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Employment

Insolvencies

House prices

Debt-to-income

Credit growth

Disposable income

Leaend

Debt-to-assets

Debt cost

Savings

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July 2012

### Consumer Vulnerability Index

→ 1Q2012

Low vulnerability

### CONSUMER VULNERABILITY REMAINS STEADY

Quantec's Consumer Vulnerability Index (CVI) has showed a steady pattern in the first quarter of 2012. The improvement of consumer vulnerability which commenced in 2009, therefore appears to have plateaued. After reaching dangerously high levels during 2008, the index had, by the end of 2010, dropped by nearly 29 index points (or roughly –37%). During the past eighteen months, the index has been fluctuating in a narrow range around the 50-point mark, recording 51 over the two most

Heat map of SA consumer vulnerability factors (past five years)

recent periods.

Households' vulnerability improved over the past three years mostly in the areas of indebtedness. Lower interest rates ensured that debt servicing costs declined significantly, while households' savings efforts also showed some improvement, although they still found themselves in a position of dissaving.

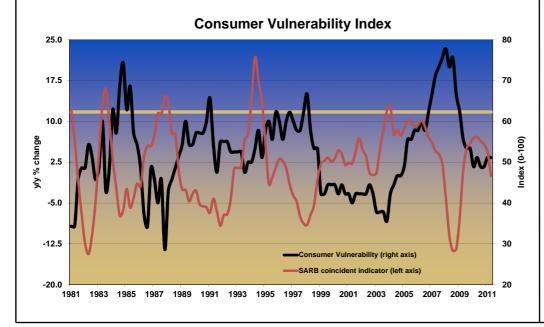
Employment growth also picked up slightly, but only half of job losses that

occurred during the recession had been restored by the end of the first quarter of 2012. The lack of improvement in residential property values meant that households' net worth remained under pressure. Credit uptake in real terms by households did appear to be picking up by the end of 2010, but has stalled again during 2011, showing only a marginal increase thus far in 2012.

2Q2007

High vulnerability

The economy's performance and the extent to which employment growth will continue in 2012/2013, will be very important determinants of households' ability to meet their debt obligations and further improve their financial vulnerability.



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Quantec Research (Pty) Ltd is a South African based consultancy. We focus on the marketing, distribution and support of economic and financial data, country intelligence and quantitative analytical software. We also provide consultancy in custom economic and financial database solutions, economic analysis and forecasting, and market analysis and segmentation.

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In South Africa, as is the case in many other countries, there is a keen interest in the financial health or vulnerability of the consumer. Since bank asset growth depends heavily on mortgage demand and other forms of asset finance, this is clearly an area that needs to be monitored closely. Indeed, the credit crunch of 2008/2009, had its origins partly in lending to people who were not in a position to repay their loans.

Many international studies have been conducted over the years in an attempt to establish predictors of consumer vulnerability which could serve as a warning signal to the authorities and to aid banks in gauging the possible impact of household debt and borrowing on their profitability. In South Africa, a lack of data and insufficient occurrences of consumer crises, make the compilation of probability predictors more difficult.

For South Africa, nine indicators of consumer financial health or vulnerability were identified and combined into a single index which can be used as a measure of consumer vulnerability. For each of the nine indicators, the historical standard deviations are calculated and scores given as shown in the tables below.

#### Consumer vulnerability index composition (1st Quarter 2012)

	Histo	orical period values <sup>1)</sup>		Latest	Score 5	Score 3	Score 1	Score	Outlook:
	Mean	Maximum	Minimum	value <sup>2)</sup>	years ago	years ago	year ago	1Q2012	next 6 months <sup>3)</sup>
Employment growth (y/y)	0.7%	2.8%	-6.3%	1.8%	10	15	10	10	Positive
Insolvencies growth (y/y)	9.6%	137.8%	-45.3%	-18.1%	10	20	10	10	Stable
Real house price growth (y/y)	2.2%	35.3%	-21.5%	-7.1%	10	20	15	15	Negative
Saving to HDI <sup>4)</sup>	2.0%	10.1%	-3.9%	0.0%	25	25	20	20	Stable
Household debt to HDI	59.8%	82.7%	44.3%	74.7%	20	25	20	20	Stable
Real Credit growth (y/y)	6.2%	23.6%	-6.2%	0.7%	20	5	10	10	Positive
Debt servicing cost	9.4%	15.4%	5.1%	6.7%	15	15	5	5	Positive
Real HDI growth (y/y)	3.5%	18.8%	-13.0%	4.1%	10	20	10	10	Positive
Debt to financial assets 5)	29.4%	33.7%	22.9%	29.9%	15	20	15	15	Stable
Total average score (out of 100)	•	-			60	73	51	51	

