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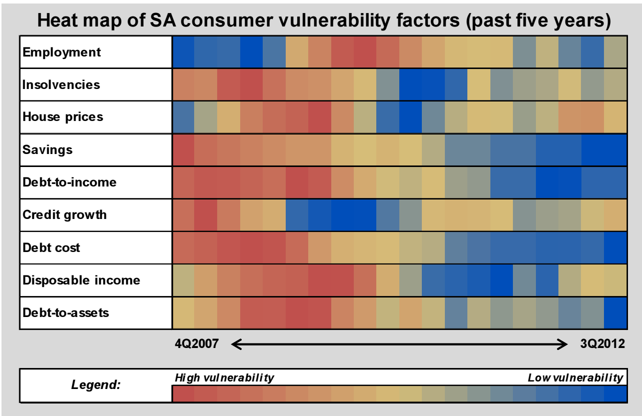
# Consumer Vulnerability Index

## CONSUMER VULNERABILITY SHOWS RENEWED IMPROVEMENT

Quantec's Consumer Vulnerability Index (CVI) for South Africa has improved in the third quarter of 2012 after having remained at the same level for seven consecutive quarters. This was the longest period of sideways movement in the index observed to date. The improvement of consumer vulnerability which commenced in 2009, has now gained some further momentum, which was caused mainly by the increase in household financial assets relative to their debt exposures. All of the other subcomponent variables showed little change in the past quarter.

After reaching dangerously high levels during 2008, the index had, by the end of 2010, dropped by nearly 29 index points (or roughly – 37%). Since then, the index has remained flat at the 51-point mark, receding to just below 50 during the most recent quarter.

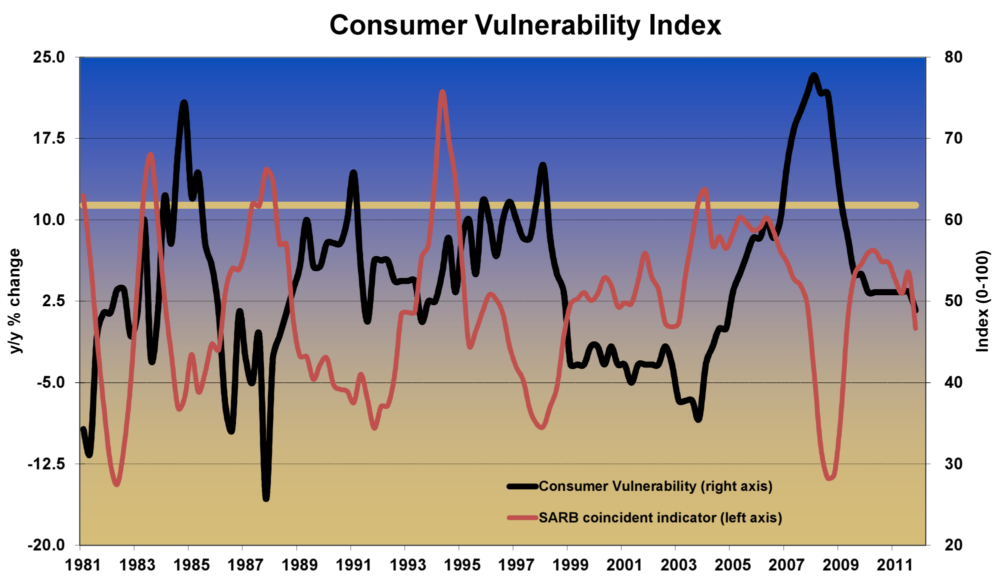



Households' vulnerability improved over the past three years mostly in the areas of indebtedness. Lower interest rates ensured that debt servicing costs declined significantly, while households have made some strides in improving their dissaving behaviour.

Employment growth also picked up slightly, but only around half of the job losses that occurred during the recession, had been restored by the end of the third quarter of 2012. The lack of improvement in residential property values meant that households' net worth remained under pressure, while lacklustre employment growth negatively affected household disposable income growth.

