

## NEW ZEALAND ECONOMICS ANZ TRUCKOMETER

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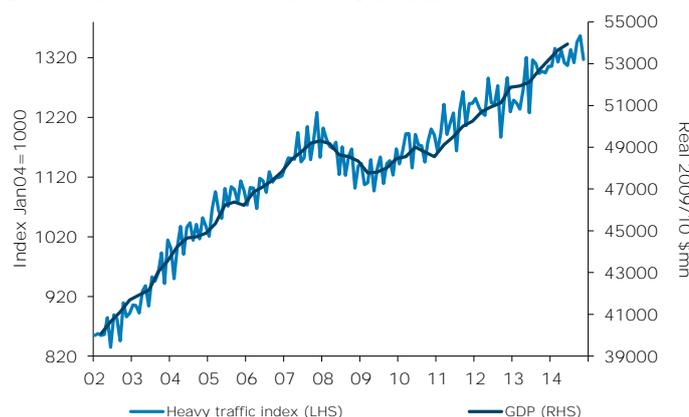
The next issue of the ANZ *Truckometer* is scheduled for release on 13 January 2015 at 10am.

## FOOT NO LONGER FLAT TO THE FLOOR

### KEY POINTS

- **The ANZ Truckometer is a timely measure of economic activity using real-time traffic data.** It has been re-estimated this month in light of the revised historical GDP data released by Statistics NZ and still tracks the official data well.
- **The ANZ Heavy Traffic Index fell 2.9% in November (sa)**, unwinding much of its lift over September and October.<sup>1</sup> The trend remains upward but may be showing early signs of flattening out.
- **The ANZ Light Traffic Index leads GDP by six months. It fell 1.4% in November (sa),<sup>2</sup>** its first fall since June. This index suggests ongoing solid momentum into next year but the growth rate is moderating.

### GDP AND THE HEAVY TRAFFIC INDEX



### GDP AND THE LIGHT TRAFFIC INDEX (6-MONTH AVERAGE)



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.

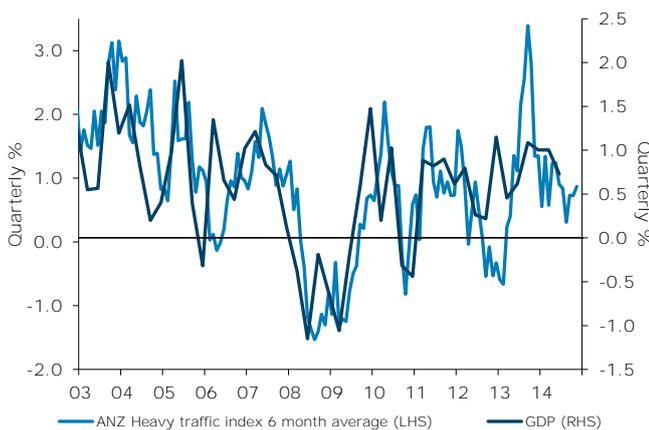
<sup>2</sup> **The ANZ Light Traffic Index** is made up of light or total traffic flows (primarily cars and vans) on 10 selected roads around the country. It gives a six month lead on GDP growth.

## ANZ TRUCKOMETER

**The Heavy Traffic Index fell by 2.9% in November (seasonally adjusted – sa), returning to approximately the levels prevailing three months earlier. The Light Traffic Index fell 1.4% sa, its first fall since June**, and its largest monthly fall since mid-2013. Both light and heavy *actual* traffic flows did increase, but less than they typically do in November, meaning the seasonally adjusted indexes fell. The Heavy Traffic Index is concurrent with GDP, whereas the Light Traffic index gives a six month lead.

**Quarterly growth in the 6-month average of the Heavy Traffic Index gives a good steer on GDP. It suggests slower growth occurred in Q3** (GDP data is to be reported later this month), but has risen since, despite the fall in the November month.

**FIGURE 1. ANZ HEAVY TRAFFIC INDEX (6 MONTH AVERAGE) AND QUARTERLY GDP GROWTH**



Source: ANZ, NZTA, Statistics NZ

**Despite the fall in November, the Light Traffic Index continues to be suggestive of an economy that is trying to grow faster than it sustainably can** (see chart on the front page). The spirit is certainly willing, but the Heavy Traffic Index suggests growth in the second half of the year has been solid rather than spectacular.

