

NEW ZEALAND ECONOMICS ANZ TRUCKOMETER

7 April 2016

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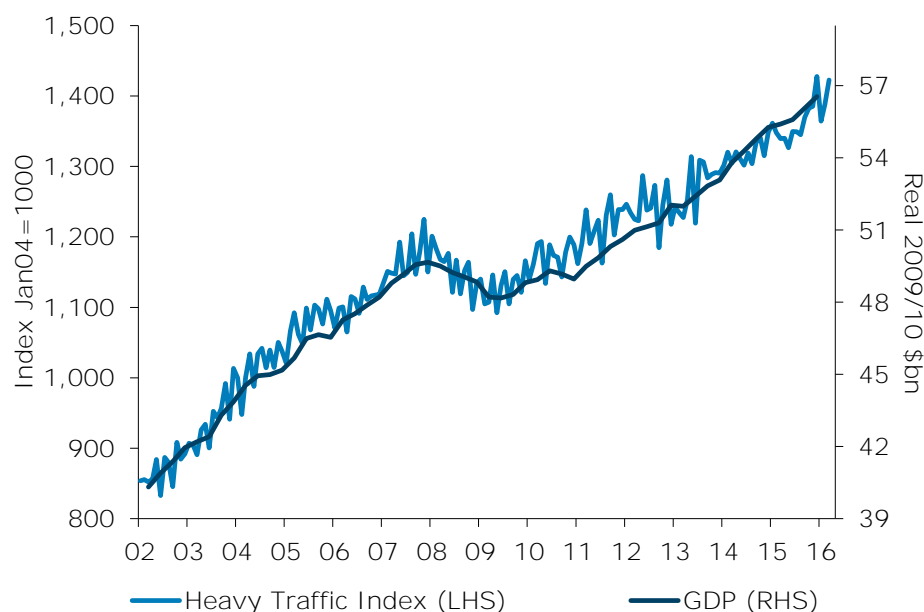
The next issue of the ANZ *Truckometer* is scheduled for release on 10 May 2016 at 10am.

MARCHING ON

KEY POINTS

- **The two Truckometer indexes rose solidly in March, continuing their recovery from a sharp fall in January.**
- **The Heavy Traffic Index¹ rose 2.5% (-0.5% q/q), while the Light Traffic Index², which leads growth in the economy by six months, lifted 0.8% m/m (+1.1% q/q).**
- **The Heavy Traffic Index suggests that quarterly GDP growth was not as strong in Q1 as it was in Q4, but GDP will likely smooth through the volatility to some extent. Based on all indicators to date we have pencilled in a 0.7% rise for Q1 compared with 0.9% in Q4.**
- **The strong upward trend in the Light Traffic Index persists, suggesting good broad-based momentum across the economy.**

GDP AND THE ANZ HEAVY TRAFFIC INDEX



Source: ANZ, NZ Transport Agency, Statistics NZ

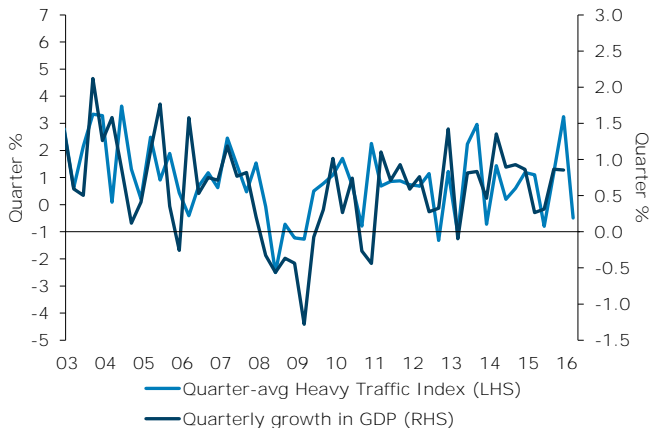
¹ **The ANZ Heavy Traffic Index** comprises flows of vehicles weighing more than 3.5 tonnes (primarily trucks) on 11 selected roads around NZ. It is contemporaneous with GDP growth.

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 **rose 2.5% in the month of March (seasonally adjusted – sa), continuing its bounce-back from a sharp fall in January.** The index nonetheless suggests a softer quarterly growth rate in Q1 GDP than was seen at the end of last year. However, it seems likely that GDP will smooth through the Truckometer’s predictions, remaining at a respectable growth rate north of 0.5% q/q, which would compensate for the Truckometer overshoot in Q4.

FIGURE 1. ANZ HEAVY TRAFFIC INDEX AND GDP GROWTH



Source: ANZ, NZ Transport Agency, Statistics NZ

Annual growth in the index was little changed at 3.1% (figure 2).

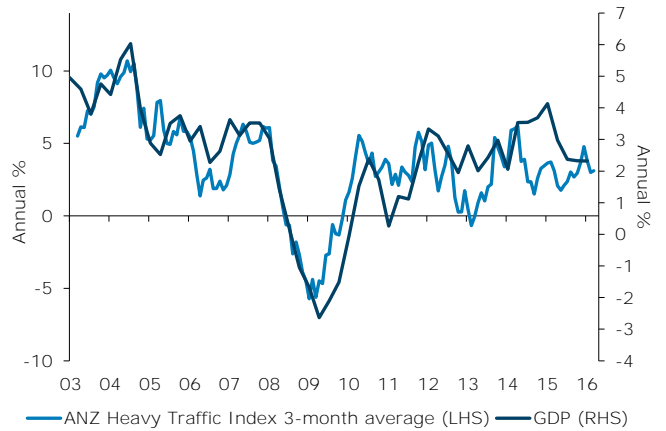
In March, traffic flows rose on 9 of 11 roads in the Heavy Traffic Index, and 7 of 10 roads in the Light Traffic Index (seasonally adjusted).

