

NEW ZEALAND ECONOMICS ANZ TRUCKOMETER

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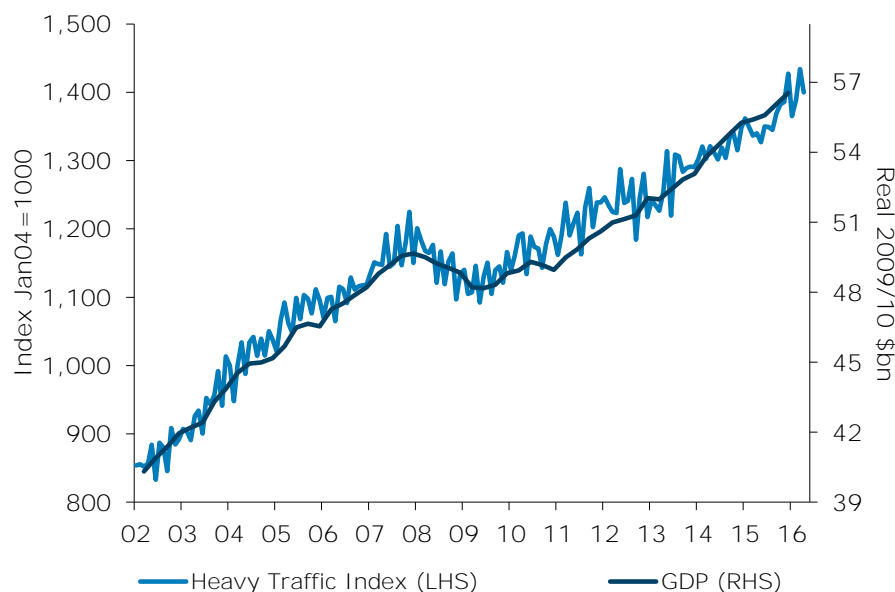
The next issue of the ANZ *Truckometer* is scheduled for release on 7 June 2016 at 10am.

SWITCHBACK

KEY POINTS

- **The Heavy Traffic Index eased in April, while the Light Traffic Index was flat.** Looking through the monthly volatility, both continue to suggest the New Zealand economy has momentum.
- **The Heavy Traffic Index¹ fell 2.4% (+1.1% 3m/3m) in April, while the Light Traffic Index², which leads growth in the economy by six months, was unchanged (+2.3% 3m/3m).**
- **The Heavy Traffic Index indicates that quarterly GDP growth was perhaps not as strong in Q1 as it was in Q4, but is not suggesting anything alarming. The strong upward trend in the Light Traffic Index remains, suggesting good momentum across the economy.**

GDP AND THE ANZ HEAVY TRAFFIC INDEX



Source: ANZ, NZ Transport Agency, Statistics NZ

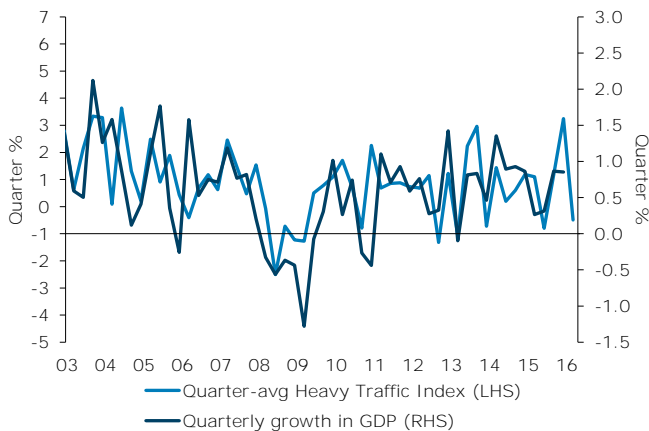
¹ **The ANZ Heavy Traffic Index** comprises flows of vehicles weighing more than 3.5 tonnes (primarily trucks) on 11 selected roads around NZ. It is contemporaneous with GDP growth.

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 in normal circumstances (but cannot predict sudden adverse events such as the Global Financial Crisis).

