

NEW ZEALAND ECONOMICS ANZ TRUCKOMETER

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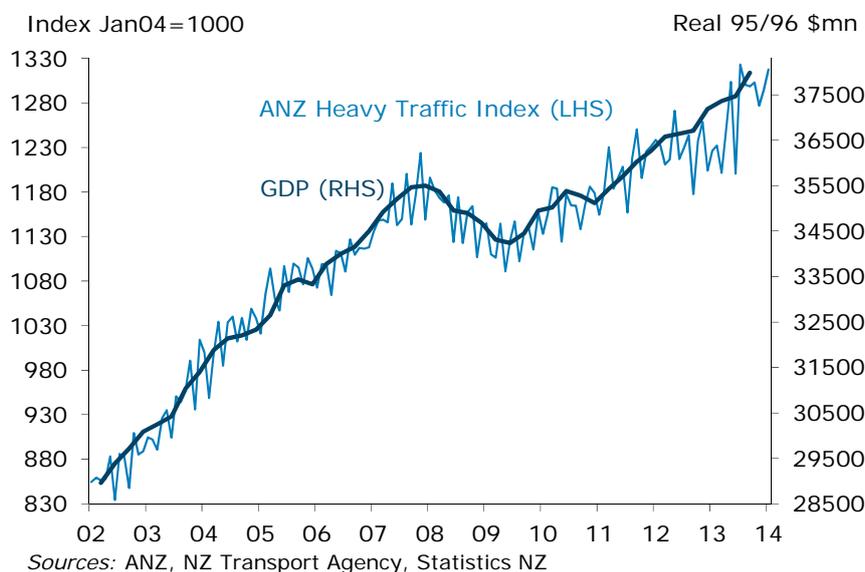
The next issue of the ANZ *Truckometer* is scheduled for release on 11 March 2014 at 10am.

ON A ROLL

KEY POINTS

- **The ANZ Truckometer is a timely measure of economic activity across the economy using real-time traffic data.**
- **The ANZ Heavy Traffic Index rose 1.7 percent in January (seasonally adjusted).**¹ This lift follows a 1.4 percent rise in December and cements the steep upward trend in the index. Flows on 9 of the 11 roads in the index rose in January (sa).
- **The ANZ Light Traffic Index rose 1.2 percent in January (sa), on top of a small rise in December.**² The upward trend has moderated slightly but is still looking very secure. Light traffic rose on 9 of the 10 roads in the index in January (sa).
- Some moderation in growth rates would not be surprising in light of the growth surge in the second half of 2013, but **the ANZ Truckometer continues to flag solid momentum across the economy.**

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.

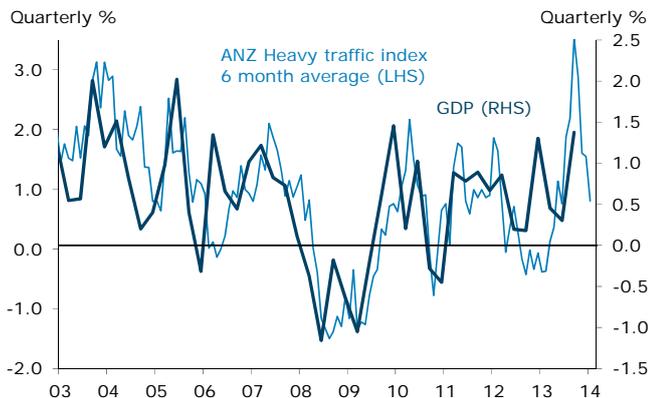
² **The ANZ Light Traffic Index** is made up of light or total traffic flows (primarily cars and vans) on 10 selected roads around the country. It gives a six month lead on GDP growth.

ANZ TRUCKOMETER

The two ANZ *Truckometer* indexes rose in January (seasonally adjusted): the Heavy Traffic Index by 1.7 percent and the Light Traffic Index by 1.2 percent. Both series have solid upward trends, boding well for economic growth into the second half of the year.

