

The South African business cycle from 2013 to 2022

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Introduction

The South African Reserve Bank (SARB) has previously identified reference turning points in the South African business cycle for the period 1946 to 2013. These turning points have been discussed in various articles and notes published in earlier editions of the *Quarterly Bulletin* (QB). The chronology of upper (peaks) and lower (troughs) turning points is published in the statistical tables section of the QB.² The most recently identified peak in the business cycle was November 2013 (Venter, 2016).

The purpose of this article is to identify and publish reference turning points in the South African business cycle after the November 2013 peak.

Over the past decade, the South African economy was impacted by several adverse global developments and domestic structural constraints which have led to a protracted period of heightened uncertainty and resulted in a gradual decline in the potential rate of economic growth (SARB, 2017). The domestic economy was also severely impacted on by the national lockdown restrictions imposed in 2020 after the global outbreak of the coronavirus disease 2019 (COVID-19) pandemic.

The article first describes the SARB's methodology to identify a reference turning point in the business cycle, including the business cycle definition used by the SARB. Thereafter, the statistical results are presented, followed by a brief overview of the main macroeconomic events and developments between 2013 and 2022. The article concludes with the identification of three reference turning point dates during this period.

Methodology applied to identify reference turning points

The SARB determines reference turning points in the business cycle in terms of the *growth cycle* definition (Venter, 2005). Growth cycles represent the fluctuations around the long-term trend of aggregate economic activity and are also referred to as trend-adjusted business cycles. The SARB's business cycle chronology therefore represents reference turning point dates that distinguish between upward phases (periods when the rate of growth in aggregate economic activity either matched or exceeded the long-term trend) and downward phases (periods when aggregate economic activity either contracted or increased at a slower pace than its long-term trend).

Several statistical tools are used to identify a reference turning point in the business cycle. The SARB's three *composite business cycle indicators*³ are continuously monitored for any indication of a possible turning point. The three composite business cycle indicators, which are independently compiled, each comprise economic indicators that are grouped together according to their ability to lead, coincide with or lag movements in the business cycle. The composite leading business cycle indicator currently combines 11 individual economic indicators which have historically preceded reference turning points in the business cycle. The composite coincident business cycle indicator incorporates five economic indicators which have historically coincided with reference turning points in the business cycle. Similarly, the composite lagging business cycle indicator constitutes seven economic indicators which have historically followed turning points in the business cycle.

When the composite business cycle indicators suggest that a turning point in the business cycle might have occurred, two comprehensive diffusion indices are compiled. The *current diffusion index* is a comprehensive composite index compiled from the actual month-to-month symmetrical percentage changes⁴ in each of the 163 seasonally adjusted economic time series analysed. These indicators represent all the relevant economic processes in the various economic sectors, including production, sales, employment, wage and price developments,

1 The authors would like to thank N Ehlers and K Moagi of the Business Cycle Analysis Unit in the Economic Statistics Department of the SARB for their invaluable assistance in applying the statistical methods used in this analysis.

2 For the business cycle phases since 1945, see page S-164 in this edition of the *Quarterly Bulletin*.

3 A composite business cycle indicator is compiled by integrating different economic indicators into a single index.

4 The month-to-month symmetrical percentage change (S) in a time series (X) is calculated as:

$$S_t = 200 * (X_t - X_{t-1}) / (X_t + X_{t-1}).$$

The methodology to construct the current diffusion index is the same as that for the composite business cycle indicators.



monetary aggregates and investment. The deviation of the current diffusion index from its long-term trend provides a quantitative measure of the cyclical movement in aggregate economic activity (i.e. the growth cycle). It provides an indication of the depth (amplitude) and duration of the growth cycle phases, with the turning points serving as a proxy for reference turning points in the business cycle.

The *historical diffusion index* is defined as a measure of the dispersion of the changes in the same set of economic time series. This index is constructed by first determining the specific turning points (peak and trough dates) in the cyclical component (deviation from trend) of each of the 163 time series. Each monthly historical diffusion index value represents the number of time series that are increasing in that month (relative to each one's long-term trend) as a percentage of the total number of time series considered. An index value exceeding 50 indicates that more than half of the time series considered was increasing relative to their long-term trends in that month, implying that the economy was in an upward phase of the business cycle. Similarly, an index value below 50 indicates that the economy was in a downward phase of the business cycle in that month. Therefore, turning points in the historical diffusion index occur when the index passes through the 50 mark, with the index providing an indication of the duration and diffusion (dispersion among the economic indicators considered) of the growth cycle phases.

The SARB's growth (or deviation) cycle methodology makes extensive use of trend estimation to disaggregate time series into trend and cyclical components to identify reference turning points. The phase average trend (PAT) was developed specifically for identifying growth cycles (Boschan and Ebanks, 1978) and has historically been used by the National Bureau for Economic Research (NBER) in the United States (US) (Zarnowitz and Ozyildirim, 2006). An advantage of the PAT is that the variation in an economic time series is attributed equally to business cycle fluctuations and to other factors, such as major structural and technological changes, wars and financial crises. Zarnowitz and Ozyildirim (2006) found that the Hodrick–Prescott (HP) trend (Hodrick and Prescott, 1997) closely approximates the PAT when setting the smoothing parameter (λ) as $\lambda=108\ 000$ for monthly time series. As such, the HP trend (with $\lambda=108\ 000$) was used for all trend estimations in this analysis.

However, most of the economic time series exhibited extreme outliers in the first half of 2020 because of the strict COVID-19 national lockdown (alert levels 4 and 5) that started on 26 March. These extreme outliers became problematic when decomposing a time series into its long-term trend and cyclical components, as they caused the statistical filtering technique to overstate the decline in the trend component before and during the pandemic period due to the smoothing inherent in such filtering techniques. The trend then declines even before the onset of the pandemic, suggesting some prior knowledge of the exogenous pandemic shock. This distortion to the cyclical component of a time series could affect the accurate identification of business cycle turning points.

