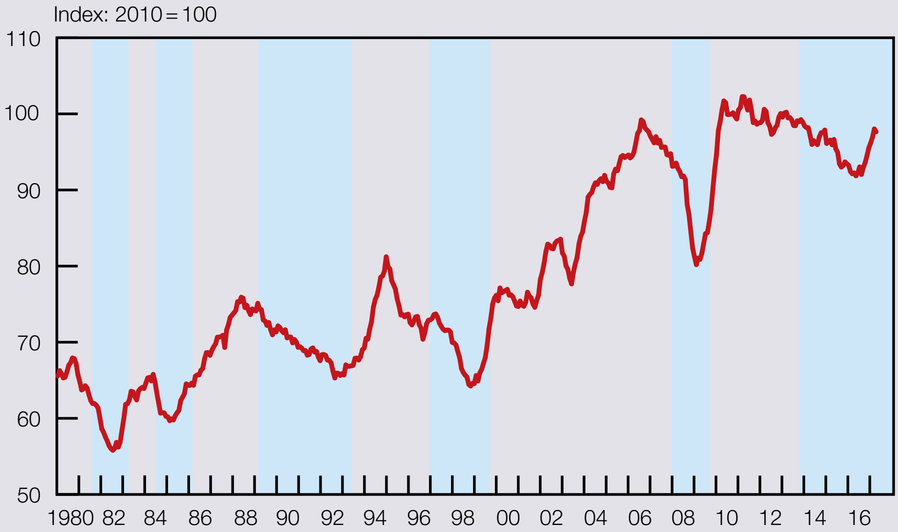
Box 1 Recent upward trend in the composite leading business cycle indicator

The composite leading business cycle indicator[1] appears to have reached a trough in April 2016 and subsequently increased decisively up to February 2017. Based on past experience, the recent strong upward trend in the leading indicator rightfully led to expectations of an imminent end to the current downward phase in the business cycle. However, domestic economic activity remains subdued as indicated by a contraction in real gross domestic product in recent quarters.

Expectations of a looming end to the current downward phase of the business cycle is based on the established track record of the SARB's composite leading business cycle indicator which has consistently pre-empted turning points in the business cycle. Historically, the leading indicator's median lead time has been 10 months at business cycle peaks and 8.5 months at business cycle troughs. The leading indicator reached its most recent upper turning point in March 2011 – preceding the reference peak in the business cycle by 32 months. The South African economy has been in a downward phase of the business cycle for 42 months up to May 2017.

Composite leading business cycle indicator



Shaded areas indicate downward phases of the business cycle

Source: SARB

An analysis of the leading indicator's subcomponents indicates that the recent increase has not been very broad-based. The composite leading business cycle indicator combines 11 individual economic indicators whose turning points have historically preceded those in the business cycle. These subcomponents comprise leading indicators of domestic demand, external demand, sentiment and employment, among others.

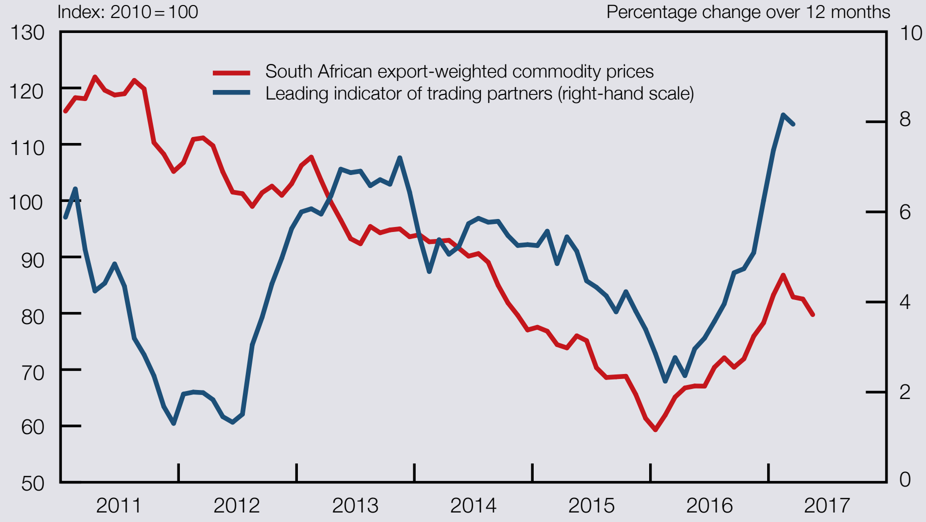
The recent strong upward trend in the leading indicator was largely driven by significant increases in the two subcomponents that measure external demand. These are the South African export-weighted international commodity price index (denominated in US dollar) and the leading indicator of trading partners (an index of the composite leading business cycle indicators of South Africa's main trading partner countries, weighted according to South African exports to those countries)[1]. Most international commodity prices have increased from early 2016 as the global economic outlook improved. This is corroborated by a notable increase in the composite leading indicator of trading partners from March 2016.

