



# Leading and Misleading Indicators of Consumer Spending

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Every month the Westpac - Melbourne Institute Index of Consumer Sentiment is commented on in the financial reports and every quarter, some reports also comment on the IdeaWorks – Melbourne Institute Retail Purchase Intentions Barometer.

**It has been shown that these are misleading indicators and that to use them in planning would be very risky.**

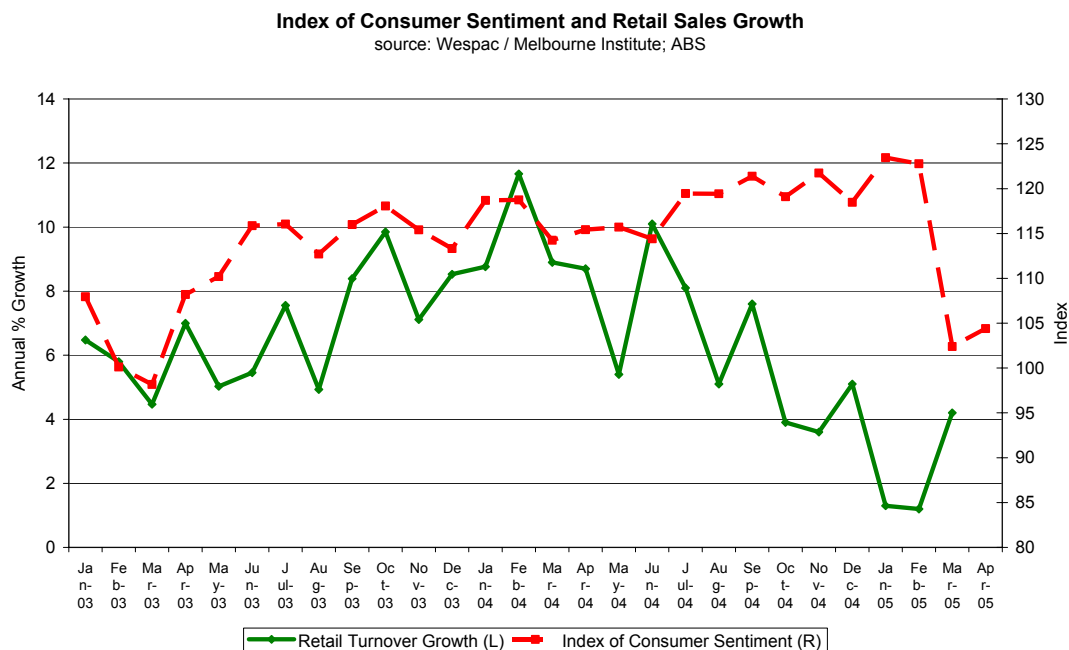
But indicators developed by foreseechange gave a warning of the current slowdown in retail spending growth before it happened, allowing retailers and their suppliers to avoid excess stock, costly discounting, and an opportunity to re-focus target marketing to gain share in those consumer segments which are still spending heavily.

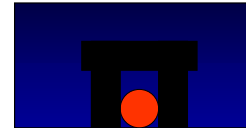
We briefly review these indicators and provide some results from regression analysis.