To reduce the distortion created by the COVID-19-related outliers in the trend estimation of a non-stationary time series, a two-step approach was followed. Firstly, an HP trend (with $\lambda=500$) was estimated on the logarithm of the original economic time series to obtain proxy values for the pandemic outlier period. The values obtained from this low-lambda⁵ HP trend filter were then substituted into an augmented version of the original time series to smooth out, or lessen the impact of, the severe outliers from March to June 2020. The conventional HP filter (with $\lambda=108\ 000$) was then estimated on the augmented version of the original time series to obtain a more appropriate trend, which was used to decompose the original unaltered time series into its trend and cyclical components.

The identification of a reference turning point in the business cycle is not purely a mechanical statistical exercise, and the statistical tools described above do not always indicate the same reference turning point date. Consequently, other macroeconomic indicators as well as significant economic events and developments occurring near a possible turning point must be considered when identifying a reference turning point date.

5 A lower lambda value generates a trend that shows less smoothed estimates and follows the original time series more closely, where a higher lambda value generates a more smoothed trend estimate.



Statistical results

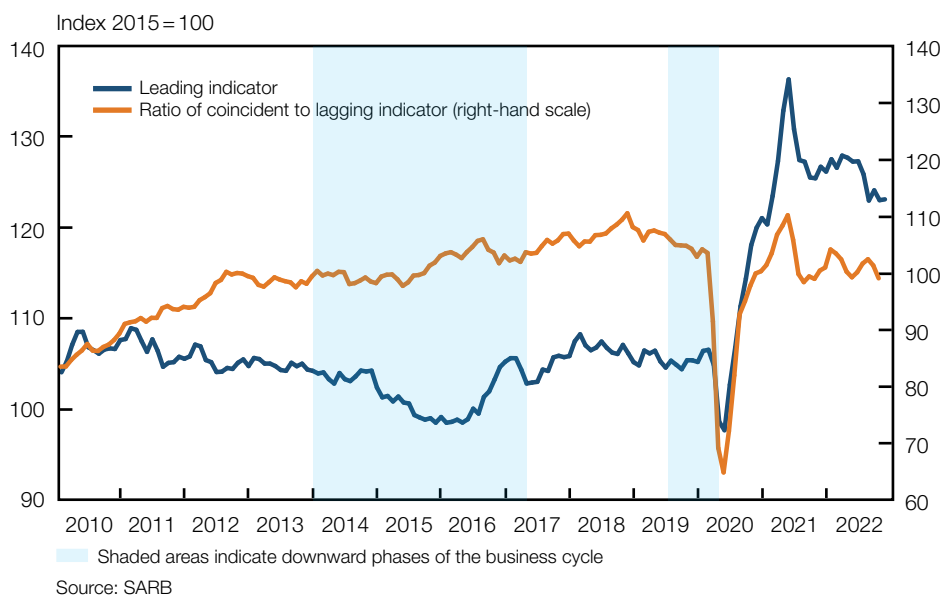
The methodology confirmed the previously identified reference peak in the business cycle of November 2013 and indicated three subsequent reference turning points in the business cycle during the 2013–2022 period. A lower turning point in April 2017 was followed by a peak in June 2019 and then another trough in April 2020.

The composite business cycle indicators

The composite leading business cycle indicator peaked in February 2011 and then trended gradually lower for five years. This pointed to the progressive weakening in domestic economic activity. The leading indicator then troughed in April 2016 and trended higher up to February 2018, suggesting the commencement of an upward phase of the business cycle. An earlier study showed that the upward trend in the leading indicator signalled the end of the downward phase of the business cycle as the turning point signal from the leading indicator met the requirements of being pronounced, pervasive and persistent (Venter, 2020). Subsequently, the leading indicator again moved gradually lower to 2019, suggesting renewed weakness in domestic economic activity. The leading indicator then plummeted in the three months to May 2020 because of the COVID-19 lockdown. Based on its historical relationship with the business cycle, the leading indicator pointed to a possible trough in the business cycle towards the end of 2016 or in early 2017 as well as a subsequent peak in the second half of 2018 or the first half of 2019. The leading indicator then increased strongly until May 2021 before gradually receding due to COVID-19-related distortions and base effects (SARB, 2021).

The ratio of the composite coincident business cycle indicator relative to the composite lagging business cycle indicator serves as an additional leading indicator of the business cycle (Venter, 2004). This ratio increased up to August 2012 before moving sideways up to May 2015. Contrary to the leading indicator, the ratio did not decline over this period because the downturn was not caused by a typical overheating economy as on previous occasions but rather drifted gradually towards stagnation from the supply side, hampered by several supply constraints and heightened policy uncertainty (Laubscher, 2020). The ratio then trended higher up to November 2018, which suggested that an upward phase in the business cycle might have occurred. The ratio subsequently decreased notably up to May 2020, signalling another downward phase in the business cycle even before the onset of the COVID-19 pandemic.

