Data availability for the construction of a composite leading business cycle indicator for South Africa

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Introduction

This document aims to provide a list of time series for possible inclusion in a composite leading business cycle indicator for the South African economy. Firstly, the time series chosen by the OECD in its preliminary composite leading indicator for South Africa will be discussed. Then, a number of time series will be presented as additional or alternative leading indicators for possible evaluation by the OECD.

When considering the list of possible leading indicator components, a few characteristics of the South African economy should be taken cognisance of. It should be noted that the South African economy is a small open economy. South Africa’s major export destinations include the G7 countries (excluding Canada), Taiwan and the Republic of Korea. South Africa is also a major exporter of commodities, especially mining commodities. The diminishing importance of gold exports should also be noted. In 1980 gold exports represented roughly 50 per cent of total exports. In 2004 this figure declined substantially to only 10½ per cent.

Time series initially selected by the OECD

1) Production volumes in manufacturing: Future tendency survey

Source:
Bureau for Economic Research (BER) in Stellenbosch

Frequency and Starting date:
Quarterly. 2nd quarter 1974
Description:
Respondents are requested to indicate whether they expect their firm’s production to be “up”, “same”, or “down” compared to the same quarter of the previous year. The survey results are then weighted and expressed as net balances.

Timeliness:
Released during the last month of the survey quarter

2) Number of factory workers in manufacturing: Future tendency survey

Source:
Bureau for Economic Research (BER) in Stellenbosch

Frequency and Starting date:
Quarterly. 1st quarter 1970

Description:
Respondents are requested to indicate whether they expect the number of factory workers to “increase”, “stay the same”, or “decrease” compared to the same quarter of the previous year. The survey results are then weighted and expressed as net balances.

Timeliness:
Released during the last month of the survey quarter

3) Rate of increase in average domestic selling price per unit of production (manufacturing): Future tendency survey

Source:
Bureau for Economic Research (BER) in Stellenbosch

Frequency and Starting date:
Quarterly. 3rd quarter 1987

Description:
Respondents are requested to indicate whether they expect the rate of increase in the domestic selling price per unit of production to “increase”, “stay the same”, or “decrease” compared to the same quarter of the previous year. The survey results are then weighted and expressed as net balances.

Timeliness:
Released during the last month of the survey quarter
4) Consumer confidence index: Future tendency survey

Source:
Bureau for Economic Research (BER) in Stellenbosch

Frequency and Starting date:
Quarterly. 2nd quarter 1982

Description:
Respondents are requested to answer three questions:
- Do you expect the economic position in South Africa to “improve”, “stay the same”, or “deteriorate” during the next 12 months?
- Do you expect the financial position of households to “improve”, “stay the same”, or “deteriorate” during the next 12 months?
- Rating of current time to buy durable goods: better, neutral, worse.
The survey results are then weighted and expressed as net balances.

Timeliness:
Released at the end of the last month of the survey quarter

5) Retail sales of motorcars

Source:
Statistics South Africa

Frequency and Starting date:

Description:
The time series measures the value of vehicle sales (new and used) during each month. The data are obtained with a sample survey of South African vehicle dealers.

Timeliness:
Released with a delay of between two and two and a half months

6) Merchandise exports

Source:
Customs and Excise

Frequency and Starting date:

Description:
The time series measures the total value of merchandise exports from South Africa. The South African Reserve Bank makes some minor BOP adjustments and also does seasonal adjustment on the data.
Timeliness:
Released with a delay of one month

7) Gold price in Rand

Source:
London gold price

Frequency and Starting date:

Description:
The time series measures the average monthly London gold price in South African Rand.

Timeliness:
Released with a delay of one month

Additional time series suggested for evaluation

1) Average hours worked per factory worker in manufacturing: Future tendency survey

Source:
Bureau for Economic Research (BER) in Stellenbosch

Frequency and Starting date:
Quarterly. 1st quarter 1970

Description:
Respondents are requested to indicate whether they expect the average number of hours worked per factory worker to “increase”, “stay the same”, or “decrease” compared to the same quarter of the previous year. The survey results are then weighted and expressed as net balances.

Timeliness:
Released during the last month of the survey quarter

2) Level of inventories in relation to expected demand in manufacturing and trade: Future tendency survey (inverse)

Source:
Bureau for Economic Research (BER) in Stellenbosch

Frequency and Starting date:
Quarterly. 1st quarter 1970
Description:
Respondents are requested to indicate whether they believe that compared to the same quarter of a year ago, current stocks of finished goods relative to expected demand are **too high / just sufficient / too low**. The survey results are then weighted and expressed as net balances.