## Index of Consumer Sentiment

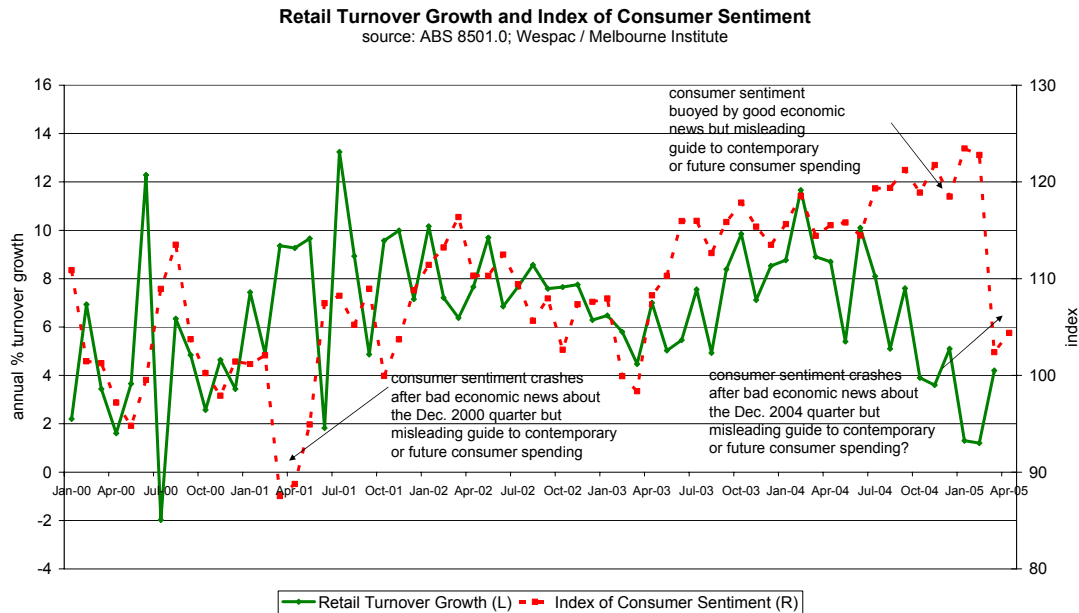
The Westpac – Melbourne Institute Index of Consumer Sentiment (ICS) continued rising long after retail sales growth was clearly slowing. The ICS finally slumped in March 2005, some nine months after it was clear that consumers were tightening their belts (Chart 1). The ICS has similarly misled several times in the past, for example in early 2001 when retail spending was accelerating it slumped (Chart 2).

**Chart 1**





## Chart 2



The Reserve Bank of Australia’s Research Discussion Paper 2001-09, released in January 2002, in which their researchers analysed the index of consumer sentiment and concluded “... there is little evidence that the surveys tell us anything we didn’t already know”. This paper can be downloaded from the RBA website, [www.rba.gov.au](http://www.rba.gov.au).

Even earlier, on 20 February 2001, Barrie Dunstan reported in the Australian Financial Review that my research had concluded that “Once we allow for interest rate movements, consumer confidence measures contain no information about the future of consumer spending”. The index reflects past news on factors such as the value of the Australian dollar, unemployment, and interest rates.

The ICS has consistently failed as a leading or even contemporaneous indicator of discretionary consumer spending.

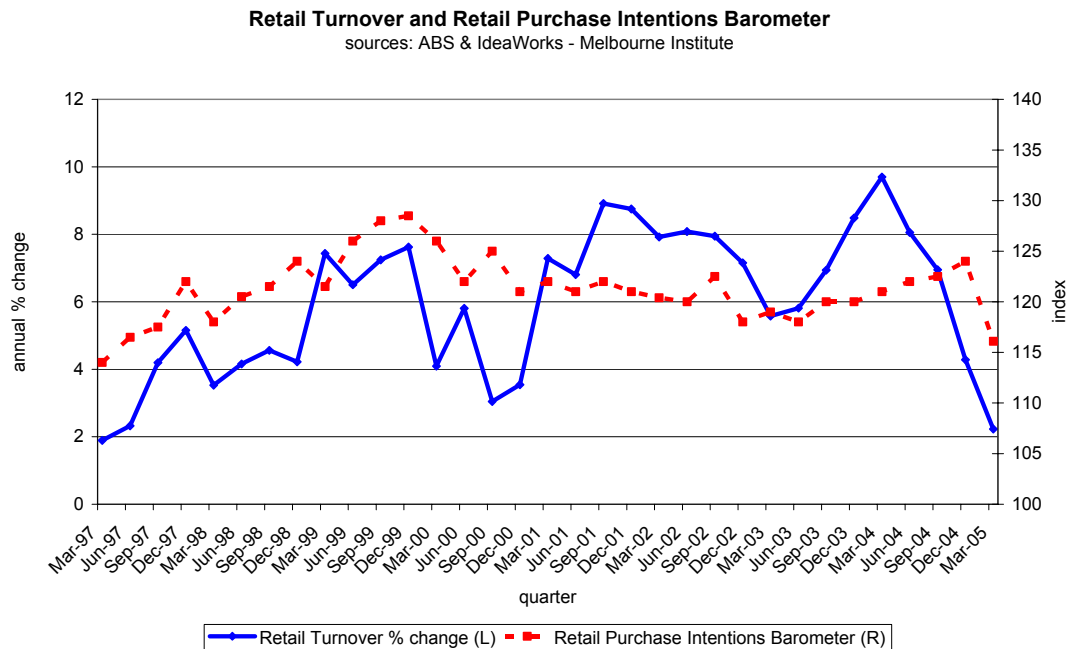


## Retail Purchase Intentions Barometer

The IdeaWorks – Melbourne Institute Retail Purchase Intentions Barometer peaked in the December 2004 quarter, prompting the authors to conclude that there was a very positive outlook for 2005 (Chart 3). But that time, retail spending growth had been falling for six months. The March 2005 reading belatedly fell by 7.9 points, the biggest fall in the history of the index.