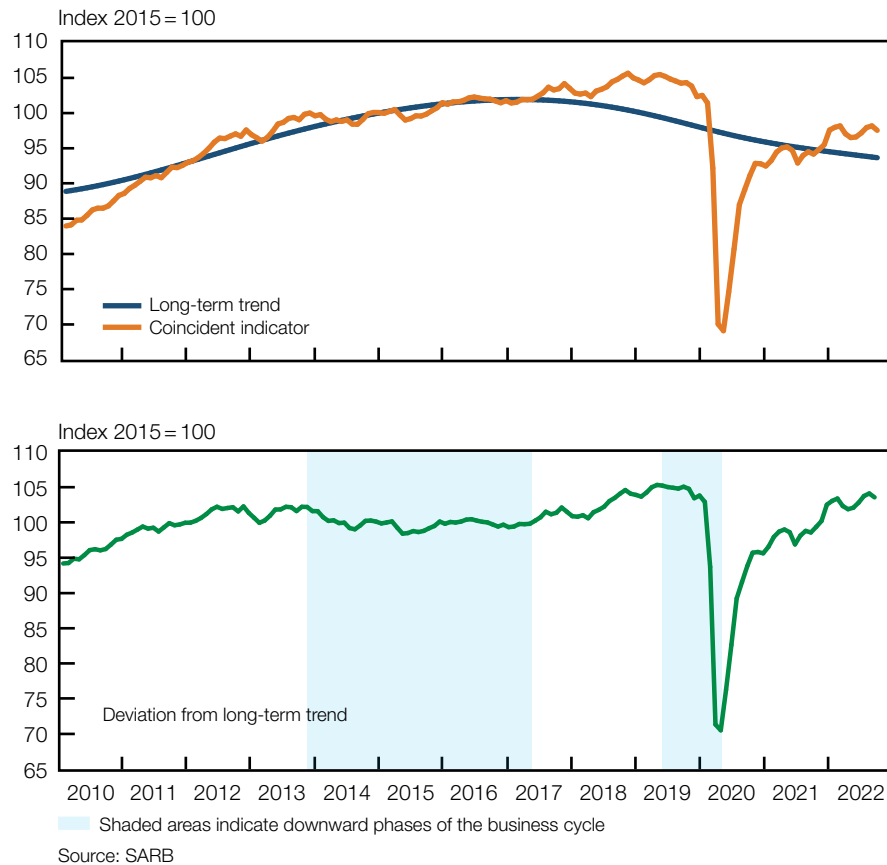
Figure 1 Composite business cycle indicators





The deviation of the composite coincident business cycle indicator from its long-term trend moved lower from November 2013 to mid-2015 before trending broadly sideways up to January 2017. The indicator then increased up to May 2019, suggesting that an upward phase in the business cycle had probably occurred, before declining during the remainder of the year and then plummeting in early 2020. The indicator increased strongly from June 2020 as economic activity started recovering from the COVID-19 lockdowns.

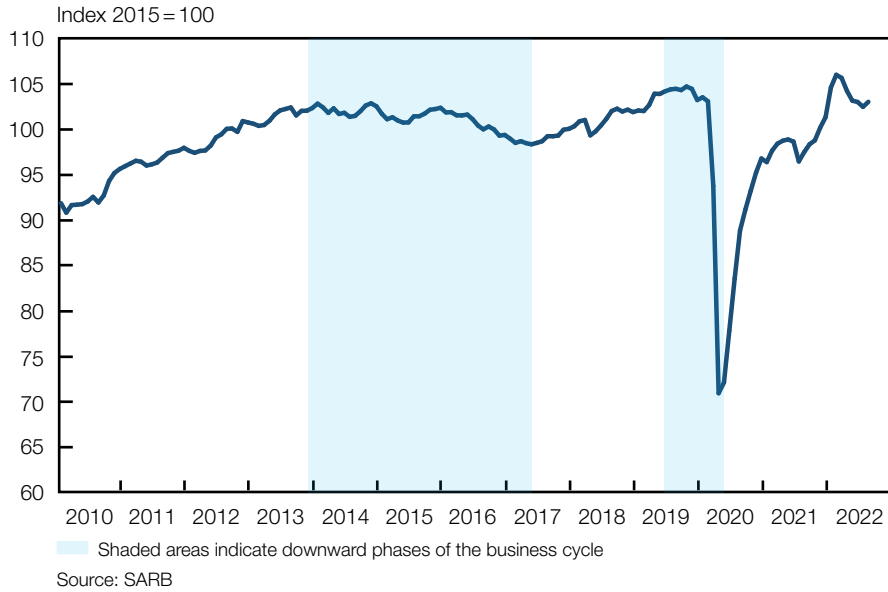
Figure 2 Composite coincident business cycle indicator



The current diffusion index

The deviation of the current diffusion index from its long-term trend increased steadily up to January 2014 before moving gradually lower up to May 2017. The indicator then increased up to October 2019, which indicated that an upward phase in the business cycle had likely occurred. The indicator then decreased significantly up to April 2020 before increasing strongly thereafter.

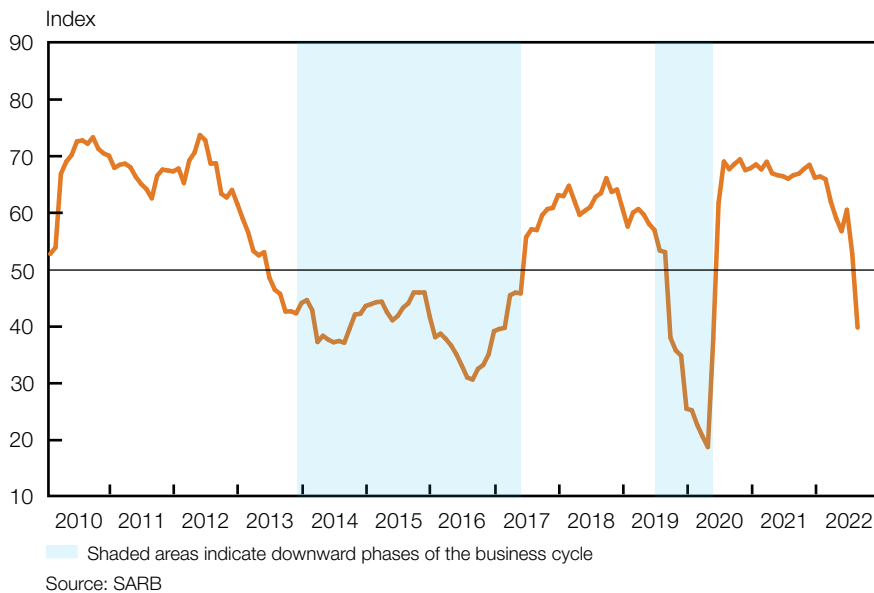
Figure 3 Current diffusion index (deviation from long-term trend)



The historical diffusion index

The historical diffusion index fell below 50 in June 2013, which implied that the majority of the time series analysed decreased from that month onwards relative to their respective long-term trends. The indicator only moved back above 50 from June 2017, suggesting that a trough in the business cycle had been reached, and remained above that level until August 2019. The historical diffusion index then fell to as low as 18.7 in April 2020 before moving decisively through the 50 mark in June.