Credit uptake by households did appear to be picking up in real terms since the middle of 2012, but remained well below the median growth rate recorded since 1981.

The economy's performance and the extent to which employment growth will continue in 2013, will be crucial factors in determining households' ability to meet their debt obligations and further lessen their financial vulnerability.




**In this issue:**



*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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*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.*
*Recently, the heightened uncertainty related to the sovereign debt concerns in high-income countries, has shaken investors and consumers' confidence, weighing on the industrial sector recovery as consumers delayed purchases of durable goods and businesses drew down stocks.*
*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 (3rd Quarter 2012)

| | Historical period values [1] | | | Latest value [2] | Score 5 years ago | Score 3 years ago | Score 1 year ago | Score 3Q2012 | Outlook: next 6 months [3] |
|---|---|---|---|---|---|---|---|---|---|
| | Mean | Maximum | Minimum | | | | | | |
| Employment growth (y/y) | 0.7% | 2.8% | -6.3% | 1.4% | 10 | 25 | 10 | 10 | Stable |
| Insolvencies growth (y/y) | 9.5% | 137.8% | -45.3% | -14.6% | 15 | 15 | 10 | 10 | Stable |
| Real house price growth (y/y) | 2.1% | 35.3% | -21.5% | -4.5% | 10 | 15 | 15 | 15 | Negative |
| Saving to HDI [4] | 1.9% | 10.1% | -3.9% | 0.0% | 25 | 25 | 20 | 20 | Stable |
| Household debt to HDI | 60.1% | 83.0% | 44.3% | 76.0% | 20 | 20 | 20 | 20 | Stable |
| Real Credit growth (y/y) | 6.1% | 23.6% | -6.2% | 3.8% | 15 | 5 | 10 | 10 | Positive |
| Debt servicing cost | 9.3% | 15.4% | 5.1% | 6.5% | 15 | 10 | 5 | 5 | Stable |
| Real HDI growth (y/y) | 3.5% | 18.8% | -13.0% | 3.9% | 10 | 20 | 10 | 10 | Stable |
| Debt to financial assets [5] | 29.4% | 33.7% | 22.9% | 29.4% | 15 | 20 | 15 | 10 | Stable |
| Total average score (out of 100) | | | | | 60 | 69 | 51 | 49 | |

[1] *Historical period under review starts in 1981 for most data series*
[2] *Most of the official macro-economic data are available for 4Q2011*
[3] *Expected score movement relative to the most recent quarter*
[4] *HDI = Household disposable income*
[5] *Recent data for unmatured policies at insurance companies are estimated*

### How scoring is performed:

**For indicators where a bigger number would indicate less vulnerability**
***(i.e. real income growth, employment, savings, real house price growth)***

| Std deviations from mean | >2 | 2 to 1 | 1 to 0 | 0 to -1 | -1 to -2 | >-2 |
|---|---|---|---|---|---|---|
| Score | 25 | 20 | 15 | 10 | 5 | 0 |

**For indicators where a smaller number would indicate less vulnerability**
***(i.e. debt ratios, growth in real credit, insolvencies growth, debt servicing cost)***

| Std deviations from mean | >2 | 2 to 1 | 1 to 0 | 0 to -1 | -1 to -2 | >-2 |
|---|---|---|---|---|---|---|
| Score | 0 | 5 | 10 | 15 | 20 | 25 |

*Source: Quantec*

*For each of the indicators, the most recent value is compared with the historical data. A score is then awarded depending on how many standard deviations this value is below or above the*

From the table it can be seen that consumers' vulnerability are at a slightly improved level as a year ago, while it is showing a significant improvement on the condition that prevailed three years ago.