ANZ TRUCKOMETER

The ANZ Heavy Traffic Index is a timely, concurrent GDP indicator. It fell 2.4% in the month of April (seasonally adjusted – sa), but remains on a firm upward trend. Due to weakness in January, the index does – on the face of it – suggest a softer quarterly GDP growth rate in Q1 than was seen at the end of last year (figure 1). However, it seems likely that GDP figures will smooth through the Truckometer’s predictions and maintain a respectable rate of growth.

FIGURE 1. QUARTERLY ANZ HEAVY TRAFFIC INDEX AND GDP GROWTH



Source: ANZ, NZ Transport Agency, Statistics NZ

Annual growth in the index lifted to 4.9%, suggesting annual GDP growth in a 2-3% range (figure 2).

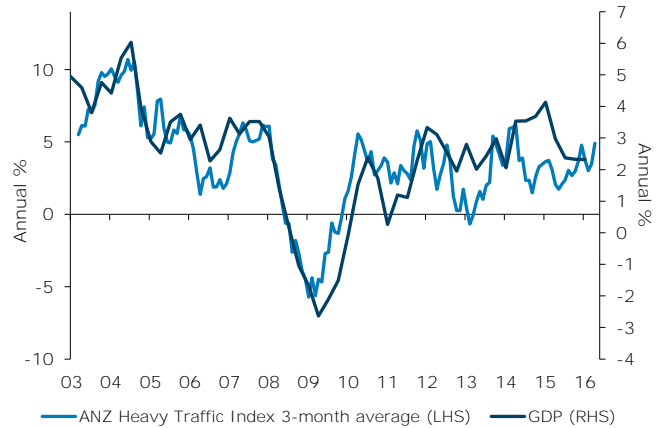
In April, traffic flows fell on 10 of 11 roads in the Heavy Traffic Index, and 7 of 10 roads in the Light Traffic Index (seasonally adjusted).

The Light Traffic Index gives a 6-month lead on the economy and is best interpreted as a measure of momentum. It was unchanged in April (sa). Its strong upward trend (figures 3 and 4) is consistent with the solid reads on consumer confidence that our surveys have revealed.

The upward trend in the two Truckometer indexes show that while the New Zealand economy may be facing headwinds, it is not going to just roll over without good cause.

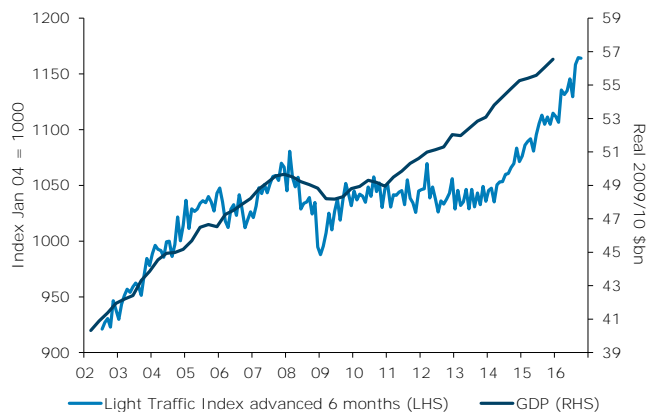
That said, we are a little concerned that the mix of growth across the economy is deteriorating somewhat – driven not so much by income growth as by housing market strength and household debt accumulation (on top of already-high levels). That makes the economy more vulnerable to an external shock. But for now, we’re trucking on.

FIGURE 2. ANZ HEAVY TRAFFIC INDEX AND ANNUAL GDP GROWTH



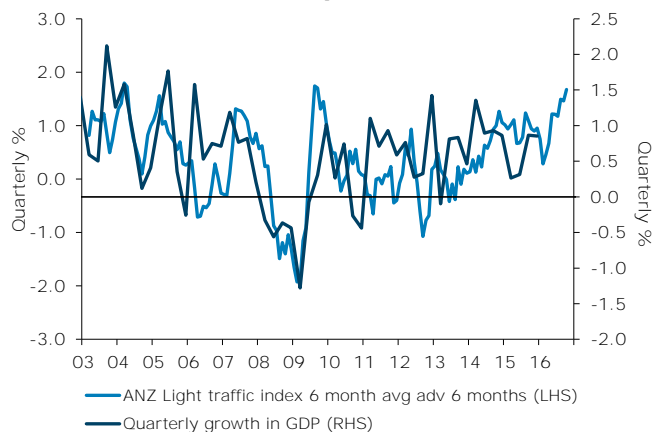
Source: ANZ, NZ Transport Agency, Statistics NZ