Figure 4 Historical diffusion index





Macroeconomic events and developments

Following the global financial crisis (GFC) of 2008–09, the South African economy experienced an unusual business cycle for more than a decade (Laubscher, 2020), marred by several adverse global developments and persistent domestic structural constraints which led to a prolonged period of heightened uncertainty. Such external events, coupled with domestic institutional, political and structural changes, have a significant impact on the evolution of the business cycle, as noted by Zarnowitz (1992): “How the economy moves over time depends on its structure, institutions and policies, all of which are subject to large historical changes”. Amid increased volatility in most macroeconomic indicators, domestic economic activity expanded at a subdued pace throughout this period, with the amplitude of the business cycle becoming much smaller than previously, as aggregate economic activity fluctuated closely around this historically low growth trend. Another unique feature of this period was the lack of business confidence and fixed investment, which reflected the impact of these external developments and domestic structural constraints, such as:

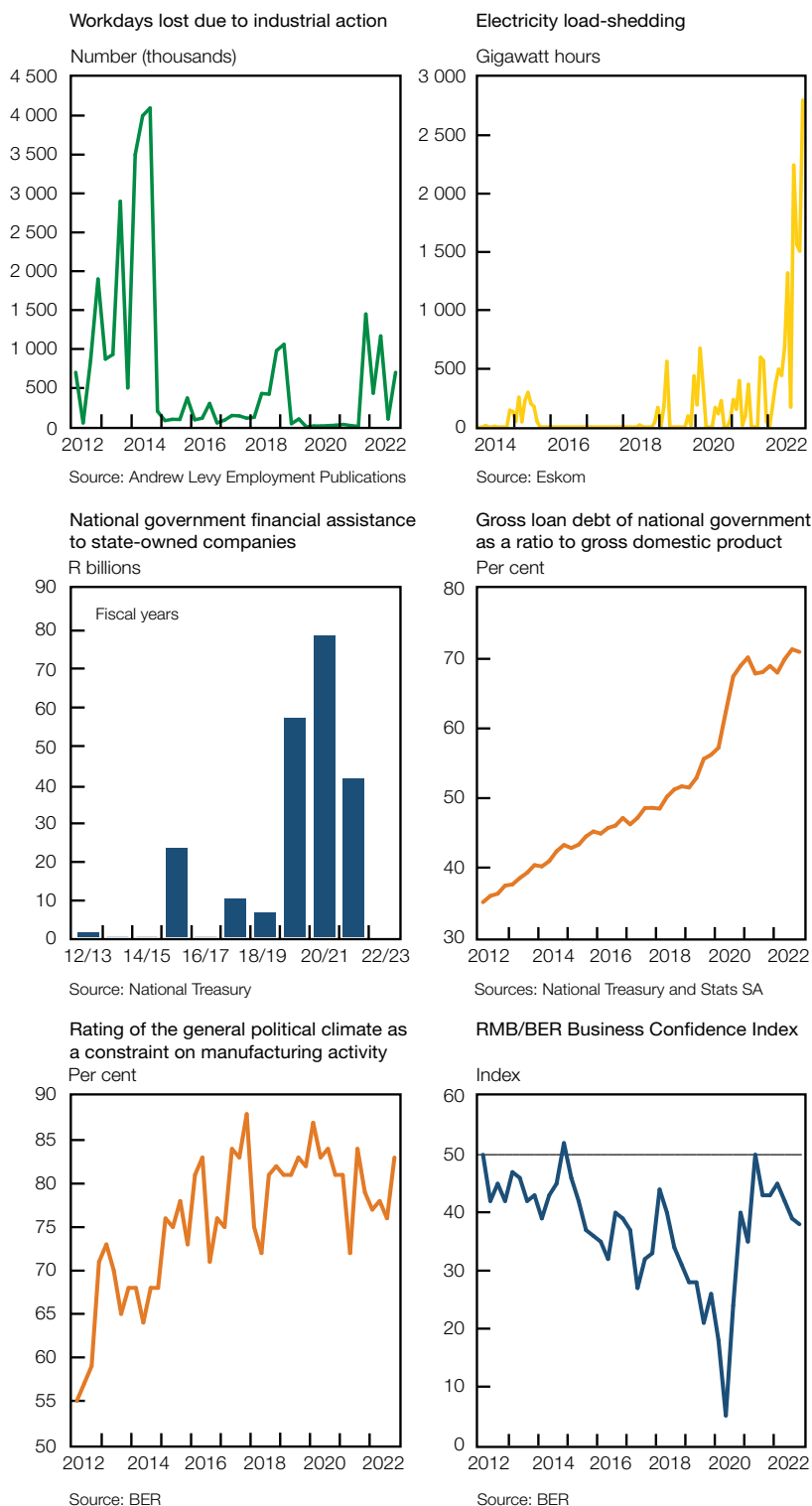
- The post-GFC global economic recovery was relatively uneven, with fairly weak economic growth in the advanced economies, along with protracted accommodative (low interest rates) and unconventional (quantitative easing) monetary policy by most central banks. Resilient real economic growth in China during and immediately after the GFC slowed gradually from 2012 as that economy rebalanced away from infrastructure investment towards consumption expenditure. This exacerbated the decline in international commodity prices, to the detriment of commodity-exporting countries, including South Africa.
- Two exogenous shocks significantly affected the global and domestic economy between 2020 and 2022. First, the outbreak of the COVID-19 pandemic in December 2019 resulted in harsh lockdown restrictions globally, which caused severe global supply chain disruptions and fiscal policy interventions. Apart from the significant loss of life and concomitant pressure on the global health system, the dislocation between supply and demand resulted in a rapid acceleration in goods price inflation globally. Second, Russia’s invasion of Ukraine in February 2022 deepened the global supply chain constraints and added further upward pressure to inflation, particularly of food and energy prices.
- Labour relations in South Africa deteriorated markedly in the first five years after the GFC, with numerous disruptive and often violent wage-driven industrial action drives, initially in the public sector in 2010 and later also in several other sectors, particularly mining. A five-month-long strike in the platinum-mining sector in the first half of 2014 resulted in a marked loss of mining output and export revenue.
- South Africa’s fiscal position deteriorated steadily after the GFC and again in the wake of COVID-19. National government’s budget deficit increased sharply to 4.2% of gross domestic product (GDP) in 2009 and remained around that level in subsequent years before increasing markedly to 9.8% of GDP at the end of fiscal 2020/21. Weak economic growth and lower international commodity prices constrained revenue, while the rapid increase in the public sector wage bill and frequent financial assistance to state-owned companies (SOCs) kept expenditure elevated. This resulted in the rapid increase in the total gross loan debt of national government, from 23.6% of GDP in the first quarter of 2009 to 71.0% of GDP in the fourth quarter of 2022.
- The deterioration in South Africa’s fiscal position resulted in successive sovereign credit rating downgrades by international ratings agencies, eventually to below investment grade, and South Africa’s exclusion from the World Government Bond Index in April 2020. This contributed to an increase in South African government bond yields and the cost of capital.
- Domestic political developments have significantly impacted on the South African economy over the past decade. Widespread allegations of corruption, including the so-called state capture⁶, inconsistent policy pronouncements as well as regulatory concerns in key sectors led to heightened economic policy uncertainty (Laubscher, 2020) and contributed to the erosion of confidence in the South African economy. A weakening of governance at public institutions contributed to the increased financial assistance to several SOCs.