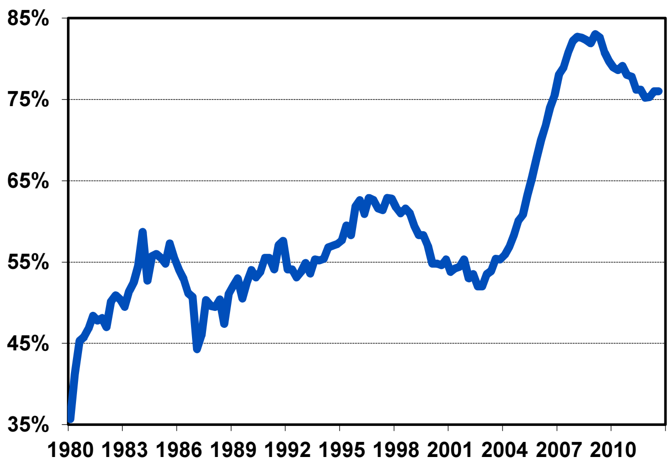
Savings were appallingly low and real credit growth quite high during the third quarter of 2006. The global credit crunch and ensuing recession of 2008/2009, impacted negatively on employment and disposable income growth. Distress borrowing gave rise to even higher debt levels and caused a material rise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

The latest available figures (for the third quarter of 2012) show that only three of the nine indicators were still in the top half of the vulnerability scale. The other six 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 remain weak 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 remained elevated despite some moderate increases in household disposable income growth.

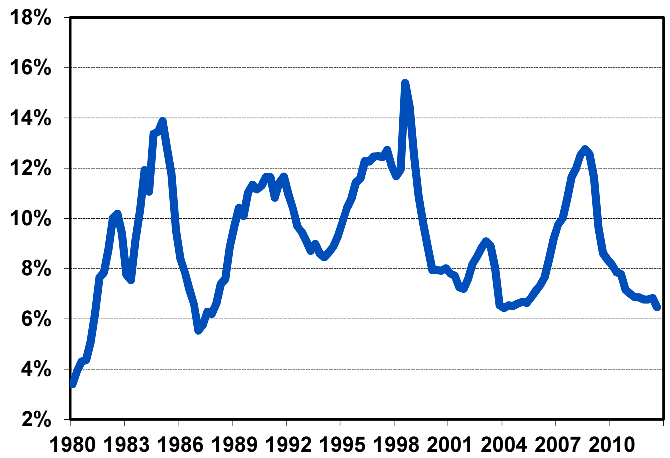
Meanwhile the residential property market has remained under pressure which, together with the oversupply of properties in some areas, have kept real house price growth in negative territory.

## Household debt as a percentage of disposable income



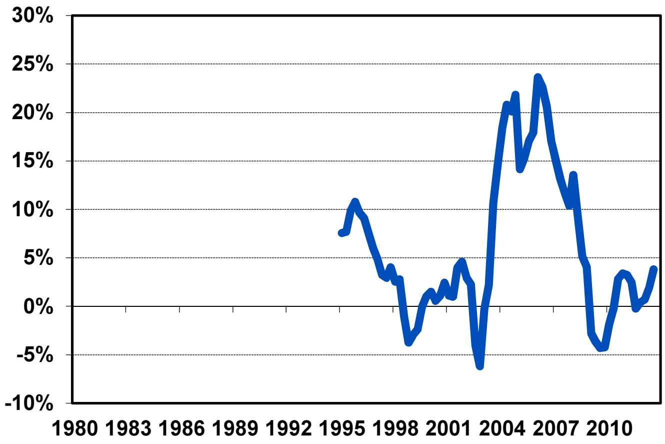

Whereas the household-debt-to-income ratio averaged 54% for about 25 years prior to 2005, the ratio moved up uninterruptedly during 2005 to 2008, going as high as 82,7%. Since then, household debt has relented somewhat, registering 75,2% of disposable income at the end of 2011. However, debt levels have crept up slightly during 2012, coming in at 76% in the third 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 prices of residential properties.

