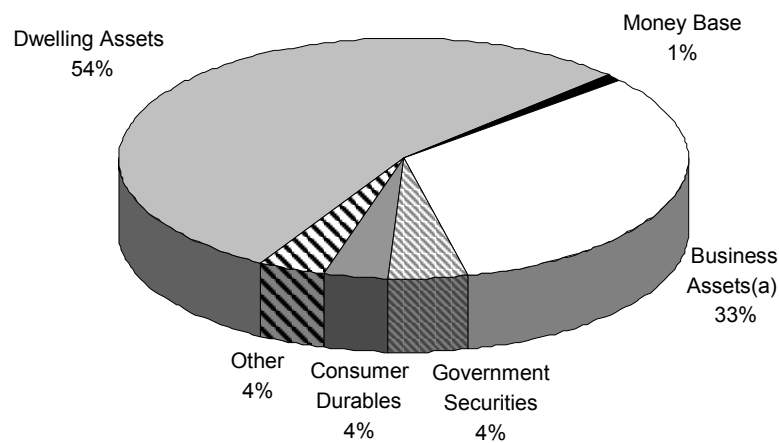
During the year to 30 June 2001:

- The valuation ratio for business assets increased, reflecting faster growth in stock market prices.
- The valuation ratio for dwelling assets was virtually unchanged from the previous year.
- The valuation ratio for government securities fell for the third year in succession, although the fall was small compared to recent years as interest rates fell.

Composition of Australian net private wealth by type of asset

The composition of wealth at market value by asset type remained relatively stable during the year to 30 June 2001.

Chart 4: Composition of Australian net private sector wealth by asset type



(a) Includes Australian investment abroad and excludes foreign liabilities.

References

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Appendix

Relationship with the ABS national balance sheets

The Treasury net wealth estimates presented in this article are broadly consistent with those published in the ABS publication, *Australian National Accounts: National Balance Sheet* (ABS Cat. 5241.0.40.001). The main differences are that the scope of the Treasury estimates is the aggregate private sector and that the Treasury estimates are prepared using a consistent basis for valuing the assets. In addition, the Treasury estimates are available for a much longer time period, thus allowing longer-term analysis of past changes in wealth.

In terms of scope, the Treasury estimates cover the total private sector in Australia. In contrast, the ABS balance sheets are prepared for a range of institutional sectors and for Australia as a whole, but not for the private sector as such. In terms of the ABS institutional sector classifications, the private sector is the sum of the ABS household and unincorporated enterprise sector and the private sector components of each of the non-financial corporation and financial corporation sectors.

In terms of scope, the major difference is that the ABS estimates include the value of demonstrated sub-soil assets and timber in native forests. These assets are not included within the Treasury estimates for two reasons. First, the ABS estimates for these assets typically only go back to 1989; the Treasury wealth estimates are calculated for each year back to 1960. Second, the valuation of these assets is difficult. The ABS valuations involve "calculating the expected future net income flow generated by the asset, and then discounting at some interest rate for the life of the asset". These figures cannot easily be added to the Tables below, since it is unclear to what extent these assets are already included in the valuations of businesses. In addition, comparisons with pre-1989 data will obviously not be possible.

Another important difference between the ABS and Treasury estimates is the valuation basis that is used. As noted earlier in this article, the Treasury estimates are compiled on both a market value and replacement cost basis. In contrast, the ABS uses a replacement cost basis for produced assets and a market value basis for financial assets and liabilities. As a result, the ABS estimates of 'net worth' (or wealth) are actually based on a mix of these two valuation methodologies.

Table 1: ABS valuations of sub-soil and native timber assets

As at June -	Subsoil assets	Native standing timber
1989	62.2	1.3
1990	52.0	1.3
1991	56.4	1.7
1992	55.8	1.5
1993	66.6	1.7
1994	70.5	1.9
1995	87.5	2.2
1996	84.7	2.2
1997	96.7	2.2
1998	103.4	2.3
1999	120.4	2.3
2000	143.9	2.5
2001 (a)	172.9	2.6

(a) Preliminary figures.