6 This later led to the establishment of *The Judicial Commission of Inquiry into Allegations of State Capture, Corruption and Fraud in the Public Sector and Organs of State*. See <https://www.sastatecapture.org.za/>.



- The South African economy has experienced significant supply constraints over the past decade, including severe and ever-intensifying electricity-supply disruptions and a gradual deterioration in rail infrastructure. The insufficient electricity generation capacity has been exacerbated by long delays in the completion of two large coal-fired power stations (Medupi and Kusile) and a continuous increase in unplanned outages at existing power stations, despite the steady addition of independently produced renewable energy to the national grid. In addition, the price of electricity has increased significantly – by 241% – from December 2009 to December 2022, compared with an increase of 92.8% in the overall consumer price index over the same period. The rapidly rising cost and unreliable availability of electricity in South Africa has become a growing constraint to output growth in the domestic economy.

Figure 5 Selected structural constraints that impacted on the South African business cycle over the past decade





Some of these factors had already contributed to the demise of the post-GFC economic recovery and ushered in a downward phase of the business cycle in December 2013 (Venter, 2016). The empirical results discussed earlier confirmed that the downward phase was interrupted by a short and relatively weak upward phase before the onset of the COVID-19 pandemic. The main economic developments during each of the three identified business cycle phases from the end of 2013 to mid-2020 are discussed separately below.

Downward phase: December 2013 to April 2017

Global economic growth slowed notably in 2012 after the initial post-GFC rebound and remained relatively weak and uneven among countries until 2016. Most of the advanced economies still suffered from the build-up to and overhang of the GFC, including high private and public debt levels. Fiscal austerity contributed to recessions in many European countries towards the end of 2011 and into 2012, as the level and cost of public debt raised fears about fiscal sustainability. Monetary policy in the advanced economies remained extremely accommodative throughout this period, with short-term interest rates in several countries remaining close to the zero lower bound for a protracted period. In addition, unconventional quantitative easing was used to provide financial market liquidity.

Weak economic growth in the advanced economies and the concomitant lower global demand led to a decline in international commodity prices from late 2011, with these prices only bottoming out at the end of 2015. In addition, commodity prices were also affected by the gradual slowdown in economic activity in China and its rebalancing away from fixed investment towards consumption expenditure. The decline in crude oil prices was initially muted as heightened geopolitical tensions led to increased precautionary demand, but then these prices declined markedly in 2014 and 2015. Global consumer price inflation remained subdued and generally within or below targets in most economies over this period.

Against this global backdrop, and with mounting domestic structural supply-side constraints, real GDP growth in South Africa slowed gradually from 2.5% in 2013 to 0.7% in 2016. Economic activity was constrained by turbulent labour relations, with as much as 11.8 million workdays lost due to industrial action in 2014, exacerbated by the five-month platinum-mining strike. Formal non-agricultural employment decreased during most of the downward phase as firms reduced their staff complement in response to the troubled labour relations environment and high wage settlements. Electricity-supply constraints also hampered economic activity with the re-introduction of intermittent electricity load-shedding from the fourth quarter of 2014. Throughout this downward phase, fixed investment was deterred by persistent industrial and trade policy uncertainty, particularly in the mining sector. The level of real gross fixed capital formation reached a peak in the fourth quarter of 2013 before contracting in six of the subsequent seven years, 2015 being the only exception.

These constraints contributed to the gradual erosion of business confidence, as reflected by the decline in the RMB/BER Business Confidence Index (BCI) from 47 index points in the first quarter of 2013 to a low of 27 in the second quarter of 2017.⁷ However, the BCI showed some resilience in the second half of 2014 and the first half of 2015 as confidence among wholesalers and retailers increased notably. This highlights another unique feature of this downward phase, in that real household consumption expenditure initially held up well, growing by 2.2% in 2015 compared with only 0.7% in 2014, before slowing again in 2016. The resilience in household spending was supported by strong growth in the disposable income of households, underpinned by notable increases in real remuneration per worker in the formal non-agricultural sector. This coincided with a deceleration in consumer price inflation in 2015 as the sharp decrease in international crude oil prices lowered domestic fuel prices. However, core inflation did not slow as much and accelerated again to close to the upper limit of the inflation target range in 2016, in part due to the sharp depreciation in the exchange value of the rand in the second half of 2015. Consequently, monetary policy had to be pro-cyclical, with a 200 basis points increase in the repurchase (repo) rate between January 2014 and March 2016 to keep consumer price inflation within the target range and to anchor inflation expectations.

