

# NEW ZEALAND ECONOMICS

## ANZ TRUCKOMETER

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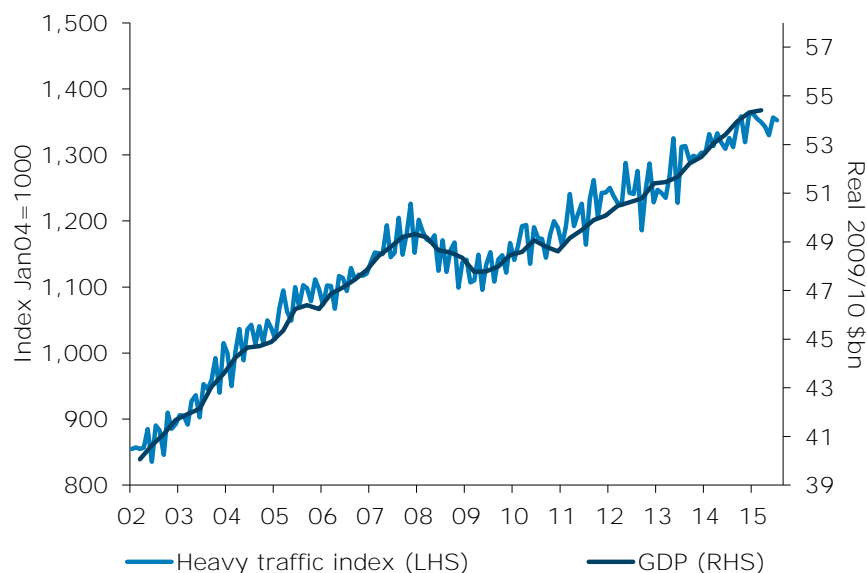
The next issue of the ANZ *Truckometer* is scheduled for release on 8 September 2015 at 10am.

## FLAT TYRE

### KEY POINTS

- **The ANZ Truckometer is a measure of economic activity using real-time traffic data from around New Zealand.** It is timely and contains hard activity data as opposed to measuring sentiment.
- **The ANZ Heavy Traffic Index fell 0.3%** in July, and is down 0.2% in on a 3 month/3 month basis (seasonally adjusted).<sup>1</sup> It has now receded six months out of the last seven; a clear slowdown is apparent (refer chart below).
- **The ANZ Light Traffic Index leads GDP by six months. It fell 0.2% in July.** It is flat in the last three months versus the three months previous (sa), marking the end of a strong upward trend.<sup>2</sup>
- **The Heavy Traffic Index suggests a weak GDP growth outturn in Q2, and a fairly flat July is not a great start to Q3.** The Light Traffic Index is more upbeat about near-term growth but is now also losing steam.
- **Signals from our Truckometer reflect an economy facing strengthening headwinds.** Until global dairy prices find a floor (and broader commodity prices too – as a bellwether of China's economic health) all economic forecasts remain a moving target.

### GDP AND THE ANZ HEAVY TRAFFIC INDEX



Source: ANZ, NZ Transport Agency, Statistics NZ

<sup>1</sup> 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.

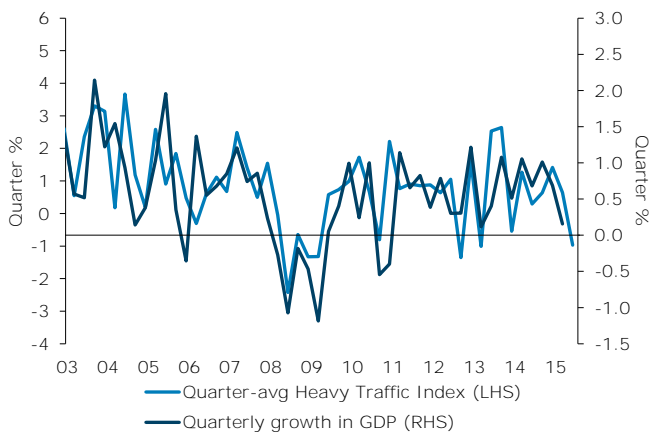
<sup>2</sup> The ANZ Light Traffic Index is made up of light or total traffic flows (primarily cars and vans) on 10 selected roads around the country. It gives a six month lead on GDP growth in normal circumstances (but cannot predict sudden adverse events such as the Global Financial Crisis).

