Global Economics

Derek Holt 416.863.7707
derek.holt@scotiabank.com

Frances Donald 416.862.3080
frances.donald@scotiabank.com

Special Report

What Premier Li Might Say About U.S. & Canadian Growth

Mostly US-based economists and journalists are focused upon alternative metrics for Chinese economic growth that they believe are superior to Chinese GDP because they are less subject to potential measurement error and manipulation. Since last year, these alternative metrics have suggested much weaker growth than Chinese GDP itself, leading some to conclude that the Chinese GDP figures must be particularly problematic of late. In order to further emphasize how these alternative metrics don't necessarily offer any better gauge of underlying growth than Chinese GDP, however, we'll offer a new twist in the debate by bringing it back home to them with a growth tracking measure modelled after the indicators Premier Li preferred — but applied to the US and Canadian economies.

What Is The Keqiang Growth Proxy?

The Li Keqiang Index is an attempt to track Chinese growth based on a leaked memo via Wikileaks (here). Back in March of 2007, when current Chinese Premier Li Keqiang was Party Secretary in Liaoning Province, he remarked to US Ambassador Clark Randt that GDP is "man-made" and "for reference only." He said that when he was evaluating Liaoning's economy, he focused on electricity consumption, rail cargo volumes that charge fees per unit and hence are easily tracked, and the amount of loans disbursed which tend to be accurate because banks charge for them. Following the leaked memo in 2010, various shops arbitrarily weighted these three indicators to produce activity trackers and/or proxies for GDP. Notably, both Bloomberg and the Economist produced Li Keqiang Indices (chart 1). Other shops incorporated Premier Li's three indicators with other variables to produce alternative GDP trackers. While most versions of the Li Keqiang Index tracked fairly well with total GDP between 2005 and as late as 2012, at least directionally, these indicators have strongly disconnected from reported GDP figures over the past several years, leading some to the conclusion that GDP figures must be inflated as Premier Li's indicators were the better gauge of growth.
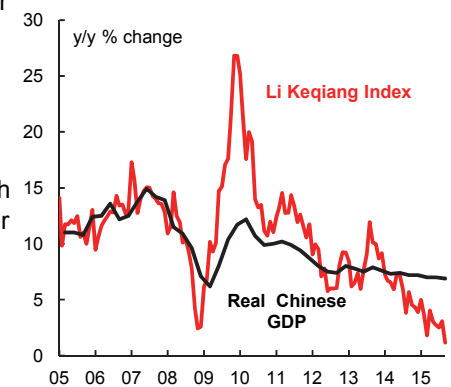
We'll come back to conceptual problems with this thinking, but for now observe that it's highly improbable that the large Chinese economy exhibited such massive swings in growth as the various measures of the Keqiang index would suggest. Today's low readings on the Keqiang index are possibly at least as misleading as the wild swings of the past — such as the roughly thirty percentage point swing in growth in the 2009-10 period.

A US Keqiang Index

Chart 2 depicts an effort to construct a US Keqiang index. It uses the same entirely arbitrary and unscientific weights used in Bloomberg's Li KeQiang index: a 40% weight on loans and leases in US bank credit from the Federal Reserve; a 40% weight on electricity production in the US from the Edison Electric Institute; and a 20% weight on railcar freight loads from the Association of American Railroads.
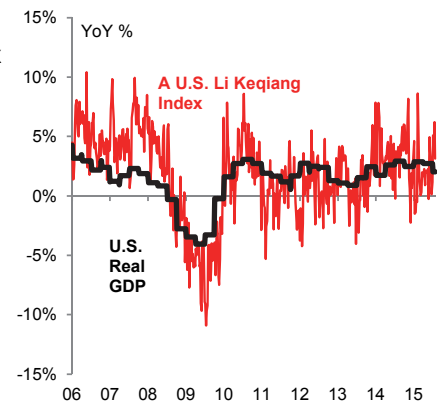
Chart 1

China's "Li Keqiang Index" And Chinese Real GDP Growth

Source: Scotiabank Economics, Bloomberg, National Bureau of Statistics of China.