Fiscal policy was also unable to support economic activity in a contra-cyclical way during the downward phase of the business cycle as national government had to embark on a path of

7 Unlike during previous upward phases of the business cycle, the RMB/BER BCI barely reached the neutral 50 level during the post-GFC upward phase due to the presence of some structural constraints.



fiscal consolidation to rein in the budget deficit that had increased to 4.9% of GDP at the end of fiscal 2012/13 in the wake of the GFC. As a result, national government's gross loan debt increased from 23.6% of GDP at the end of fiscal 2008/09 to 37.6% of GDP at the end of fiscal 2012/13, and further to 46.2% of GDP at the end of fiscal 2016/17. Government finances were further constrained by financial assistance to SOCs.

The combination of global developments and domestic constraints resulted in significant net sales of domestic shares and bonds by non-residents from mid-2015 to early 2017, with the exchange value of the rand depreciating notably during 2015. Weak domestic demand lowered merchandise imports, and South Africa's trade balance with the rest of the world switched from large deficits between 2013 and 2015 to surpluses in 2016 and 2017. This assisted in narrowing the deficit on the current account of the balance of payments, from 6.2% of GDP in the third quarter of 2013 to 1.9% of GDP in the first quarter of 2017.

Upward phase: May 2017 to June 2019

Global economic activity gained some momentum in the second half of 2016. Economic growth accelerated in the US as inventories started contributing positively to growth, while stronger domestic demand supported output in the euro area and the United Kingdom (UK) on the back of resilient spending in the aftermath of the June 2016 referendum in favour of the UK leaving the European Union. Global economic growth strengthened further to 3.8% in 2017 – the fastest pace since 2011. The acceleration was broad-based among the advanced and emerging market economies, and reflected a recovery in fixed investment and a notable rebound in global trade. The increase in commodity prices from early 2016 also benefitted commodity-exporting countries during 2017 and 2018.

The higher commodity prices contributed to a gradual acceleration in global inflation from the second half of 2016 following years of very subdued price pressures. The increase in global producer price inflation was more pronounced than in consumer price inflation, reflecting the greater weight of commodities in producer price indices and their importance as intermediate inputs in production. In 2018, consumer price inflation in the advanced economies slowed again on account of lower commodity prices while accelerating in some of the emerging market economies following earlier currency depreciations. Core inflation stayed well below central bank targets in almost all the advanced economies as wage and unit labour costs remained tepid throughout this period. Although most central banks in the advanced economies continued the gradual normalisation of monetary policy by reducing the pace of asset purchases and steadily raising short-term interest rates, global monetary policy remained accommodative.

In South Africa, real GDP growth accelerated to 1.2% in 2017 and further to 1.5% in 2018. The improvement resulted mainly from increased consumer demand as growth in real household consumption expenditure accelerated from 0.7% in 2016 to 1.7% and 2.7% in the subsequent two years respectively, supported by robust growth in disposable income. Despite the slowdown in nominal wage growth in 2018, real remuneration per worker increased notably due to the deceleration in consumer price inflation, particularly food price inflation. Consumer spending was further supported by a moderate increase in formal employment, largely in the services sectors. Following a protracted slowdown from the end of 2012, growth in bank credit extended to households accelerated gradually from around 3.0% in mid-2017 to 6.5% by mid-2019.

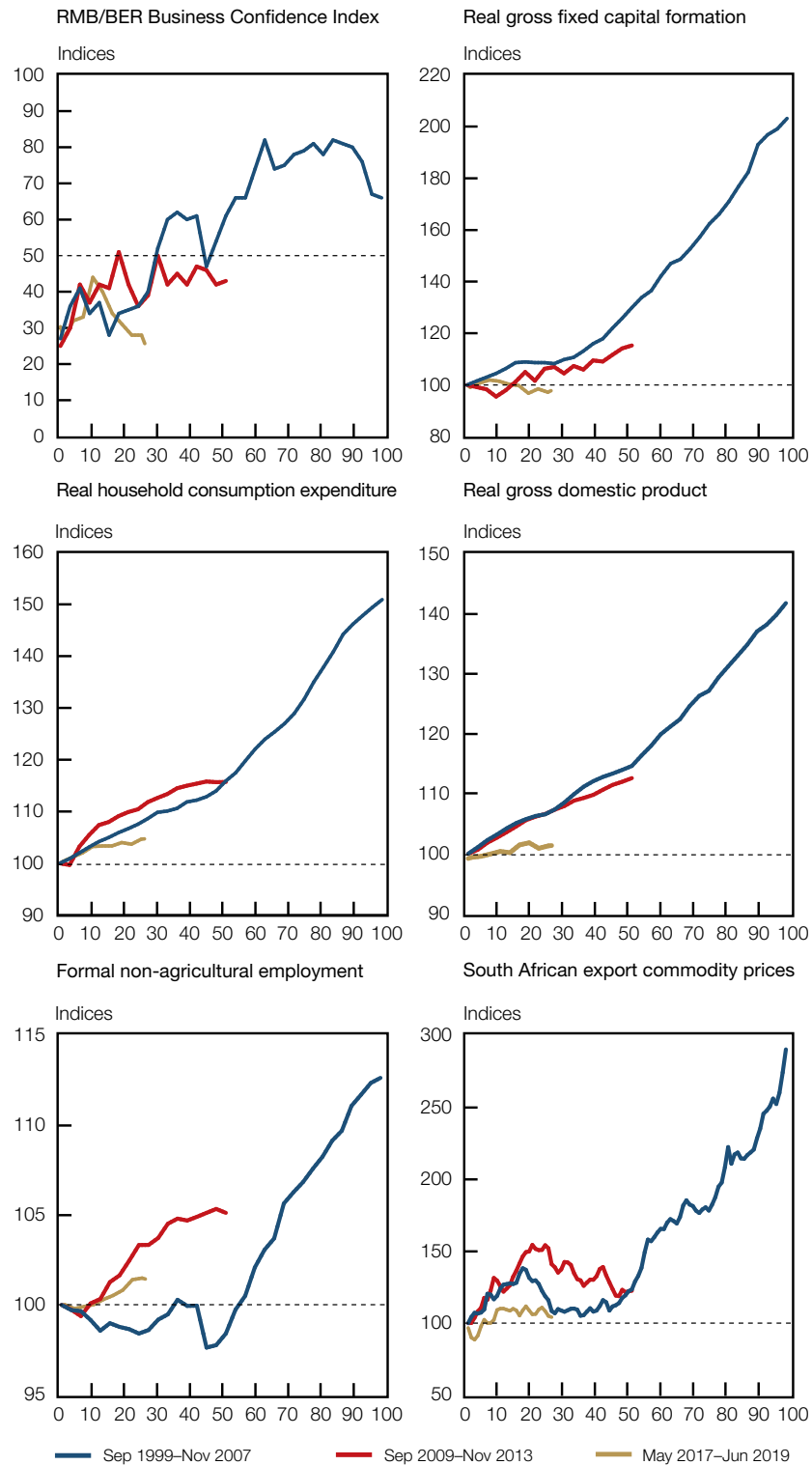
In contrast to the acceleration in household consumption expenditure, both real gross fixed capital formation and real final consumption expenditure by general government contracted in 2017 and 2018 as the domestic structural constraints persisted. Fixed investment was still hindered by the lack of business confidence. Despite increasing from 27 index points in the second quarter of 2017 to 44 in the first quarter of 2018, the BCI remained below the neutral 50 mark throughout. The increase in the BCI in the first quarter of 2018 followed the election of President Cyril Ramaphosa as leader of the ruling party in December 2017, along with expectations that the policy uncertainty and structural impediments to economic growth would be addressed. The optimism was also visible in the FNB/BER Consumer Confidence Index, which increased significantly from -8 in the fourth quarter of 2017 to 26 in the first quarter of 2018 before receding gradually during the next two years.