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



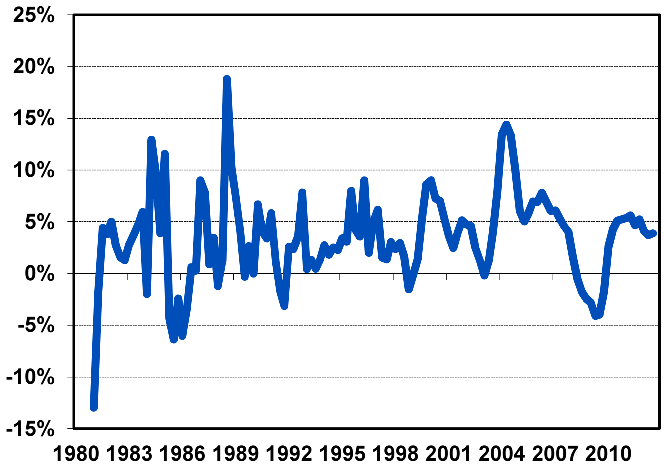

The latest number (third quarter 2012) of 6,5%, represented a meaningful drop from the level of more than 12% which prevailed during much of 2008 and 2009. (These numbers only approximate interest costs and not principal repayments on debt.) The improved debt servicing cost ratio is of course mainly the result of the decline in interest rates since the end of 2008. The ratio is bound to have shown a sideways movement during the last quarter of 2012 in view of the stable interest rate pattern since June last year. The Reserve Bank is also not expected to raise interest rates in 2013. 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 3% y/y, on average. Real credit growth showed virtually no movement during the second half of 2011. Credit growth picked up slightly in 2012, rising by 3,8% y/y in the third quarter. In nominal, terms during the first eleven months of 2012, total credit extended to the household sector grew by 7,8% y/y. "Other loans and advances" grew the fastest, by 16,7% y/y followed by instalment sales credit (14,3%). Mortgage advances growth was again very low and amounted to only 2,2% y/y. Mortgage advances comprised 50% of all loans, while "other loans and advances" constituted 38% of the total.

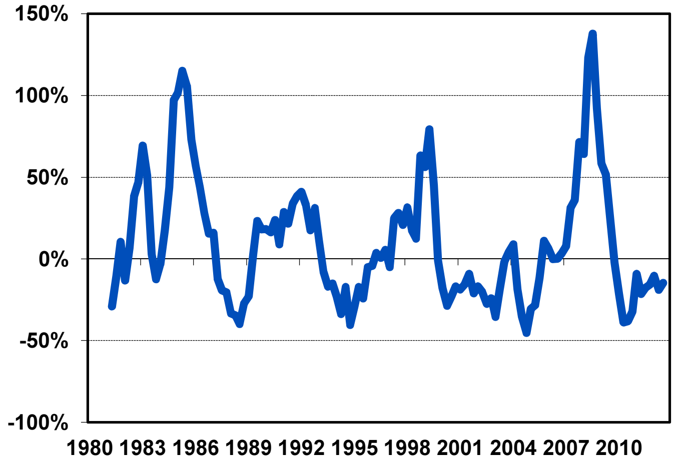
## Real household disposable income growth




Real household disposable income (HDI) growth decelerated in 2012, registering 3,9% y/y in the third quarter after rising by, on average, 5,2% y/y in 2011.
Some of the main determinants of income still remained under pressure:

