

NEW ZEALAND ECONOMICS ANZ TRUCKOMETER

10 October 2013

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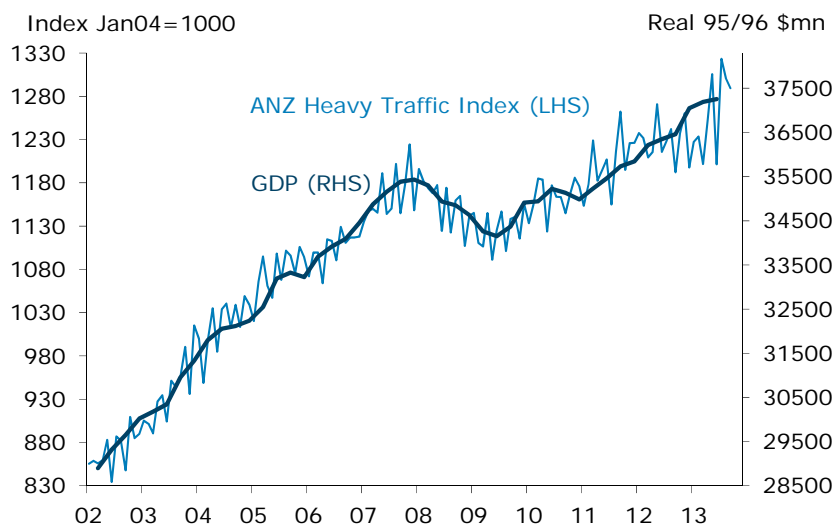
The next issue of the ANZ
Truckometer is scheduled for release
on 12 November 2013 at 10am.

IN THE FAST LANE

KEY POINTS

- **The ANZ Heavy Traffic Index remained at high levels in September, falling just 0.9 percent (seasonally adjusted) to complete a strong quarter.¹ Heavy traffic flows on 7 of the 11 roads in the index fell in September (sa).**
- Drought-related timing impacts likely explain the discrepancy between the Heavy Traffic Index and GDP in the first half of the year. But in the bigger picture **the strong upward trend bodes well for the economy's near-term growth prospects. In particular, the Heavy Traffic Index suggests a potentially spectacular Q3 GDP result.**
- **Most economic indicators are now united in picking a strong second half to the year. The power of the ANZ Light Traffic Index is that it predicts activity trends 6 months ahead, and therefore gives early warning of turning points. The index fell 0.4 percent in September to complete a fairly ho-hum quarter (sa).² The trend in this index is beginning to flatten out. Given the lead to GDP, this suggests the economy may take a well-earned breather early next year. Light traffic fell on 9 roads, and rose on only 1 road in September (sa).**

GDP and the ANZ Heavy Traffic Index



¹ **The ANZ Heavy Traffic Index** comprises flows of vehicles weighing more than 3.5 tonnes (primarily trucks) on 11 selected roads around NZ. It is contemporaneous with GDP growth.

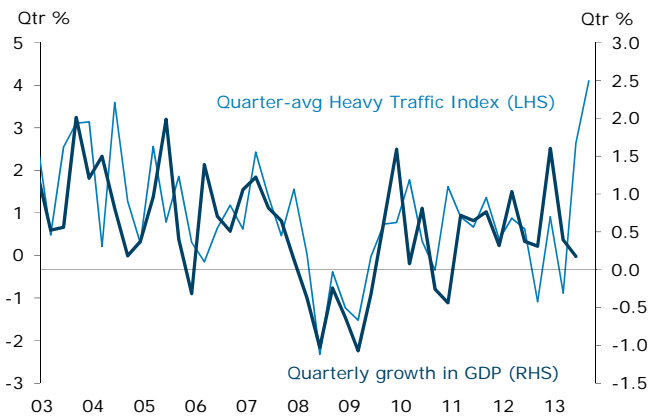
² **The ANZ Light Traffic Index** is made up of light or total traffic flows (primarily cars and vans) on 10 selected roads around the country. It gives a six month lead on GDP growth.

ANZ TRUCKOMETER

The two ANZ *Truckometer* indexes eased in September (seasonally adjusted): the Heavy Traffic Index by 0.9 and the Light Traffic Index by 0.4. Although the Heavy Traffic Index fell by more in the month, it is telling the stronger story at present, with a strong upward trend whereas the Light Traffic Index trend is flattening out.