<sup>1)</sup> Historical period under review starts in 1981 for most data series 2) Most of the official macro-economic data are available for 4Q2011 4) HDI = Household disposable income

<sup>5)</sup> Recent data for unmatured policies at insurance companies are estimated

Expected score movement relative to the most recent quarter

How scoring is done:							
For indicators where a bigger n	umber would in	dicate less vuli	nerability				
(i.e. real income growth, employ	rment, savings, re	eal house price	growth)				For each of the indicators, the
Std deviations from mean	>2	2 to 1	1 to 0	0 to -1	-1 to -2	>-2	most recent value is compared
Score	25	20	15	10	5	0	with the historical data. A scor
For indicators where a smaller	number would in	diaata laga wu	Incrahility				is then awarded depending on how many standard deviations
For indicators where a smaller number would indicate less vulnerability (i.e. debt ratios, growth in real credit, insolvencies growth, debt servicing cost)							this value is below or above th
O	>2	2 to 1	1 to 0	0 to -1	-1 to -2	>-2	historical mean.
Std deviations from mean							

From the table it can be seen that there had been some improvement in South African households' financial position over the past five years, while a more significant improvement occurred during the past three years.

Savings were appallingly low and real credit growth dangerously high during the second quarter of 2006. The global credit crunch and ensuing recession of 2008/2009, impacted on employment and disposable income growth. Distress borrowing gave rise to even higher debt levels and caused a material rise in the number of insolvencies recorded.

The latest available figures (for the first quarter of 2012) show that four of the nine indicators were still in the top half of the vulnerability scale. The other five

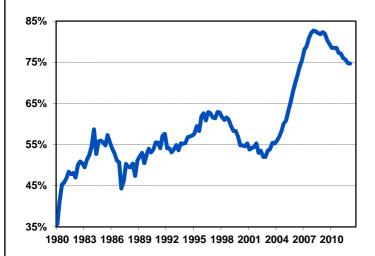
indicators were showing lower vulnerability for various reasons. The lowest interest rates in four decades have had a remarkably positive effect on debt servicing costs.

Credit uptake has continued to weaken owing to tighter lending criteria applied by banks and also because of households' relatively weak overall financial position. These factors have been limiting households' ability to take on additional debt. Household debt levels nevertheless remain elevated despite some moderate increases in household disposable income growth.

Meanwhile asset markets have remained under pressure which, together with the oversupply of properties in some areas, have kept real house price growth in negative territory.

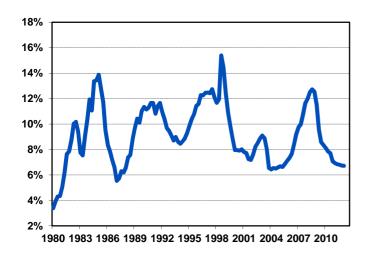
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### Household debt as a percentage of disposable income

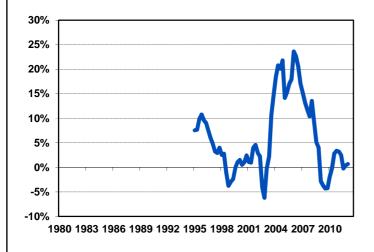


Whereas the household-debt-to-income ratio averaged 54% for about 25 years prior to 2005, the ratio moved up uninterruptedly during 2005 to 2008, going as high as 82,7%. Since then, household debt has relented somewhat, registering 74,7% of disposable in the first quarter of 2012. This level can still be regarded as unsustainably high, especially if interest rates should start to rise again. The high debt level has proved to be an obstacle in the savings efforts of households and has weakened their balance sheets, thus hampering the take-up of credit. This in turn has dampened the increases in certain asset prices.

### Household debt servicing cost as a percentage of disposable income

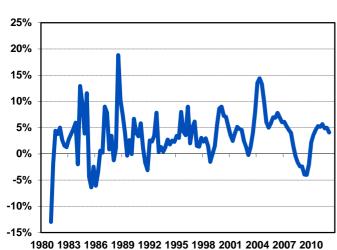


The latest number (first quarter 2012) of 6,7%, represents a meaningful drop from the level of more than 12% which prevailed during much of 2008 and 2009. (These figures only approximate interest costs and not principal repayments on debt.) The improved debt servicing cost ratio is of course mainly the result of the decline in interest rates since the end of 2008. The ratio is bound to show some further improvement during 2012 in view of the latest interest rate cut. The Reserve Bank is also not expected to raise interest rates for at least another year or so. In addition, disposable income growth should show further advances in view of above-inflation wage increases being granted in many sectors.