It is possible to reconcile the main components of the Treasury estimates of wealth at replacement cost with the estimates of produced assets in the ABS balance sheets, although allowance needs to be made for the differences in scope and coverage. While it is not generally possible to derive estimates of wealth at market value from the ABS balance sheets, it is possible to infer an estimate of the valuation ratio (the ratio of the market value of an asset to its replacement cost) for business assets. This is because the net financial assets held by the combined household and unincorporated, general government and foreign sectors (valued at market prices) should represent claims over the net physical assets held by the financial and non-financial corporation sectors (valued at replacement cost). The ratio so derived is reasonably similar to the valuation ratio for business assets presented in this article, thus confirming that, apart from the scope and coverage issues noted above, the Treasury wealth estimates are broadly consistent with the ABS estimates in the national balance sheets.

Table 1(b): Real private sector wealth at market value^(a)

As at June	Dwelling Assets	Business Assets	Consumer Durables	Government Securities	Money Base	Australian Investment Abroad	Foreign Liabilities	Total Wealth
(\$1999-2000 billion)								
1960	202.8	233.6	49.5	69.2	16.8	3.7	-32.7	560.7
1961	211.8	246.4	50.9	68.2	15.5	4.5	-28.2	588.2
1962	233.6	259.1	50.0	75.5	16.4	4.5	-30.0	629.1
1963	239.3	275.9	51.8	83.0	16.1	6.3	-36.6	657.1
1964	270.2	309.6	52.6	86.0	18.4	7.0	-47.4	720.2
1965	285.6	300.0	54.2	84.7	17.8	5.9	-40.7	733.1
1966	295.9	318.0	54.9	88.5	15.6	7.4	-41.8	765.6
1967	296.8	322.2	56.3	92.9	16.7	7.1	-47.6	772.2
1968	314.6	441.5	57.7	94.6	16.9	10.8	-71.5	895.4
1969	341.5	471.1	60.0	96.3	17.8	10.4	-77.8	951.9
1970	376.1	447.2	62.7	88.0	19.0	10.6	-71.1	966.9
1971	404.6	430.9	63.8	90.1	18.4	12.5	-73.7	982.9
1972	438.5	472.7	66.5	100.6	18.6	15.5	-90.1	1061.5
1973	497.7	449.7	68.8	95.4	23.1	12.7	-85.5	1102.9
1974	575.1	399.0	71.6	73.6	22.8	10.2	-66.0	1127.4
1975	552.6	318.1	75.4	74.6	17.7	10.8	-56.9	1032.8
1976	553.6	327.3	79.4	75.3	19.1	10.9	-70.8	1035.6
1977	556.8	315.9	83.1	73.3	21.3	12.8	-67.9	1038.2
1978	551.6	330.3	85.3	80.9	18.4	14.1	-69.1	1057.5
1979	567.4	350.9	83.1	83.1	18.3	16.3	-72.6	1094.6
1980	597.7	419.9	85.0	78.8	17.8	16.8	-88.6	1177.8
1981	656.7	476.4	86.8	78.7	18.0	16.1	-99.5	1286.8
1982	651.7	403.7	89.9	74.4	18.8	18.8	-105.2	1209.7
1983	627.0	424.8	91.0	86.5	17.8	21.1	-119.7	1210.0
1984	654.9	461.1	91.4	110.3	18.7	23.1	-127.2	1299.1
1985	694.0	511.0	93.8	102.4	20.3	30.9	-153.6	1370.6
1986	688.1	599.0	100.5	73.5	20.9	48.8	-174.2	1433.4
1987	783.9	752.4	102.4	80.6	20.8	65.4	-209.4	1675.6
1988	814.6	711.3	101.4	80.4	21.5	79.2	-216.2	1673.7
1989	1041.4	790.4	102.3	61.4	21.5	90.2	-247.9	1945.9
1990	1053.7	755.2	104.6	51.9	21.5	93.0	-261.6	1910.4
1991	1052.3	686.8	103.7	74.6	21.7	88.1	-271.0	1853.1
1992	1092.1	688.1	104.3	102.5	21.6	102.4	-286.5	1926.3
1993	1131.3	680.1	105.8	104.6	22.7	123.5	-303.3	1969.7
1994	1194.2	796.5	108.7	99.3	24.0	147.8	-340.5	2140.4
1995	1223.8	810.0	112.5	104.9	25.2	163.7	-362.5	2192.4
1996	1243.5	902.1	114.7	120.1	25.7	170.1	-385.1	2310.5
1997	1281.6	1040.1	113.9	140.6	35.2	205.3	-437.6	2501.4
1998	1396.6	1121.1	116.3	153.6	31.9	262.7	-518.5	2687.5
1999	1508.1	1294.0	118.8	151.6	32.1	277.3	-571.7	2936.4
2000	1672.0	1376.6	120.7	148.9	27.8	346.6	-668.8	3150.5
2001 (b)	1763.6	1424.5	122.8	136.4	28.0	360.1	-720.0	3239.4