Quarterly growth in the ANZ Heavy Traffic Index, which is contemporaneous with GDP, was smaller but still positive in Q4 – no mean feat after an exceptionally strong Q3 led by an agricultural bounce-back. Statistics NZ’s methodology for calculating agricultural GDP suggests that GDP data will smooth through the volatility in agricultural production and hence heavy traffic to some extent. In this light, the index (six month average) still implies solid GDP growth in Q4 (see below). Our preliminary pick is 0.9 percent q/q. Given the last two strong months, the decline in the 6-month average charted below looks likely to be arrested at very respectable levels, indicative of the degree of momentum in the economy.

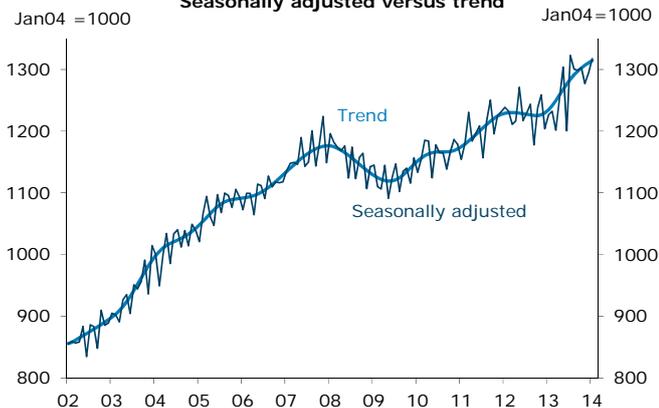
ANZ Heavy Traffic Index (6-month avg) and GDP



Sources: ANZ, NZ Transport Agency, Statistics NZ

The trend in the Heavy Traffic Index has flattened slightly but remains very robust.

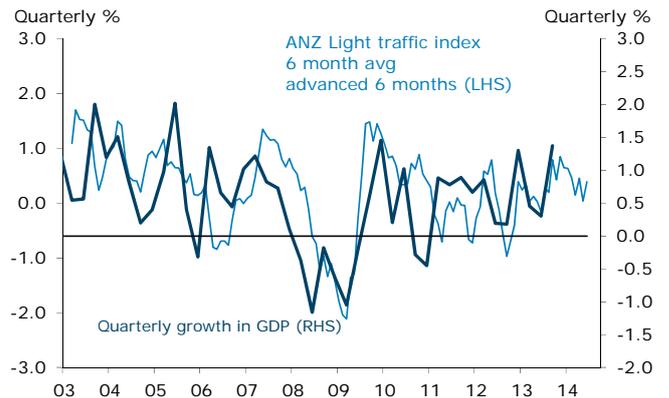
Monthly ANZ Heavy Traffic Index Seasonally adjusted versus trend



Sources: ANZ, NZ Transport Agency, Statistics NZ

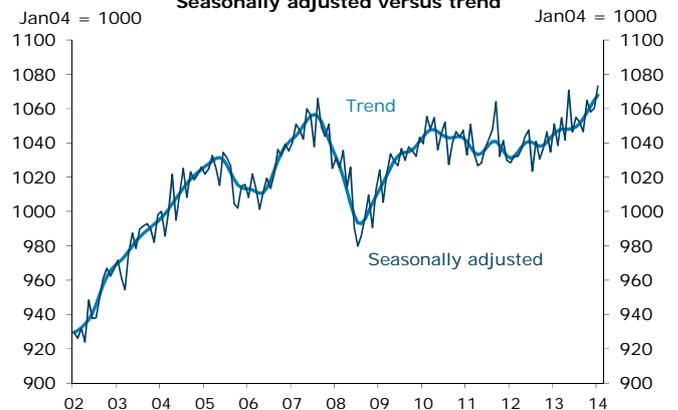
The ANZ Light Traffic Index predicted the strength in Q3 6 months ahead. The index rose 1.2 percent in January. The recent run of strong results has resulted in the most sustained implied quarterly growth profile since the bounce out of recession in 2009-10. However, while it suggests solid growth ahead, like the Heavy Traffic Index, it suggests Q3 might have been the peak in quarterly growth.