FIGURE 3. ANZ LIGHT TRAFFIC INDEX (ADVANCED 6 MONTHS) AND REAL GDP



Source: ANZ, NZ Transport Agency, Statistics NZ

FIGURE 4. ANZ LIGHT TRAFFIC INDEX (6-MONTH AVERAGE, ADV. 6 MONTHS) AND GDP GROWTH



Source: ANZ, NZ Transport Agency, Statistics NZ



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 three month period for heavy traffic, or six 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.

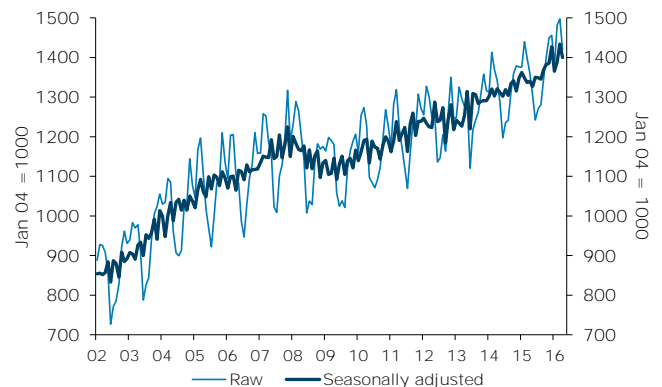
The ANZ Truckometer indexes (and particularly the Light Traffic Index) are best interpreted as indicators of momentum and turning points in the economy rather than spot predictors of GDP

outturns. But the two indexes are remarkable indicators – the Heavy Traffic Index for its close match to GDP, as well as its timeliness (available less than two weeks after the period in question), and the Light Traffic Index for its valuable and unusual six month lead to GDP.

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. The indexes’ data history (subject to revision) is also available on request.

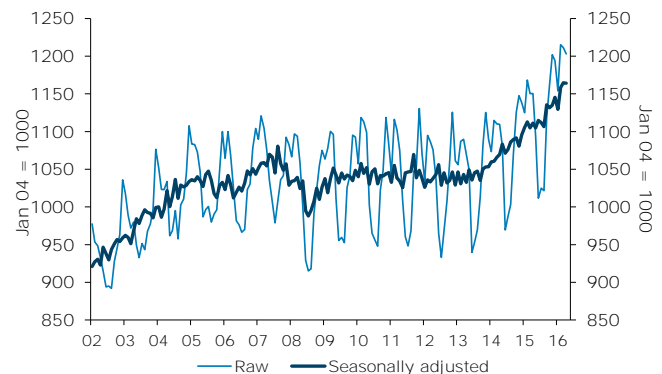
	Light Traffic Index		Heavy Traffic Index	
	Index Jan 04=1000	Monthly % chg	Index Jan 04=1000	Monthly % chg
Apr-15	1111	0.6	1340	0.3
May-15	1105	-0.6	1327	-1.0
Jun-15	1115	0.9	1350	1.7
Jul-15	1112	-0.3	1349	-0.1
Aug-15	1106	-0.5	1345	-0.3
Sep-15	1136	2.6	1369	1.8
Oct-15	1131	-0.4	1383	1.0
Nov-15	1135	0.3	1386	0.2
Dec-15	1146	0.9	1427	3.0
Jan-16	1129	-1.4	1365	-4.4
Feb-16	1158	2.6	1389	1.7
Mar-16	1165	0.5	1434	3.3
Apr-16	1164	0.0	1400	-2.4

FIGURE 5. ANZ HEAVY TRAFFIC INDEX: RAW VS SA



Source: ANZ, NZ Transport Agency

FIGURE 6. ANZ LIGHT TRAFFIC INDEX: RAW VS SA



Source: ANZ, NZ Transport Agency



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