The ANZ Heavy Traffic Index, which is contemporaneous with GDP, has completed a strong third quarter despite easing slightly in August and September (sa). This suggests a strong Q3 GDP result. Indeed, this is the strongest quarterly increase in the history of the series, which all else equal, presages a chance of a spectacular quarterly GDP result. This certainly ties in with anecdotes of a very strong primary sector bounce-back from drought, thanks to a mild winter and good early spring rains.

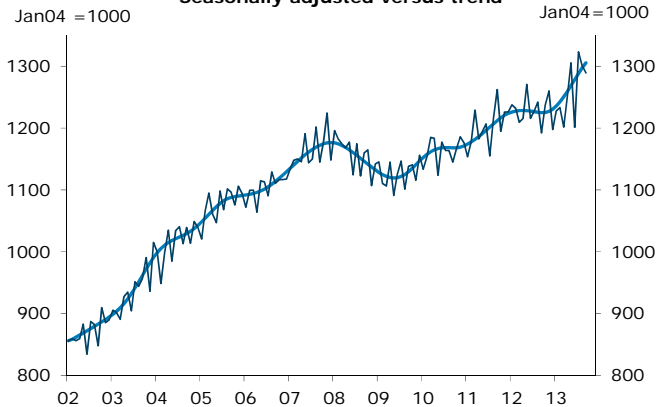
ANZ Heavy Traffic Index vs growth in GDP



Sources: NZ Transport Agency, Statistics NZ, ANZ

The upward trend in the Heavy Traffic Index is steep. This bodes well for near-term GDP. It also corroborates the earlier bullish predictions of the Light Traffic Index, with its 6-month lead on GDP. That index started rising steeply at the end of last year.

Monthly ANZ Heavy Traffic Index Seasonally adjusted versus trend



Sources: ANZ, NZ Transport Agency, Statistics NZ

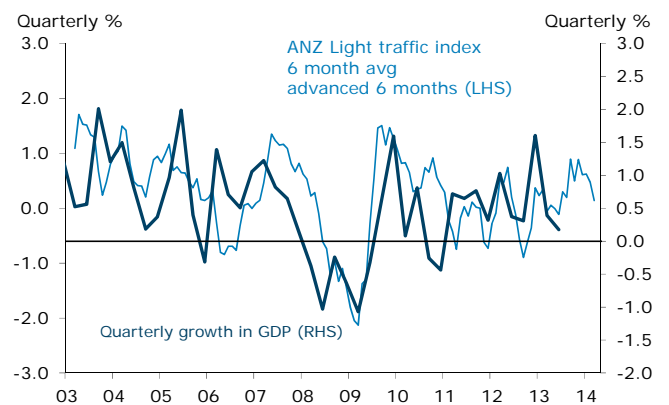
The ANZ Light Traffic Index fell 0.4 percent in September. Although this was stronger than the Heavy Traffic Index on the face of it, in a broader sense the upward trend in the index appears to be at risk of running out of steam. However, this is not cause for alarm, given the strength of activity predicted in the second half of 2013. The Light Traffic Index is predicting solid GDP growth for the remainder of the year, averaging a robust 3½ percent annual pace. A period of consolidation would not be at all unreasonable after such a surge. The trend in the Light Traffic Index is nearly back at its pre-recession peak.

Monthly ANZ Light Traffic Index Seasonally adjusted versus trend



Sources: ANZ, NZ Transport Agency, Statistics NZ

ANZ Light Traffic Index (6-month avg) and GDP



Sources: ANZ, NZ Transport Agency, Statistics NZ

Overall, the ANZ Truckometer indexes suggest the NZ economy will truck on through the second half of this year. As long as Mother Nature plays nicely, a very strong dairy payout and a hefty pipeline of construction work will underwrite the near-term outlook. In the longer term, our concern is that the economy simply does not have the resources to facilitate a construction boom and a consumption boom at the same time. Something will have to give. But for now, New Zealand is on a roll.

ANZ TRUCKOMETER

ABOUT THE ANZ TRUCKOMETER

The **ANZ Truckometer** is a set of two economic indicators derived using traffic volume data from around the country. Traffic flows are a real-time and real-world proxy for economic activity – particularly for the New Zealand economy, where a large proportion of freight is moved by road. It represents an extremely timely barometer of economic momentum. **The ANZ Heavy Traffic Index shows a strong contemporaneous relationship to GDP, while the ANZ Light Traffic Index has a six month lead on activity as measured by GDP.**

Using statistical techniques we optimise the **ANZ Truckometer** indexes to map to quarterly GDP growth. A simple average of traffic on all roads, as calculated by the NZ Transport Agency for its own purposes, is a decent economic indicator in its own right. However, optimisation can strip out a good deal of the noise – many of the traffic series are highly volatile, have level shifts, or have other undesirable statistical properties. The ANZ Light and Heavy Traffic Indexes select roads based on their usefulness for explaining quarterly growth in GDP – in the same 3 month period for heavy traffic, or 6 months later for light traffic.