This measure also failed to predict the strong recovery in retail spending growth in 2001.

Chart 3



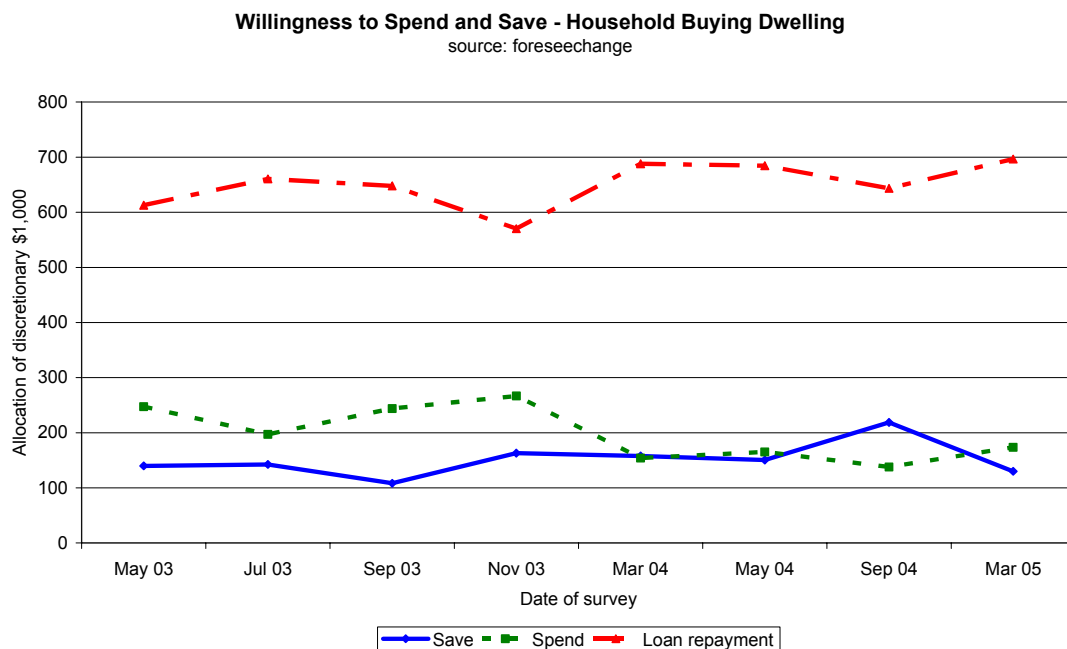


## Consumer Pulse

Consumer Pulse is a set of measures developed by foreseechange over the period 1993 to 2003. Our measures are now proving themselves to be leading rather than misleading and to shed considerable insight into the behaviour of consumers. This includes differential behaviour of different segments of consumers. The measures have implications for price sensitivity as well as discretionary spending growth.

Households with mortgages are less willing to spend than they were in 2003. Indeed, the first sign that their willingness to spend had fallen was as long ago as March 2004 (Chart 4). This is the only survey indicator that predicted to slump in retail sales growth and the signal tripped 12 months before the ICS and retail spending barometer belatedly caught up with consumer spending.

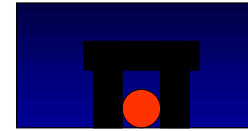
### Chart 4



Willingness to spend and save is measured by asking survey respondents how a (hypothetical) discretionary \$1,000 would be allocated across saving, spending, and loan repayment. The \$1,000 could be from savings or a tax return.

In 2003, the average allocation to spending by households buying their dwelling was \$239 and this fell to \$152 in 2004. This fall in willingness to spend was in order to increase loan repayments after the November and December 2003 interest rate rises.

Other measures included in Consumer Pulse include Perceived Financial Wellbeing (which is an indicator for price sensitivity amongst other things) and expected movements in interest rates and house prices. More information is available from [www.foreseechange.com/consumer\\_pulse.htm](http://www.foreseechange.com/consumer_pulse.htm) or call Charlie Nelson on (03) 9386 4841 for a sample report.