Government finances were still constrained as the budget deficit increased again from 3.5% of GDP at the end of fiscal 2016/17 to 4.2% of GDP in fiscal 2018/19, while national government's gross loan debt increased further to 51.5% of GDP as at 31 March 2019. Both headline and core consumer price inflation slowed gradually in the three years to mid-2019 and moved below the 4.5% midpoint of the inflation target range at the end of 2017. Inflation expectations also receded closer to the midpoint of the target range over this period. This allowed the SARB's Monetary Policy Committee (MPC) to lower the repo rate twice by 25 basis points each in July 2017 and March 2018.

Figure 6 Upward phase comparison of selected economic indicators*



Months of upward phases

* Measured in months

Source: SARB



Downward phase: July 2019 to April 2020

Following a broad-based cyclical upswing that lasted nearly two years, global economic growth slowed in the second half of 2018 and further in 2019 amid increased trade tensions and tariff hikes between the US and China, lower business confidence, tighter financial conditions and increased policy uncertainty in many economies. The slowdown was geographically broad-based and caused growth in global trade to stall in 2019. The global expansion from mid-2016 to mid-2018 did not generate sustained increases in core inflation, and as global growth slowed, it fell further below target across the advanced economies and below historical averages in many emerging market and developing economies. As a result, global monetary policy was eased during 2019.

Against this backdrop, the first case of COVID-19 was discovered in China in December 2019. The virus spread rapidly across the world, and the World Health Organization declared COVID-19 a global pandemic on 11 March 2020. To curb the spread of the virus and save lives, the co-ordinated global response included, among other measures, national lockdowns that prohibited human mobility and led to a sudden stop in economic activity in almost all countries, plunging the global economy into a severe and synchronised recession, leading to sharp declines in commodity prices and causing financial market turmoil. Significant fiscal packages were swiftly introduced in most countries to cushion the impact of the sharp contraction in economic activity on firms and households.

Besides the sharp contraction in economic activity and significant job losses, the national lockdowns and concomitant port closures severely disrupted global supply chains. But as the lockdown restrictions were eased and economies started to reopen from around mid-2020, global demand for goods recovered much faster than initially anticipated and exceeded the availability of resources. Shortages of raw materials and of some finished goods intensified as inventories were quickly depleted. This was exacerbated by long delays at ports, the displacement of freight containers and, in some instances, shortages of labour. As demand for consumer goods persisted, these inventory and container shortages resulted in sharp increases in global shipping costs and the prices of raw materials, causing an acceleration in global inflation to multi-decade highs in 2022 (Wolhuter, 2022).

While the global economy was still recovering from the COVID-19 pandemic, Russia invaded Ukraine on 24 February 2022. This resulted in renewed global supply chain constraints and a surge in energy and food prices, adding to global inflationary pressures. Whereas central banks had responded to the COVID-19 pandemic by abruptly lowering policy interest rates in 2020, they reverted to aggressive policy tightening in 2022 to rein in inflation.