# ANZ TRUCKOMETER

The two Truckometer indexes fell by similar amounts in July.

The ANZ Heavy Traffic Index is concurrent with GDP. It fell 0.3% in July (seasonally adjusted – sa), after bouncing 2.0% in June. The index has fallen in six of the past seven months, and is down 0.2% in the last three months versus the three months prior. It suggests the economy was fairly flat in the June quarter, and a flattish July outturn is not a rip-roaring start to Q3.

**FIGURE 1. ANZ HEAVY TRAFFIC INDEX AND GDP GROWTH**



Source: ANZ, NZ Transport Agency, Statistics NZ

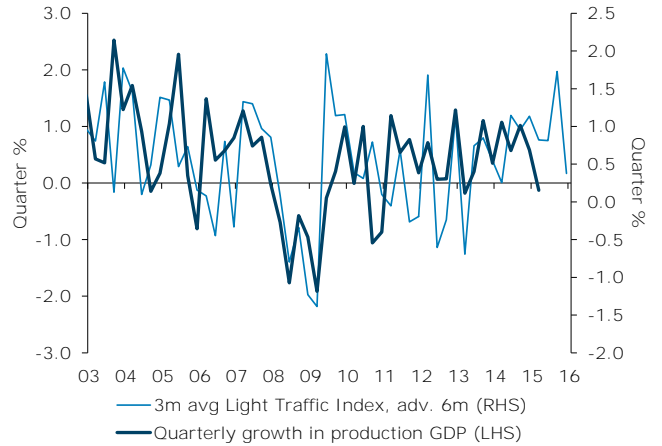
Seasonally adjusted traffic flows fell on 10 of 11 roads in the Heavy Traffic Index in July, and rose on one.

The Light Traffic Index gives a 6-month lead on the economy. Its long lead means it gives a take on where the economy is headed if left well enough alone. It fell 0.2% in July (sa) and is unchanged on a smoothed 3-month/3-month basis. It suggests strong momentum over the next six months (figure 2) but we are not buying that story, given the unanticipated plunge in global dairy prices that has occurred since these numbers were measured.

The Light Traffic Index is now also looking topy. Traffic flows fell in July on five of ten roads in the index, with four higher and one flat (sa).

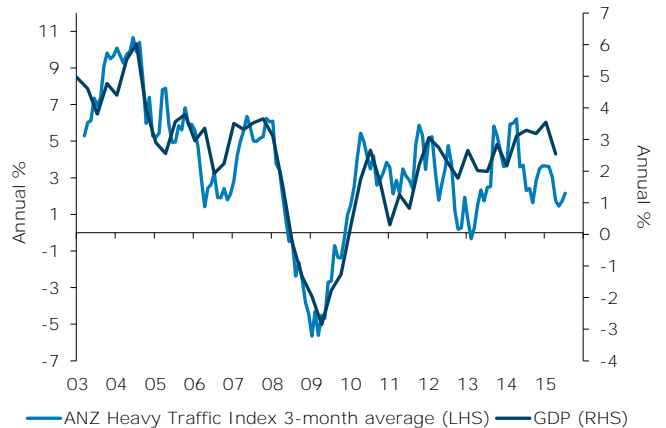
If the broad signals from our Truckometer Heavy Traffic Index are correct – and they usually are – the economy has slowed down markedly in the past half year. With business confidence now in retreat and dairy prices yet to find a floor, we expect further cuts in the Official Cash Rate.