### Real credit growth: Household sector

Real year-on-year growth in private sector credit extension was negative during 2009 and the first half of 2010. During mid-2010 to mid-2011, real credit growth was in positive territory but only to the tune of 2,9% y/y, on average. Real credit growth showed virtually no movement in the second half of 2011 and rose marginally by 0,7% in the first quarter of 2012. In nominal terms during the first five months of 2012, total credit extended to the household sector grew by 6,9% y/y. "Other loans and advances" grew the fastest, by 16,8% y/y followed by instalment sales credit (12,3%). Mortgage advances growth was again negative in real terms and grew by only 2,4%. Mortgage advances comprised 50% of all loans, while "other loans and advances" constituted 37% of the total.

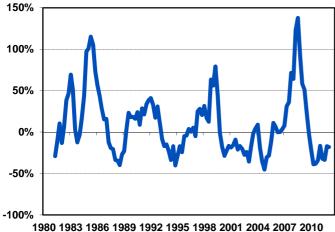


Real household disposable income growth Real household disposable

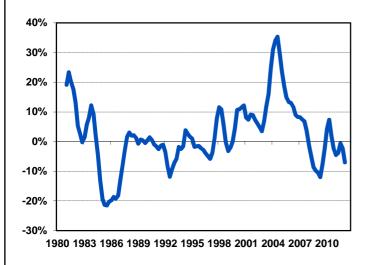
Real household disposable income (HDI) increased by 4,1% y/y in the first quarter of 2012. after rising by, on average, 5,2% y/y in 2011.

Some of the main determinants of income still remain under pressure:

- Employment growth: Although positive growth is being recorded, unemployment is still rising while nearly half a million jobs have still not been recovered since the recession.
- Productivity growth: Labour productivity declined by 1% on a quarterly annualised basis during the third quarter of 2011.
- Inflation: Headline CPI inflation has eased unexpectedly, but is unlikely to decline to below 5% before resuming an upward trend again.
- Changes in taxes and subsidies: No tax relief is foreseen over the next few years.



Rising insolvencies (of individuals) and liquidations (of enterprises) nearly always accompany any deterioration in economic conditions. Very often, a person can become insolvent when his / her income is no longer sufficient to finance expenditure, especially when such expenditure relates to the financing of debt commitments. During 2000-05, insolvencies had shown mostly a declining trend, averaging -18,4% y/y during this period. However, insolvencies started to increase at the end of 2005, and by mid-2008, escalated at a rate of more than 130% p.a. This involved nearly 1800 insolvencies per quarter, compared with an average of some 560 insolvencies per quarter during 2007. The rate of growth in insolvencies started to moderate towards the end of 2008 and during the past nine quarters, insolvencies had shown a drop of 28% y/y on average (some 600 cases in the first quarter of 2012).



### **Real house price growth**

Any decline in residential property values usually relates to excess supply, relative to demand. Although the number of houses built escalated by, on average 9,3% p.a. during 2003-2007, the decline in real house prices during 2008 probably had as much to do with deteriorating demand conditions than it did with an oversupply of properties. Steep increases in real house prices of more than 17% per year during 2003-2007 had made houses relatively expensive, while interest rate increases between mid-2006 and end-2008, as well as tighter credit conditions since mid-2007, caused many potential homebuyers to buy smaller properties or to postpone purchases altogether. The drop in house prices during 2008 and early 2009 was the steepest since 1992, and by the first quarter of 2012, real house prices were back at roughly the levels that prevailed in the first quarter of 2005.