## Regression Analysis of the Relationship Between Retail Turnover Growth and Indicators

The willingness to spend data is available from the December 1993 quarter to the December 2002 quarter for the five capital cities. The sample size is 600 per quarter and there is some missing data in 2001 and 2002. There is a statistically significant contemporaneous relationship between the foreseechange willingness to spend measure and retail turnover growth. The model explains 12% of the variance in retail turnover and the model is statistically significant ( $p = 0.036$ ). The data is shown in Chart 5.

Chart 5



We have found that there is a stronger relationship between willingness to spend for particular consumer segments and retail turnover. In these cases, the relationship is not only contemporaneous but also predictive one quarter ahead.

In the case of one consumer segment, the contemporaneous relationship explains 21% of the variance in retail turnover and the leading relationship explains 13% of the variance. The data for this segment is shown in Chart 6 (contemporaneous relationship) and Chart 7 (leading relationship). We have identified segments which explain up to 33% of the variance one quarter ahead. We discuss aspects of the proportion of variance explained towards the end of this paper.



Chart 6

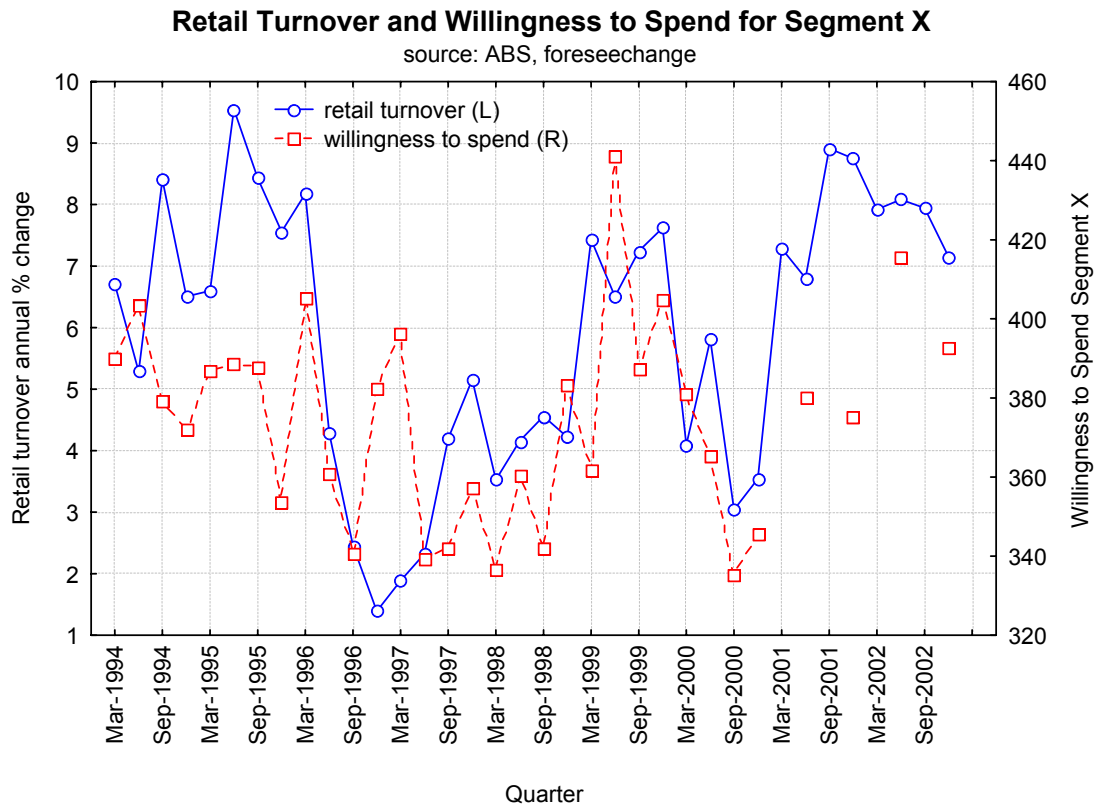
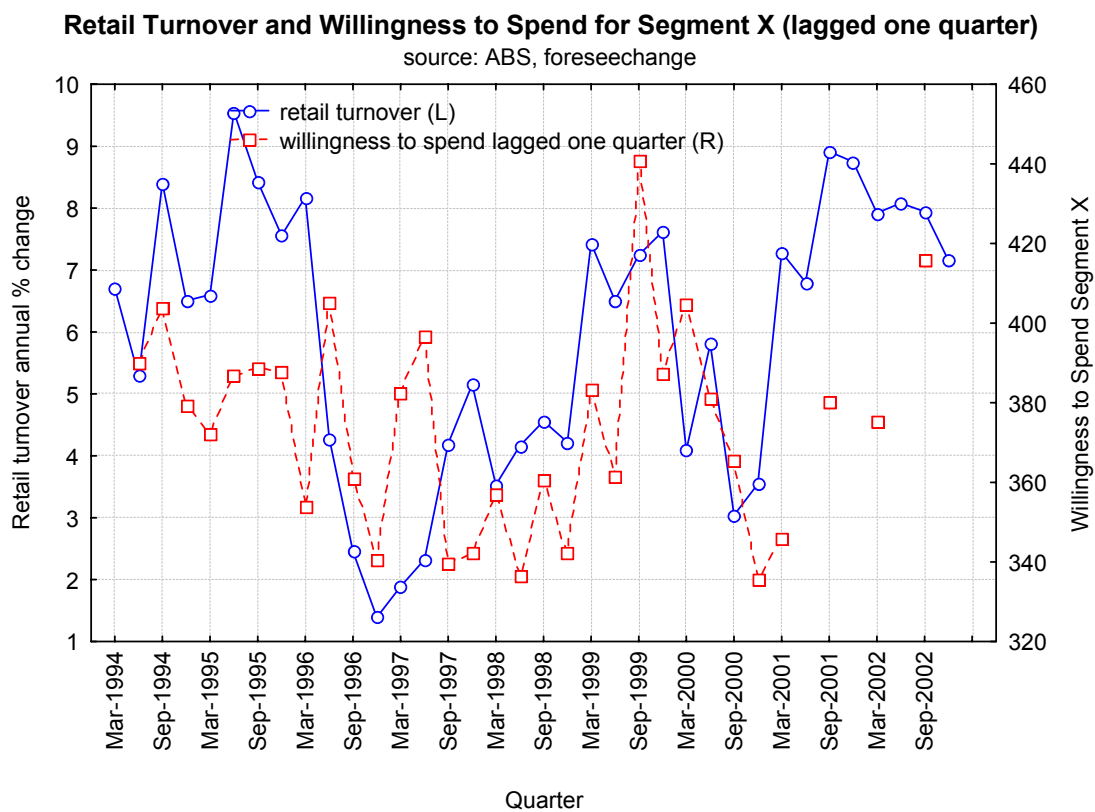