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



Sources: ANZ, NZ Transport Agency, Statistics NZ

Monthly ANZ Light Traffic Index Seasonally adjusted versus trend



Sources: ANZ, NZ Transport Agency, Statistics NZ

The ANZ Truckometer indexes suggest that the GDP strength seen in Q3 was more than a flash in the pan; that the NZ economy is now settling into a sustained period of growth over 2014 – albeit that quarterly growth may have already peaked.

This is encouraging. But New Zealand faces challenges in maintaining the economic upswing. The growth outlook is unbalanced and tilted towards construction and domestic demand. Private debt is already high; New Zealand cannot afford a borrow-and-spend mentality to take hold. In addition, the supply side matters hugely – an ongoing focus on efficiency from all parties is necessary to prevent inflation pressures rising. No one wants to see aggressive OCR lifts spoil the party.



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.

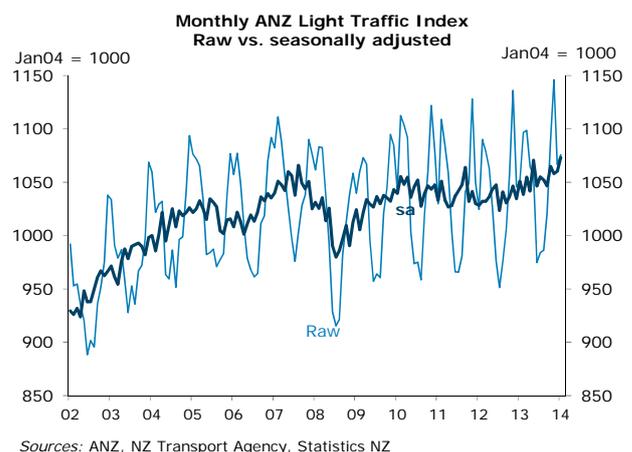
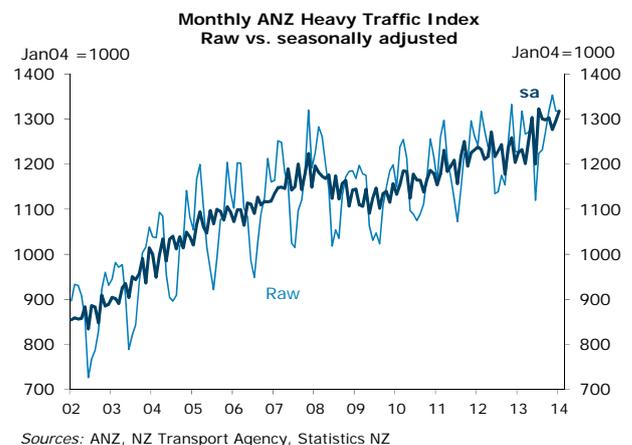
The ANZ Truckometer indexes are best interpreted as indicators of base momentum and turning points in the economy rather than spot predictors of GDP outturns. But the two

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
Jan-13	1051	1.6	1226	1.9
Feb-13	1039	-1.2	1232	0.5
Mar-13	1055	1.6	1202	-2.5
Apr-13	1042	-1.2	1252	4.2
May-13	1071	2.8	1304	4.2
Jun-13	1046	-2.3	1201	-7.9
Jul-13	1055	0.8	1323	10.2
Aug-13	1052	-0.3	1301	-1.7
Sep-13	1047	-0.5	1299	-0.2
Oct-13	1065	1.8	1303	0.3
Nov-13	1058	-0.6	1277	-2.0
Dec-13	1060	0.2	1295	1.4
Jan-14	1073	1.2	1318	1.7



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