**We have reweighted the Truckometer indexes in light of the newly revised GDP data released by Statistics NZ.** Under the old weighting the November fall in both the Heavy and Light Traffic Indexes would have been a bit larger.

**The relative weakness in November after two good months is a reminder that the New Zealand economy cannot sustainably grow at 1% per quarter.** We suspect strength in September and October reflected a fast start to the dairy production season and possibly also a post-election return to normality – both very welcome factors but neither particularly sustainable as growth drivers.

Seasonally adjusted traffic flows fell on every one of the 11 roads in the Heavy Traffic Index in November, and on 7 of 10 roads in the Light Traffic Index.

**The two indices both correctly picked slower but still-solid GDP growth in Q2. However, the two indices disagree over Q3, with the Heavy Traffic Index less positive. Accordingly, the Heavy Traffic Index suggests a slowing in annual GDP growth will be apparent in the next outturn (Figure 2), while the Light Traffic Index is all guns blazing (Figure 3).** The Heavy Traffic Index has the closer fit, while the Light Traffic Index has the longer lead but its predictive ability disappears when very large unexpected events occur (eg the Global Financial Crisis of 2008). However, the Light Traffic Index certainly indicates that **the domestic economy still has plenty of momentum.**

**FIGURE 2. ANZ HEAVY TRAFFIC INDEX AND ANNUAL GDP GROWTH**



Source: ANZ, NZTA, Statistics NZ

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



Source: ANZ, NZTA, Statistics NZ

The global outlook is clouded, and represents the main risk to the New Zealand economy. But for now, **New Zealand is enjoying a period of strong growth with no inflation problem. We'll take it.**

# 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

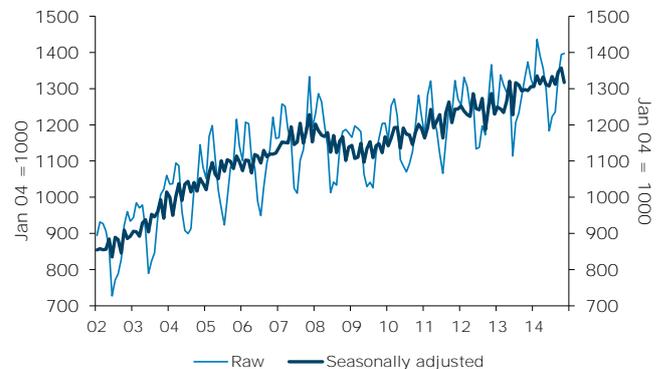
outturns. But the two indexes are remarkable indicators – the Heavy Traffic Index for its close match to GDP, as well as its timeliness (available in less than two weeks), and the Light Traffic Index for its valuable and unusual six month lead to GDP.

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.*

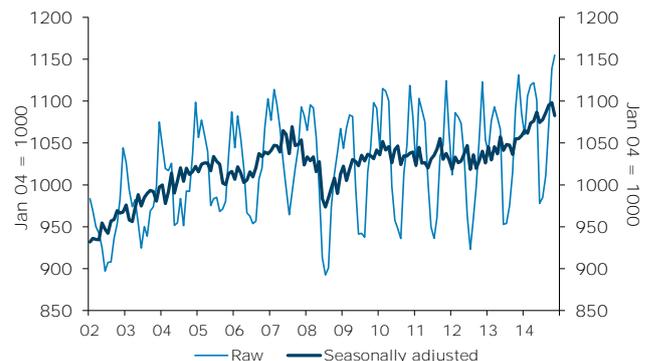
	Light Traffic Index		Heavy Traffic Index	
	Index Jan 04=1000	Monthly % chg	Index Jan 04=1000	Monthly % chg
Nov-13	1055	0.0	1295	-0.2
Dec-13	1059	0.3	1306	0.9
Jan-14	1065	0.6	1306	0.0
Feb-14	1062	-0.3	1335	2.3
Mar-14	1074	1.1	1313	-1.7
Apr-14	1076	0.2	1332	1.5
May-14	1087	1.0	1311	-1.6
Jun-14	1074	-1.1	1307	-0.3
Jul-14	1078	0.3	1334	2.0
Aug-14	1086	0.8	1312	-1.6
Sep-14	1095	0.8	1346	2.6
Oct-14	1098	0.3	1357	0.8
Nov-14	1083	-1.4	1317	-2.9

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



Source: ANZ, NZTA

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



Source: ANZ, NZTA



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