The **Light Traffic Index gives a 6-month lead on the economy** and is best interpreted as a measure of momentum. It **rose 0.8% in March (sa)**, with its strong upward trend (figures 3 and 4) illustrating good strength across the economy.

The **rebound in the Truckometer indexes in the last two months highlights the resilience of the New Zealand economy**, a characteristic that has also been evident in our sentiment-based indicators. Consumer confidence and firms’ expectations regarding their own business have held up amidst dairy challenges and global wobbles – a good sign, and necessary for solid growth. But sentiment is one thing; acting on it is another. The Truckometer confirms that the economy is just getting on with it.

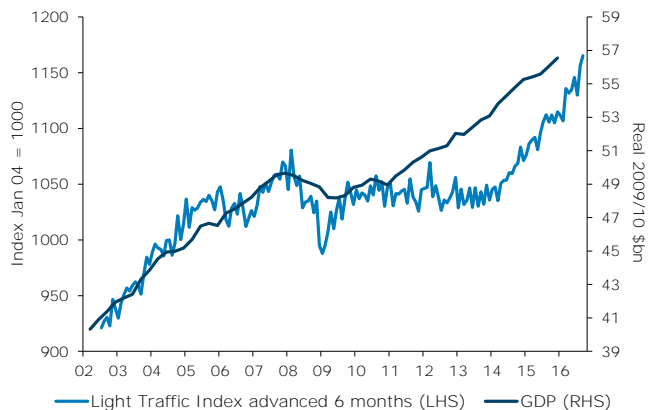
The **economy is caught between sizeable push (migration, construction, housing, monetary policy) and pull factors** (the high NZD, dairy challenges, the global scene). The Truckometer will be a useful, timely indicator of how the contest is progressing.

FIGURE 2. ANZ HEAVY TRAFFIC INDEX AND ANNUAL GDP GROWTH



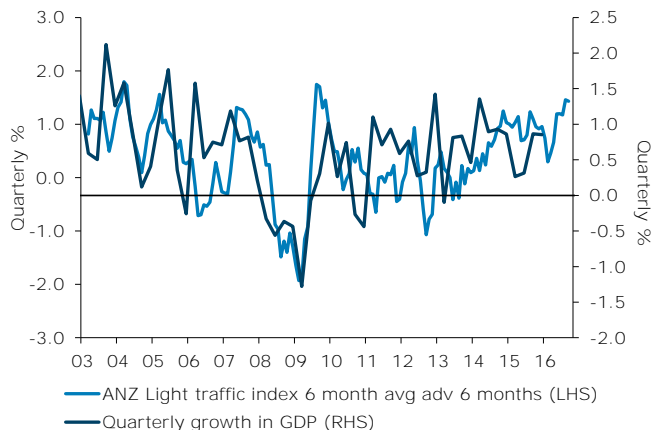
Source: ANZ, NZ Transport Agency, Statistics NZ

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.

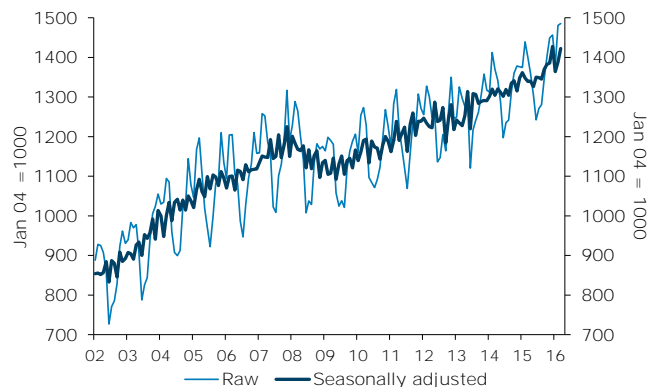
The ANZ Truckometer indexes (and particularly the Light Traffic Index) are best interpreted as indicators of momentum and turning points in the economy rather than spot predictors of GDP

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.

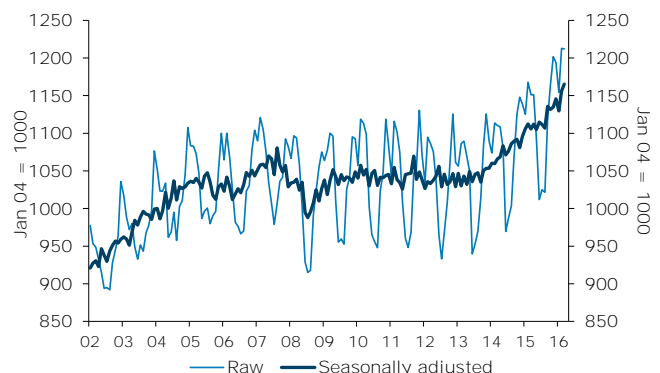
	Light Traffic Index		Heavy Traffic Index	
	Index Jan 04=1000	Monthly % chg	Index Jan 04=1000	Monthly % chg
Mar-15	1106	-0.6	1339	-0.6
Apr-15	1112	0.6	1340	0.1
May-15	1105	-0.6	1327	-1.0
Jun-15	1115	0.9	1350	1.7
Jul-15	1112	-0.3	1349	-0.1
Aug-15	1107	-0.5	1345	-0.3
Sep-15	1136	2.6	1370	1.8
Oct-15	1132	-0.4	1383	0.9
Nov-15	1135	0.3	1385	0.2
Dec-15	1146	1.0	1427	3.0
Jan-16	1130	-1.4	1364	-4.4
Feb-16	1156	2.3	1388	1.7
Mar-16	1165	0.8	1423	2.5

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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