Specific adjustments for short-term traffic disruptions and careful treatment of missing data also help to extricate the signal from the noise. Because the information value of particular traffic flows does change over time, the weights placed on the individual traffic series are permitted to slowly evolve over time. **The weight on any given traffic series is limited to 0.25** in order to make the indexes more robust to localised events.

The contemporaneous relationship between heavy traffic and GDP is not surprising – road user charges revenue data have long been used as an economic indicator. Trucks are moving produce, after all. But the lead to GDP provided by the light traffic flows is more surprising. It would appear that **willingness to buy and drive a car is the ultimate measure of “money-where-your-mouth-is” consumer confidence**. This confidence, or lack of it, is then reflected in other spending, hiring and investment decisions that are ultimately captured in production GDP six months later. Service vehicles (courier vans, for example), which are also captured in this data, may also be a leading economic indicator.

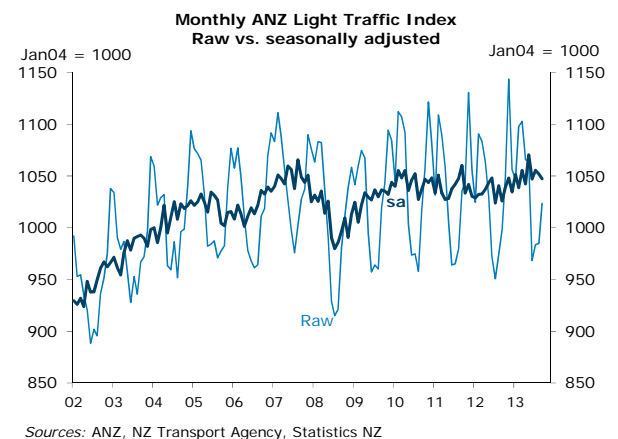
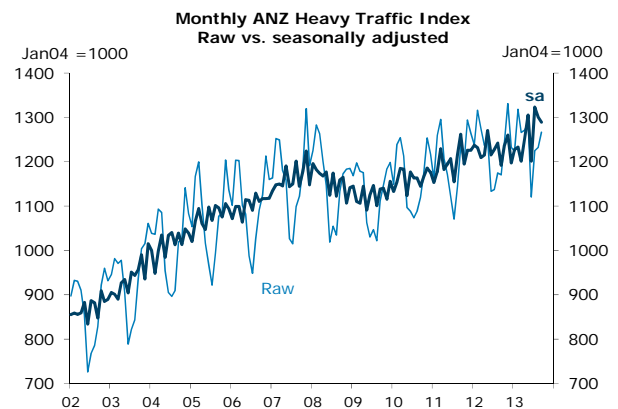
The ANZ Truckometer indexes are best interpreted as indicators of base momentum and turning points in the economy rather than spot predictors of GDP outturns. But the two

indexes are remarkable indicators – the Heavy Traffic Index for its close match to GDP, as well as its timeliness, available just a few days after the end of the quarter in question, and the Light Traffic Index for its valuable and unusual six month lead to GDP.

The trend measure of the indexes is the trend-cycle component from an X12 analysis.

Technical notes on how the ANZ Truckometer is produced were included in the initial release on 10 April 2012, available on the ANZ website or on request. Feedback is welcome. The indexes' data history (subject to revision) is also available on request.

	Light Traffic Index		Heavy Traffic Index	
	Index Jan 04=1000	Monthly % chg	Index Jan 04=1000	Monthly % chg
Sep-12	1026	-1.4	1192	-4.0
Oct-12	1039	1.3	1237	3.8
Nov-12	1048	0.9	1260	1.9
Dec-12	1035	-1.3	1198	-5.0
Jan-13	1052	1.6	1227	2.5
Feb-13	1039	-1.2	1233	0.5
Mar-13	1055	1.6	1202	-2.6
Apr-13	1042	-1.2	1252	4.2
May-13	1070	2.7	1305	4.2
Jun-13	1047	-2.2	1201	-8.0
Jul-13	1055	0.8	1323	10.2
Aug-13	1052	-0.3	1301	-1.7
Sep-13	1047	-0.4	1289	-0.9



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