**FIGURE 2. ANZ LIGHT TRAFFIC INDEX (6-MONTH AVERAGE, ADVANCED 6 MONTHS) AND QUARTERLY GDP GROWTH**



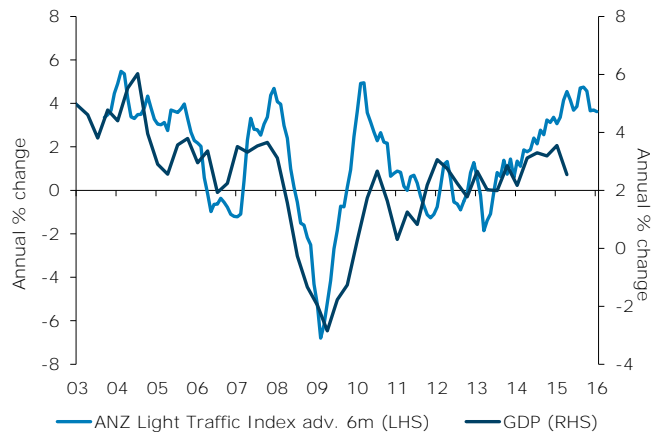
Source: ANZ, NZ Transport Agency, Statistics NZ

**FIGURE 3. ANZ HEAVY TRAFFIC INDEX AND ANNUAL GDP GROWTH**



Source: ANZ, NZTA, Statistics NZ

**FIGURE 4. ANZ LIGHT TRAFFIC INDEX AND ANNUAL GDP GROWTH**



Source: ANZ, NZTA, 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.

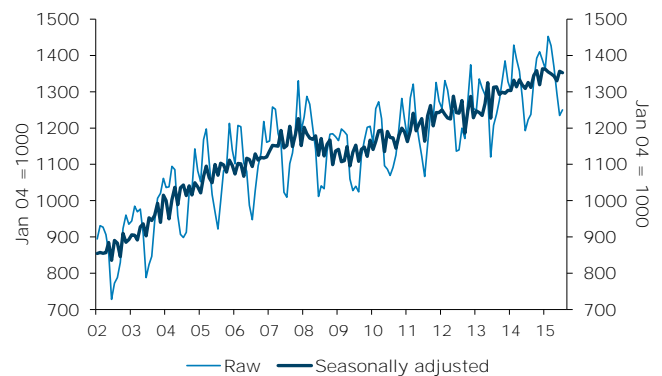
The contemporaneous relationship between heavy traffic and GDP is not surprising – road user charges revenue data have long been used as an economic indicator. Trucks are moving produce, after all. But the lead to GDP provided by the light traffic flows is more surprising. It would appear that **willingness 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

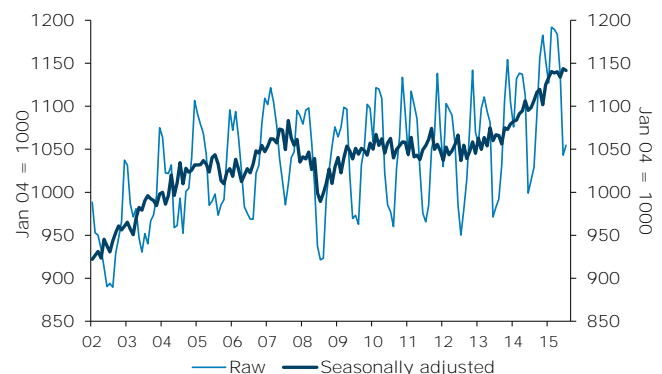
outturns. But the two indexes are remarkable indicators – the Heavy Traffic Index for its close match to GDP, as well as its timeliness (available less than two weeks after the period in question), and the Light Traffic Index for its valuable and unusual six month lead to GDP.

*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
Jul-14	1098	0.3	1326	1.2
Aug-14	1107	0.8	1312	-1.0
Sep-14	1116	0.9	1345	2.5
Oct-14	1120	0.3	1358	1.0
Nov-14	1102	-1.6	1319	-2.9
Dec-14	1125	2.1	1363	3.3
Jan-15	1133	0.7	1362	-0.1
Feb-15	1140	0.7	1355	-0.5
Mar-15	1139	-0.2	1350	-0.4
Apr-15	1140	0.1	1343	-0.5
May-15	1134	-0.6	1330	-1.0
Jun-15	1144	0.9	1357	2.0
Jul-15	1141	-0.2	1352	-0.3

**FIGURE 4. ANZ HEAVY TRAFFIC INDEX: RAW VS SA**

Source: ANZ, NZ Transport Agency

**FIGURE 5. ANZ LIGHT TRAFFIC INDEX: RAW VS SA**

Source: ANZ, NZ Transport Agency

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