

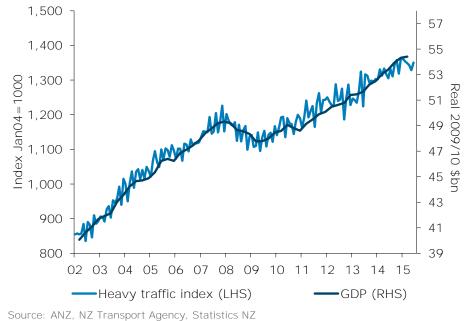
NEW ZEALAND ECONOMICS ANZ TRUCKOMETER

WARNING: DIP AHEAD

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 rose 1.6% in the month of June (seasonally adjusted), more than unwinding its May fall. The rebound is welcome after a series of declines. But it's still down 1.0% in the June quarter, which implies a weak even negative Q2 GDP growth print is a real possibility.¹ A loss of momentum is apparent.
- The ANZ Light Traffic Index leads GDP by six months. It rose 0.9% in June (sa), also unwinding its May fall. It is up just 0.1% in the last three months versus the three months previous (sa), also suggesting a flattening out in the economy.²
- While the rebound in our traffic indexes in June is encouraging, the Heavy Traffic Index, which has the strongest correlation to GDP, is nonetheless suggesting the economy has slowed markedly. The rebound in the Heavy Traffic Index is tepid considering five months of declines prior. We expect a further cut in the Official Cash Rate this month.

FIGURE 1: 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 in normal circumstances (but cannot predict sudden adverse events such as the Global Financial Crisis).

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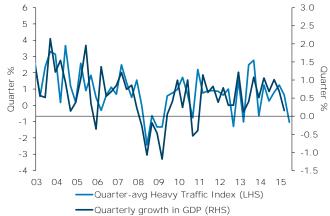
The next issue of the ANZ *Truckometer* is scheduled for release on 11 August 2015 at 10am.

ANZ TRUCKOMETER

The two Truckometer indexes reversed their May falls in the month of June. The rebound is welcome but the trend is still soft.

The ANZ Heavy Traffic Index rose 1.6% in June (seasonally adjusted) but is down 1.0% in the June quarter. This suggests the economy grew little – and may have even contracted slightly – in Q2. While the index "cried wolf" in 2012/2013 with similar levels, it was considerably more volatile around that time. Recently we have seen a gentle rolling over in the level of the index (see figure 1), making it hard to discount its prediction as "noise".





Source: ANZ, NZ Transport Agency, Statistics NZ

Drought impacts and lower dairy production (partly in response to lower prices) were evident in the weak Q1 GDP result, and it is possible that some of the loss of momentum evident in the Heavy Traffic Index has already come through. **That said, a broader range of indicators has started to turn**.

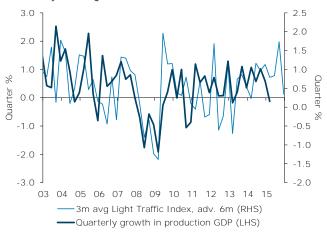
The data was partially adjusted for flooding road closures where the impact of these was evident. The flooding will have affected economic activity but not to the extent it affected traffic.

The Light Traffic Index gives a 6-month lead on the economy. It rose 0.9% in the month of June (sa) and is flat on a 3-month basis, suggesting it is also losing momentum. The light traffic index is still flagging strong annual growth (figure 5). However, the message from the 3-month trend gives a timelier signal.

It's encouraging to see a rebound in traffic flows over June. However, it's clear that the New Zealand economy has slowed markedly in

recent months; the rebound in our Heavy Traffic Index is tepid given the rebound followed five months of declines. We expect the OCR to be cut again this month.

FIGURE 3. ANZ LIGHT TRAFFIC INDEX ADVANCED 6 MONTHS) AND QUARTERLY GDP GROWTH



Source: ANZ, NZ Transport Agency, Statistics NZ



FIGURE 4. ANZ HEAVY TRAFFIC INDEX AND ANNUAL

Source: ANZ, NZTA, Statistics NZ



FIGURE 5. ANZ LIGHT TRAFFIC INDEX AND ANNUAL GDP GROWTH



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 realtime 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.

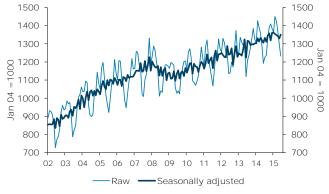
The contemporaneous relationship between heavy traffic and GDP is not surprising – road user charges revenue data have long been used as an economic indicator. Trucks are moving produce, after all. But the lead to GDP provided by the light traffic flows is more surprising. It would appear that **willingness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

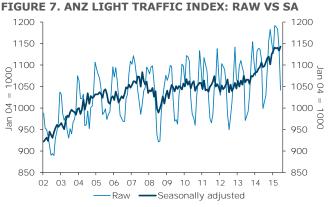
Technical notes on how the ANZ Truckometer is produced were included in the initial release on 10 April 2012, available on the ANZ website or on request. The indexes' data history (subject to revision) is also available on request.

	Light Traffic Index		Heavy Traffic Index	
	Index Jan 04=1000	Monthly % chg	Index Jan 04=1000	Monthly % chg
Jun-14	1095	-1.0	1305	-1.0
Jul-14	1097	0.2	1332	2.1
Aug-14	1106	0.8	1311	-1.6
Sep-14	1116	0.9	1345	2.6
Oct-14	1119	0.3	1358	0.9
Nov-14	1102	-1.6	1318	-2.9
Dec-14	1125	2.1	1362	3.3
Jan-15	1133	0.7	1361	-0.1
Feb-15	1140	0.7	1354	-0.5
Mar-15	1139	-0.2	1349	-0.4
Apr-15	1140	0.1	1342	-0.5
May-15	1133	-0.6	1329	-1.0
Jun-15	1143	0.9	1350	1.6









Source: ANZ, NZ Transport Agency



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