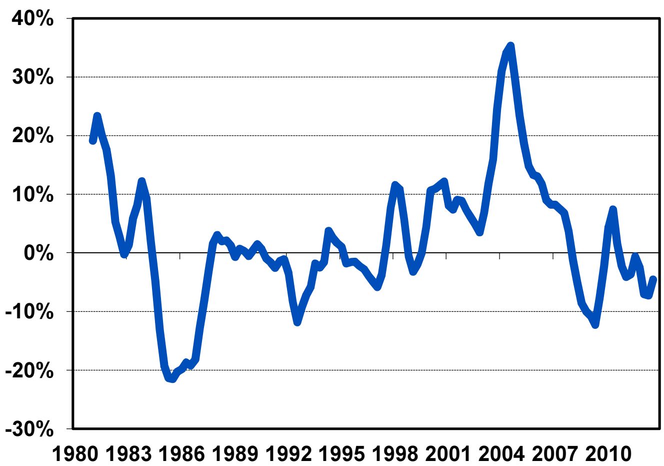
- Employment growth: Although positive growth is being recorded, unemployment is still rising while some 123 000 jobs have still not been recovered since the end of the previous recession.
- Productivity growth: Labour productivity rose by only 1,2% y/y in the second quarter of 2012.
- Inflation: Headline CPI inflation remained above the 5%-level throughout 2012, averaging 5,6% for the year.
- Changes in taxes and subsidies: No tax relief is foreseen over the next few years, while further increases in social subsidies may be limited owing to pressure on government finance.

## Change in insolvencies



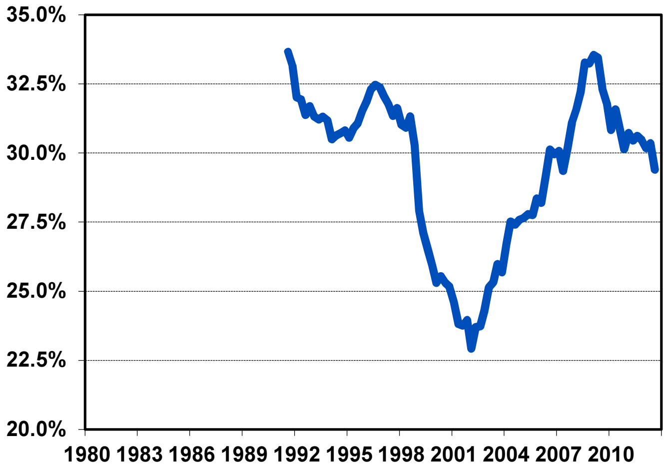

Rising insolvencies (of individuals) and liquidations (of enterprises) nearly always accompany any deterioration in economic conditions. Very often, a person can become insolvent when his/her income is no longer sufficient to finance expenditure, especially when such expenditure relates to the financing of debt commitments. During 2000-05, insolvencies had shown mostly a declining trend, averaging -18,4% y/y. 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 4 quarters, insolvencies had shown a drop of 15% y/y on average (774 cases in the third quarter of 2012).

## Real house price growth



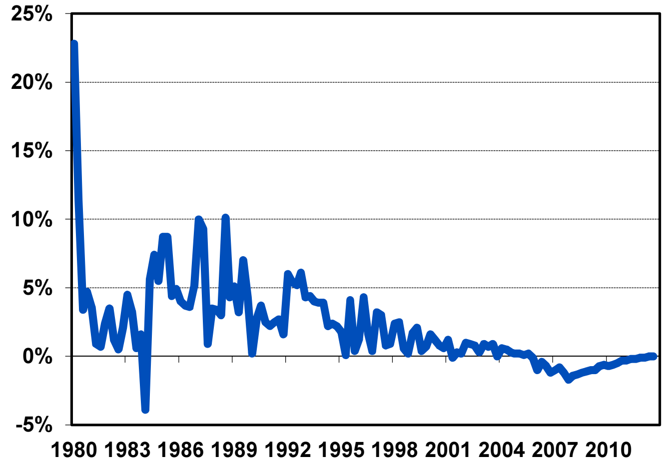

Any decline in residential property values usually relates to excess supply, relative to demand. Although the number of houses built escalated by, on average 9,3% p.a. during 2003-2007, the decline in real house prices during 2008 probably had as much to do with deteriorating demand conditions than it 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 third quarter of 2012, real house prices were back at roughly the levels that prevailed during the first quarter of 2005.