Chart 7



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There is **no** statistically significant relationship, either contemporaneous or leading, between the Westpac – Melbourne Institute Index of Consumer Sentiment and retail turnover over this same period. Also, there is **no** statistically significant relationship, either contemporaneous or lagging, between the IdeaWorks – Melbourne Institute Retail Purchase Intentions Barometer and retail turnover over the period March 1997 (when it commenced) to December 2002.

The Willingness to Spend measure works reasonably well because it captures the trade-offs made by consumers between saving, loan repayment, and spending. We now outline current research aimed at improving predictive power.

## **Improving the Predictive Power of Consumer Pulse**

While our Willingness to Spend measure has a statistically significant relationship with retail sales growth, both contemporaneous and leading, the explanatory power is not high. The explanatory power is useful but we are seeking to improve it.

One of the limiting factors is that the Willingness to Spend data is a sample survey. Over the period 1993 to 2002, the sample was restricted to the five mainland state capital cities, which represents only 61% of the population. Since 2003, the sample has been broadened so that it is now nationally representative. Increasing the sample size would reduce the random sampling error or “noise” thus increasing the explanatory power. This is being considered.

Willingness to Spend is only one dimension of spending. Another is ability to spend and we have been measuring Perceived Financial Wellbeing since late 1996. The combination of these measures into Spending Disposition segments is yielding promising results – in particular, the size of the segment that is both willing and able to spend (Profligate Spenders) has good predictive power.

There are limits to prediction based on survey measures. For example, petrol prices could rise significantly and suddenly after the survey was conducted. This would tend to reduce discretionary consumer spending growth relative to that indicated by the survey.

Despite such limitations, we believe that our Consumer Pulse measures have proved that they can add value to predicting short-term retail spending growth. They should be used in conjunction with econometric models which quantify the impact of factors such as interest rates and petrol prices. This combination can be used to fine tune inventory and tactical marketing decisions. The ability to analyse consumer segments, including the capital city / regional split can also yield insights into which consumers are spending more and which are spending less. This offers the opportunity to target those who are spending more and thus improve marketing effectiveness.