(a) Real wealth is calculated by dividing nominal wealth by the private consumption deflator.

(b) Preliminary figures.

Table 1(c): Real private sector wealth per person at market value^(a)

As at June	Dwelling Assets	Business Assets	Consumer Durables	Govern- ment Securities	Money Base	Australian Investment Abroad	Foreign Liabilities	Total Wealth
(\$ per capita, 1999-2000 prices)								
1960	19357	22301	4728	6601	1606	357	-3122	53522
1961	19769	22993	4751	6363	1442	424	-2630	54896
1962	21412	23745	4582	6915	1500	417	-2749	57655
1963	21516	24807	4656	7466	1445	562	-3292	59088
1964	23824	27304	4641	7580	1624	619	-4177	63504
1965	24697	25943	4690	7328	1539	513	-3518	63391
1966	25019	26890	4643	7485	1317	624	-3535	64731
1967	24651	26760	4680	7712	1384	593	-3955	64133
1968	25654	36003	4704	7715	1380	878	-5833	73009
1969	27247	37590	4787	7683	1418	827	-6206	75948
1970	29375	34931	4896	6876	1485	825	-5556	75527
1971	30963	32977	4884	6897	1410	957	-5639	75218
1972	32961	35529	4996	7563	1401	1167	-6770	79789
1973	36853	33301	5094	7063	1712	942	-6335	81668
1974	41911	29075	5216	5364	1665	740	-4809	82157
1975	39774	22897	5429	5367	1272	776	-4095	74337
1976	39447	23326	5658	5365	1361	774	-5044	73796
1977	39230	22257	5856	5166	1500	905	-4785	73151
1978	38412	23003	5941	5637	1284	979	-4810	73646
1979	39091	24171	5728	5728	1260	1122	-5000	75406
1980	40671	28573	5785	5363	1213	1143	-6031	80146
1981	44008	31921	5814	5275	1204	1077	-6669	86225
1982	42921	26584	5919	4897	1235	1235	-6926	79668
1983	40729	27596	5913	5621	1155	1370	-7778	78602
1984	42034	29597	5865	7078	1201	1484	-8162	83385
1985	43956	32365	5942	6486	1284	1959	-9729	86812
1986	42958	37397	6273	4589	1303	3046	-10872	89484
1987	48202	46264	6293	4953	1277	4021	-12877	103023
1988	49272	43026	6131	4862	1302	4788	-13078	101239
1989	61934	47005	6085	3654	1277	5366	-14746	115727
1990	61746	44252	6130	3040	1260	5447	-15330	111950
1991	60884	39735	6000	4316	1255	5094	-15679	107216
1992	62423	39332	5962	5858	1236	5852	-16378	110106
1993	64035	38495	5986	5923	1284	6988	-17169	111489
1994	66885	44610	6090	5564	1347	8276	-19073	119881
1995	67717	44819	6227	5806	1392	9059	-20060	121316
1996	67911	49266	6263	6560	1403	9291	-21032	126182
1997	69186	56147	6151	7590	1902	11081	-23623	135037
1998	74566	59852	6208	8201	1705	14024	-27683	143483
1999	79636	68333	6273	8006	1696	14642	-30190	155058
2000	87276	71859	6301	7771	1454	18092	-34910	164459
2001 (b)	90953	73465	6331	7032	1442	18570	-37134	167068