## Household debt / financial assets



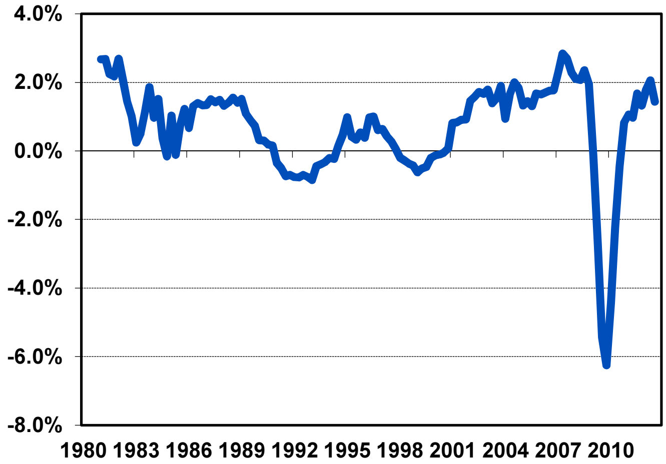

Household assets consist of tangible assets such as fixed property and durable goods, as well as financial assets. Reliable estimates for tangible assets of South African households are unfortunately not available. However, household assets held at banks in the form of deposits, at insurers in the form 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 just more than 29% in the third 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—especially on savings.

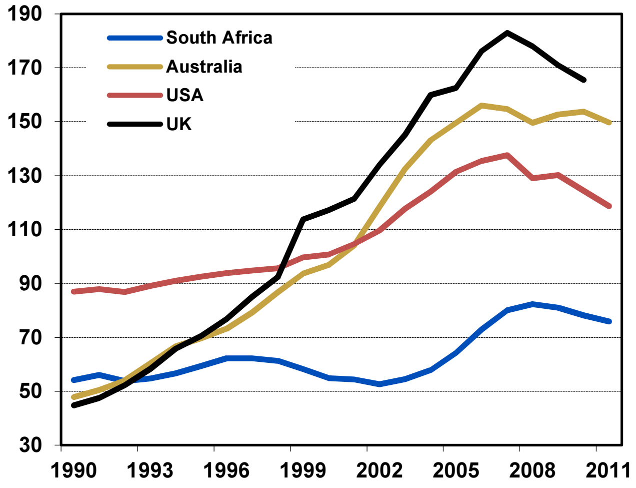
## Change in formal employment



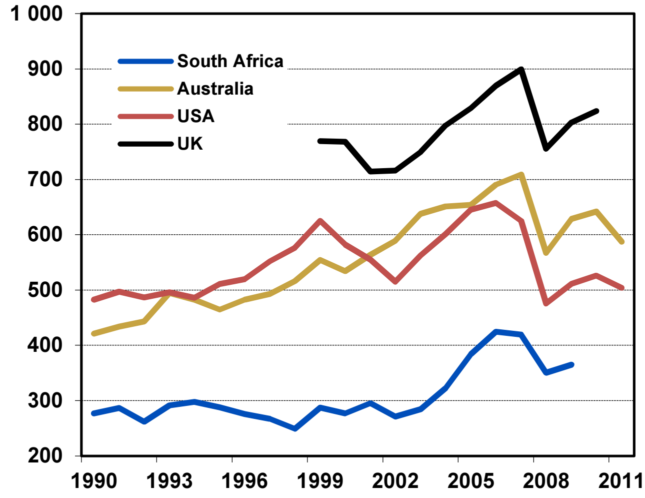

According to Stats SA's Quarterly Employment Survey and Quarterly Labour Force Survey (QLFS), formal employment started to rise (year-on-year) in the fourth quarter of 2010 after having recorded seven consecutive quarters of year-on-year declines. But the latest surveys show that formal employment growth amounted to only 1,4% y/y in the third quarter of 2012—basically on par with the paltry 1,3% that was recorded during 2011. The latest QLFS (which includes informal sector jobs) showed that in the third quarter of 2012, compared with the second quarter, the households shed the most jobs (-29 000), followed by mining (-8 000). Most of the other sectors showed gains, with the finance sector expanding by 74 000, manufacturing by 49 000, and transport sector by 43 000. In percentage terms, the utilities showed the fastest pace of employment growth of 7,1% q/q.