Chart 2

... Can't Help Predict US GDP Growth

Source: Scotiabank Economics, Bloomberg

This Report is available on scotiabank.com, Bloomberg at SCOT and Reuters at SM1C

Chart 2 also shows the correlation with US real GDP. As in China's case, there are times when the US-Keqiang index can correlate with turning points in GDP growth but the amplitudes and volatility are far in excess of what is likely by way of true economic growth. The Keqiang index applied to the US shows the huge US economy growing at between roughly -10% to +10% in recent years which, needless to say, is highly unlikely for an economy the sheer size of the US. The US-Keqiang index also shows the US economy currently growing at about double the pace reported in official GDP estimates. **Some believe that Chinese GDP is manipulated because it fails to track the Keqiang index, but the same charge would also apply to US GDP if we applied a US Keqiang Index to growth.**

A Canadian Keqiang Index

We can also construct a Canadian Keqiang index using the same methodology. The connection with Canadian GDP is shown in chart 3. There is a rough connection at major turning points, but as in the US and Chinese cases, the magnitudes of the swings and false readings are overwhelming as a guide to true economic growth. Indeed, the Canadian-Keqiang index shows the economy currently in contraction and does so more frequently over time than actual GDP. Once again, **if Chinese GDP is believed to be manipulated simply because it doesn't always line up with the Keqiang index, then the same casual assertion would be levied upon Canadian GDP when it does not track with a Canadian Keqiang Index.**

Conceptual Problems With The Keqiang Measure

We conclude with some reasons for why the Keqiang index performs in questionable fashion across all three countries as outlined in this paper.

1. Premier Li's indicators were specifically in reference to Liaoning Province's growth, not aggregate national Chinese growth. Yet, Liaoning is the most industrial province in China and where heavy and light industry dominate while services are underrepresented. That was even more true relative to national growth in 2007.

2. China's economy is in the midst of very rapid and significant structural adjustment. Namely, it is transitioning from a manufacturing-based economy to a services-based economy (chart 4). That transition has accelerated since Premier LI's 2007 comments and is not captured in the existing Li Keqiang indices. Instead, the alternative indicators are heavily biased towards heavy industry. In that sense, the Li Keqiang is probably a better Chinese heavy industry proxy than GDP tracker. Yet, as heavy industry becomes less important to total growth, so too should our emphasis on its indicators. Attempts at adjusting the Keqiang index for China's economy for this service sector deficiency are primarily sentiment based and inadequate.

3. Arbitrary and static weights applied to the components of a Keqiang index are problematic for two reasons. First, the leaked memo does not specify which indicators were more important to Premier Li. Second, as China's economy changes, so too should the relative weights in the index. Rail activity, for example, will become less important to growth over time and as one of the most negative data points, drags down the headline index.

4. Some of the Keqiang index inputs are measured in gross value terms (bank lending) while others are gross volume measures (rail cargo, electricity output). When comparing to real value-added GDP growth they mix apples and oranges.

Clearly there are big differences in the Chinese, US and Canadian economies, not least of which being the role of the consumer, the service sector, and natural resources although China is catching up rapidly on some of these measures. With the evidence we have provided, however, it is not apparent that a Keqiang-index approach yields superior growth tracking in any of the three countries we have examined. We therefore downplay its significance. While it is recognized that GDP measurement challenges exist across all geographic boundaries — witness, for instance, massive revisions to US GDP growth (chart 5) — the quest for an empirically sound and tested alternative remains unfulfilled.

Chart 3

A Canadian Keqiang Index And Canadian GDP Growth

Source: Scotiabank Economics, Statistics Canada.

Chart 4

Services Are The Bigger Part Of The Chinese Economy

Source: Scotiabank Economics, Bloomberg

Chart 5

Cumulative Revision To U.S. GDP Growth

Source: Scotiabank Economics, BEA.