1 The *business cycle* can briefly be defined as the fluctuations in aggregate economic activity. The SARB applies the growth cycle definition of business cycles, that is, determining turning points in the deviation of aggregate economic activity from its long term trend.

A *leading indicator* is an economic time series whose turning points consistently precede those in the business cycle by an average of three months or more.

A *composite index* is a time series that is compiled by combining the month-to-month changes in a number of individual economic indicators into one index, reflecting the combined movement of all the individual subcomponents in a single indicator.

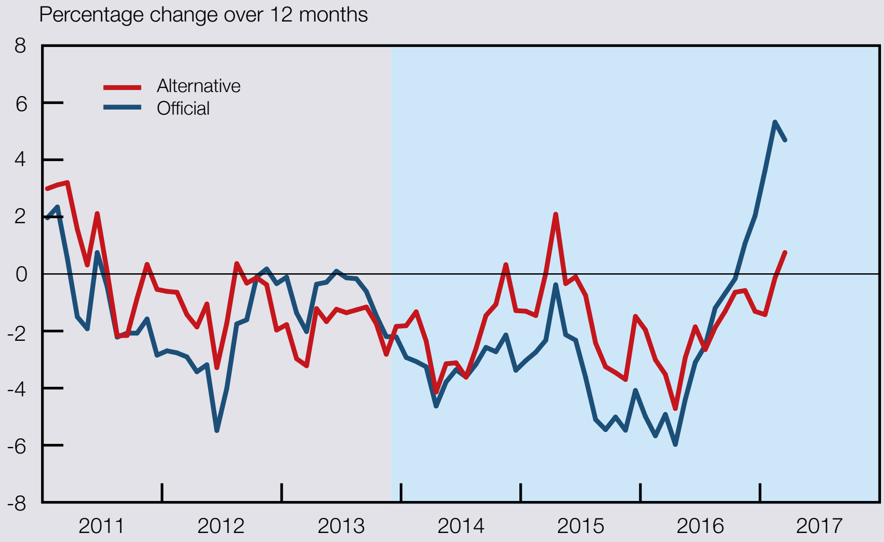
Drivers of external demand in the composite leading business cycle indicator



Sources: SARB, Foundation for International Business and Economic Research (FIBER) and the Conference Board

An alternative composite leading business cycle indicator that excludes the two subcomponents measuring external demand does not display the same strong upward trend recently observed in the official leading indicator. In recent months, the year-on-year percentage change in the alternative indicator remained subdued, while that in the official indicator accelerated significantly.

Official and alternative composite leading business cycle indicator



Shaded area indicates downward phase of the business cycle

Source: SARB

The recent strong upward trend in the official composite leading business cycle indicator therefore appears to have been driven largely by an improved global economic outlook and higher commodity prices. By contrast, leading indicators of domestic demand and employment have not increased much, while business confidence has remained at fairly depressed levels. Furthermore, domestic drivers have recently also been sensitive to political developments, which might restrict further increases in the composite leading business cycle indicator in the short run. In conclusion, the historical relationship between movements in the composite leading business cycle indicator and real economic activity in the domestic economy has been compromised somewhat by domestic growth constraints being more pronounced in the current cycle than in previous episodes.