Timeliness:
Released during the last month of the survey quarter, or at the start of the first month of the following quarter.

3) **Labour productivity in manufacturing: percentage change over 12 months / six month smoothed growth rate**

Source:

Frequency and Starting date:
Manufacturing production - Monthly
Employment in the manufacturing sector – Quarterly
1st quarter 1963

Description:
This time series represents a ratio, whereby an index representing manufacturing production is divided by an index representing the total number of people employed in the manufacturing sector. Both components of the ratio are seasonally adjusted by the South African Reserve Bank.

Timeliness:
Available when employment data are released, at the end of the quarter following the quarter for which data are released.

4) **Number of new motorcars sold**

Source:
National Automobile Association of South Africa (NAAMSA)

Frequency and Starting date:
Monthly. January 1960

Description:
This time series represents the actual number of new passenger cars sold during each month by members of NAAMSA. The series is seasonally adjusted by the South African Reserve Bank, which also publishes it in an index format.

Timeliness:
Released within one or two days after the relevant month
5) **Number of residential building plans approved for flats, townhouses and houses larger than 80m²**

**Source:**
Statistics South Africa

**Frequency and Starting date:**
Monthly. January 1971

**Description:**
Statistics South Africa conducts a sample survey regarding building activities, including the number of building plans approved for dwelling houses, amongst the largest local government institutions. The series is seasonally adjusted by the South African Reserve Bank.

**Timeliness:**
Released approximately six weeks after the end of the reporting month

6) **Interest rate spread**

**Source:**
South Africa Reserve Bank.

**Frequency and Starting date:**

**Description:**
The monthly average yield on 91-day Treasury bills is subtracted from the monthly average yield on government bonds with a maturity of 10 years and longer.

**Timeliness:**
Available within a day or two after the reporting month

7) **Prices of all classes of shares**

**Source:**
The Johannesburg Securities Exchange

**Frequency and Starting date:**
Monthly. January 1960

**Description:**
The index reflects the average monthly price movements of all publicly listed shares traded on the Johannesburg Securities Exchange.

**Timeliness:**
Available one day after the reporting month
8) **Job advertisement space in The Sunday Times newspaper**

**Source:**
The Sunday Times newspaper

**Frequency and Starting date:**

**Description:**
The basic data measure the number of square centimetres that is taken up by job advertisements every month in the Sunday Times newspaper. The monthly figure is normalised for the number of Sundays in each month. The resulting time series is then seasonally adjusted.

**Timeliness:**
Available within two weeks after the reporting month

9) **Real M1 money supply: percentage change over 12 months / six month smoothed growth rate**

**Source:**
The South African Reserve Bank

**Frequency and Starting date:**
Monthly. March 1965

**Description:**
The nominal M1 figure comprises of:
- notes and coin in circulation outside the monetary sector,
- cheque and transmission deposits of the private sector with the monetary sector, and
- demand deposits of the private sector with the monetary sector.
The nominal M1 figure is then seasonally adjusted and deflated with the overall consumer price index.

**Timeliness:**
Released one month after the reporting month

10) **Gross Operating Surplus as a percentage of Gross Domestic Product**

**Source:**
The South African Reserve Bank and Statistics South Africa

**Frequency and Starting date:**
Quartely. 1st quarter 1960
Description:
Both components of the ratio are calculated by aggregating the gross operating surpluses and gross domestic products of all the sectors and sub-sectors of the economy. Both these aggregate series are expressed in current prices and seasonally adjusted.

Timeliness:
Released approximately six weeks after the reporting quarter

11) Leading business cycle indicator of trading partners: percentage change over 12 months

Source:
Foundation for International Business and Economic Research (FIBER) in New York, USA

Frequency and Starting date:

Description:
The indicator is compiled from the composite leading business cycle indicators of South Africa’s main (export) trading partners. Countries currently included in the index are the USA, Japan, Germany, France, the UK, Italy, the Republic of Korea and Taiwan. These individual leading indicators are combined into a single index and weighted according to the rand value of exports to each country.

Timeliness:
Available approximately two months after the reporting month

12) An index measuring commodity prices

The South African Reserve Bank currently uses a commodity price index that is compiled by its Research Department. As this index is incorporated in the Bank’s econometric model, it is not distributed outside the Bank. However, most other commodity price indices should correlate well with the South African business cycle.

Conclusion

The South African Reserve Bank would be prepared to assist with the regular monthly transmission of all the abovementioned data, except the future tendency survey data, which are released by the Bureau for Economic Research (BER) in Stellenbosch.