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

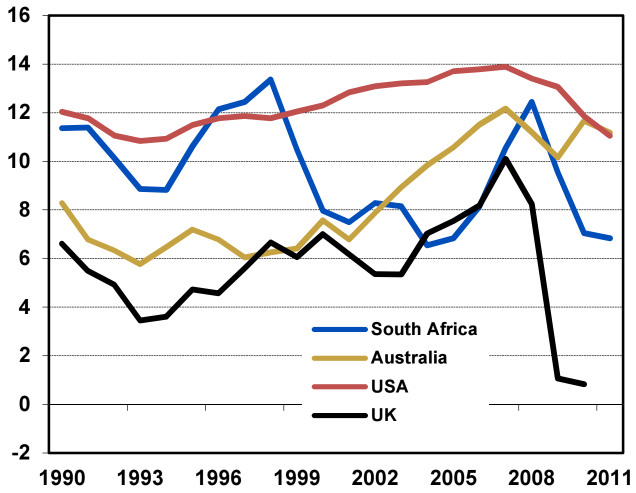
**Household debt / HDI (%)**



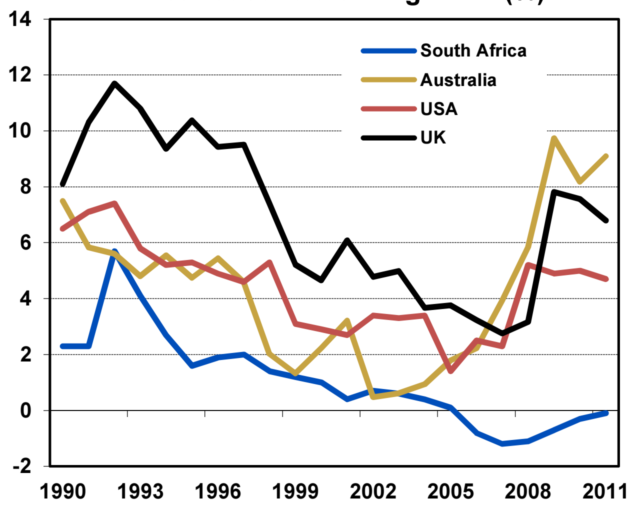

**Household net worth / HDI (%)**



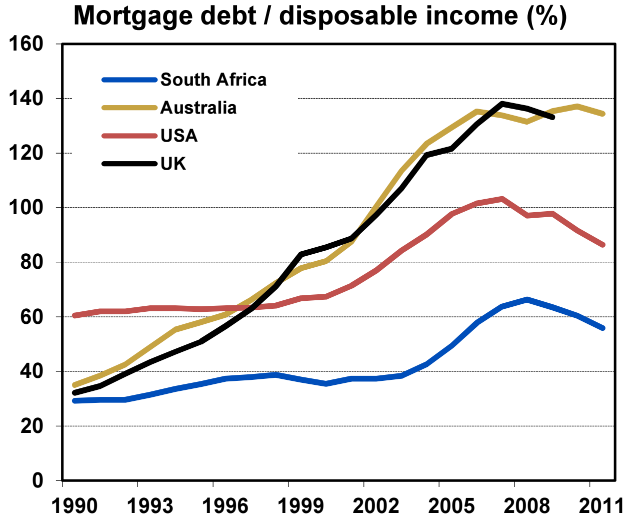

**Household debt servicing cost / HDI (%)**




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




**Mortgage debt / disposable income (%)**




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 at around zero-levels.