(a) Real wealth is calculated by dividing nominal wealth by the private consumption deflator.

(b) Preliminary figures.

Table 3: Valuation ratios for selected wealth components

As at June -	Dwelling		Business		Government	
	Assets(a)	% grow th	Assets(b)	% grow th	Securities(c)	% grow th
1960	0.515		0.923			
1961	0.519	0.7	0.903	-2.1	0.974	
1962	0.550	6.0	0.893	-1.1	1.012	3.9
1963	0.544	-1.2	0.906	1.4	1.045	3.2
1964	0.581	6.9	0.954	5.3	1.021	-2.3
1965	0.586	0.9	0.881	-7.7	0.990	-3.0
1966	0.601	2.5	0.894	1.5	1.000	1.0
1967	0.599	-0.2	0.892	-0.2	1.009	0.9
1968	0.625	4.3	1.085	21.6	1.008	0.0
1969	0.676	8.1	1.118	3.0	0.985	-2.3
1970	0.744	10.0	1.057	-5.5	0.919	-6.7
1971	0.803	8.0	1.002	-5.2	0.938	2.1
1972	0.842	4.9	1.040	3.8	1.006	7.2
1973	0.921	9.3	0.987	-5.0	0.954	-5.2
1974	1.023	11.0	0.845	-14.4	0.810	-15.1
1975	0.973	-4.8	0.683	-19.2	0.852	5.2
1976	0.974	0.0	0.701	2.7	0.874	2.5
1977	0.955	-1.9	0.664	-5.3	0.858	-1.9
1978	0.924	-3.3	0.668	0.6	0.928	8.2
1979	0.957	3.6	0.692	3.7	0.898	-3.2
1980	1.042	9.0	0.788	13.9	0.859	-4.3
1981	1.098	5.4	0.861	9.3	0.845	-1.6
1982	1.064	-3.1	0.697	-19.1	0.806	-4.6
1983	1.044	-1.9	0.733	5.2	0.870	8.0
1984	1.100	5.3	0.793	8.1	0.938	7.7
1985	1.095	-0.4	0.838	5.7	0.930	-0.8
1986	1.066	-2.7	0.959	14.5	0.958	3.1
1987	1.165	9.3	1.181	23.1	0.960	0.2
1988	1.044	-10.4	1.053	-10.8	0.990	3.2
1989	1.206	15.5	1.057	0.4	0.939	-5.1
1990	1.230	2.0	1.023	-3.2	0.949	1.0
1991	1.222	-0.7	0.997	-2.5	1.014	6.9
1992	1.276	4.4	1.034	3.7	1.097	8.2
1993	1.273	-0.2	1.012	-2.2	1.122	2.3
1994	1.273	0.0	1.158	14.5	1.016	-9.5
1995	1.263	-0.8	1.143	-1.3	1.021	0.5
1996	1.290	2.1	1.249	9.2	1.026	0.5
1997	1.254	-2.8	1.409	12.8	1.107	7.9
1998	1.301	3.7	1.462	3.8	1.147	3.5
1999	1.314	1.0	1.616	10.5	1.097	-4.3
2000	1.368	4.1	1.668	3.2	1.081	-1.5
2001 (d)	1.366	-0.1	1.762	5.7	1.072	-0.8

(a) Established house prices divided by the deflator for dwelling investment.

(b) Equity prices divided by the deflator for business fixed investment.

(c) Market price divided by face value.

(d) Preliminary figures.