Rising insolver enterprises) ne

### Change in insolvencies

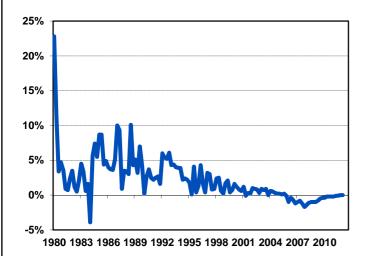
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### Household debt / financial assets

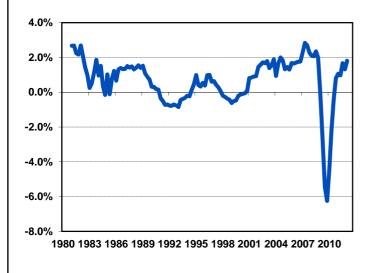


Household assets consist of tangible assets such as fixed property and durable goods, as well as financial assets. Reliable estimates for tangible assets of South African households are unfortunately not available. However, household assets held at banks in the form of deposits, at insurers in the form of unmatured policies, at pension funds and other financial assets in the form of financial securities, were added together to arrive at an approximation of household financial assets. During the period 2002-08, households accumulated debt at a faster pace than financial assets which caused the ratio to increase by more than ten percentage points. The situation has improved in the meantime, with the ratio reaching a level of 30% in the first quarter of 2012.

### Household net saving as % of disposable income



Household net saving in the national accounts is calculated as gross disposable income less final consumption expenditure and fixed capital formation. South Africa's net household saving, according to this measure, has been negative since the end of 2005. In essence, it implies that households are consuming more than they are earning, and this shortfall needs to be augmented from either accumulated savings, or through borrowing. Neither of these options are conducive for long-term wealth creation or ensuring sufficient funds at retirement and cannot be sustained indefinitely without affecting households' standard of living. Ways to encourage household saving would include sufficiently high real interest rates; low rates of inflation; measures to discourage excessive borrowing; economic policies to stimulate job creation; and low rates of taxation.



### Change in formal employment

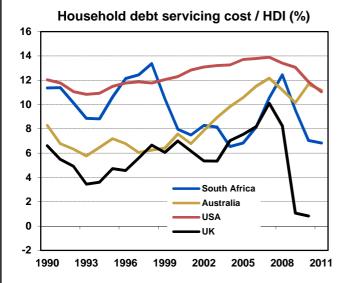
According to Stats SA's Quarterly Employment Survey and Quarterly Labour Force Survey (QLFS), formal employment started to rise (year-on-year) in the fourth quarter of 2010 after having recorded seven consecutive quarters of year-on-year declines. According to the latest surveys, formal employment growth amounted to 1,8% y/y in the first quarter of 2012 compared with average growth of 1,3% that was recorded during 2011. The latest QLFS (which includes informal sector jobs) showed that in the first quarter of 2012, compared with the fourth quarter of last year, significant job losses were recorded in manufacturing (-67 000) and construction (-71 000), while most new employment were recorded in agriculture (+26 000) and by private households (+33 000).

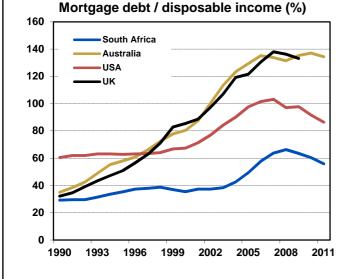
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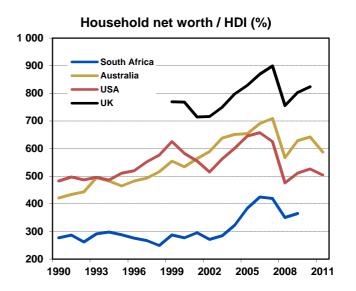
#### International comparisons: Household net worth, debt and savings

Household debt / HDI (%) 190 South Africa 170 Australia USA 150 אווג 130 110 90 70 50 30 1990 1993 1996 1999 2002 2005 2008 2011

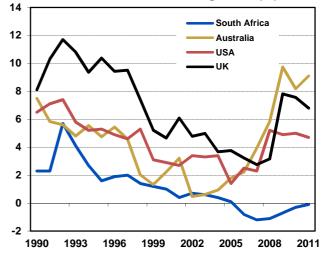
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#### Net household saving / HDI (%)



South African consumers are not the only ones who have been amassing debt over the past two decades or so. In Australia, the UK, and the US, debt levels had grown at an even more rapid pace, with mortgage debt having been responsible for most of the growth in household indebtedness.

The 2008/09 credit crisis and ensuing recession had also been responsible for a massive erosion in household wealth levels. From their respective peaks, household net wealth levels fell by 28% in the US, 18% in Australia, 17% in South Africa and 16% in the UK before recovering over the past year or so. Fortunately low borrowing rates have also caused significant declines in the debt servicing costs of households.

It would appear that savings levels have also benefitted from a renewed austerity drive amongst developed nations and although the process appears to have started also in South Africa, our household savings ratio remains negative.