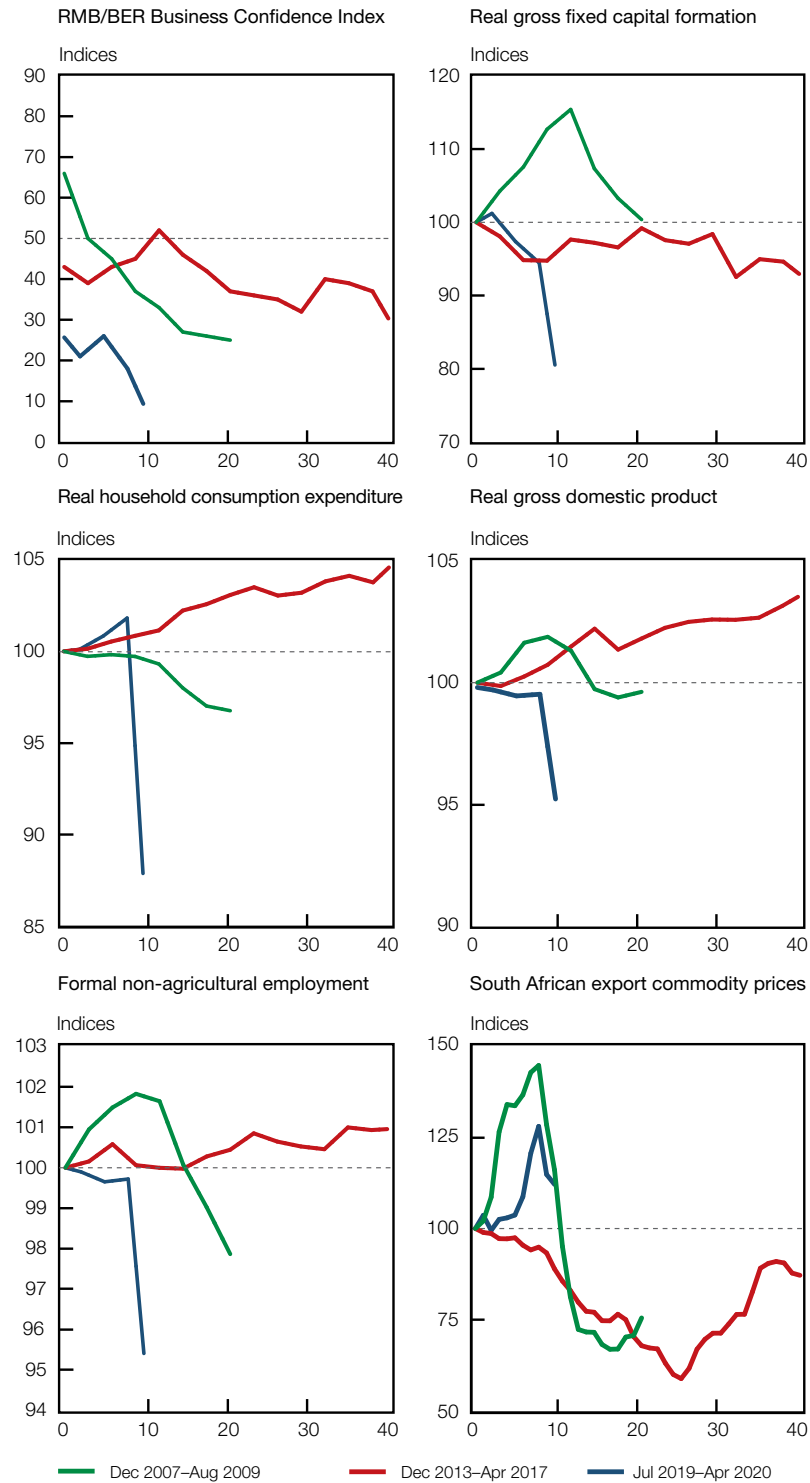
Following the slowdown in global economic growth, economic activity in South Africa also started to falter from the second half of 2019. Real GDP increased by only 0.1% (not annualised) in the third quarter of 2019 and recorded no growth in the subsequent two quarters. Formal non-agricultural employment contracted in the final two quarters of 2019, led by job losses in the private sector. Real final consumption expenditure by households remained relatively resilient over this period, while real spending by general government slowed notably and gross fixed capital formation contracted sharply.

The first case of COVID-19 in South Africa was detected early in March 2020, with a national state of disaster declared on 15 March and a national lockdown imposed from 27 March. The lockdown lasted much longer than initially anticipated, with the restrictions easing only gradually in the subsequent months. The lockdown measures, which included restrictions on mobility, the prohibition of non-essential economic activity as well as international and domestic travel bans, had a dramatic impact on the South African economy. In the second quarter of 2020, real GDP contracted by 17.1% (not annualised), real final consumption expenditure by households contracted by 20.5%, real gross fixed capital formation contracted by 22.1% and total employment fell by 2.2 million. While output and consumption rebounded from the third quarter of 2020, the recovery in fixed investment and employment took much longer. The biggest economic impact was experienced in April 2020, with industrial production as well as real wholesale, retail and new vehicle sales plummeting to historic lows before recovering from May onwards.



South Africa's already constrained government finances were severely impacted by the COVID-19 pandemic. While significant revenue losses resulted from the contraction in economic activity and employment, expenditure increased significantly as government assisted affected sectors and citizens through, among other things, the Temporary Employer/Employee Relief Scheme to compensate employees who were affected by workplace shutdowns during the lockdown and the special COVID-19 social relief of distress grant. Consequently, the budget deficit increased markedly to 9.8% of GDP at the end of fiscal 2020/21 while national government's gross loan debt increased to 70.2% of GDP as at 31 March 2021.

Figure 7 Downward phase comparison of selected economic indicators*



Months of downward phases
 * Measured in months
 Source: SARB

The SARB responded to the pandemic by providing additional liquidity to the financial markets, buying government bonds in the secondary market, and lowering the repo rate by a cumulative 300 basis points between January and July 2020. Monetary policy was subsequently tightened again from November 2021, as economic activity recovered from the effects of the pandemic and as inflationary pressures mounted on account of the global supply chain disruptions and later also the war in Ukraine.

Conclusion

The South African economy transitioned into a downward phase of the business cycle towards the end of 2013, hampered by supply-side constraints and economic policy uncertainty. Without much support from global economic activity, output growth trended gradually lower during the subsequent three and a half years.

Global economic growth accelerated somewhat from the second half of 2016, lifting international commodity prices. This supported an increase in domestic economic activity from around mid-2017, and the South African economy moved into a relatively short and mild upward phase of the business cycle, characterised mainly by stronger growth in household consumption expenditure. However, by mid-2019 the upswing had lost momentum again in the wake of weaker global economic activity, low business confidence and persistent supply-side constraints.

In the first quarter of 2020, the outbreak of the COVID-19 pandemic severely impacted on global economic activity due to the widespread imposition of national lockdowns. In South Africa, the biggest impact was experienced in April 2020, with economic activity improving from May onwards.

Considering the statistical results and macroeconomic developments, the reference date for the lower turning point in the South African business cycle was established as April 2017, with the downward phase of the business cycle lasting 41 months. The subsequent moderate upward phase lasted 26 months, with June 2019 identified as the reference peak. The ensuing downward phase lasted only 10 months up to April 2020 but was extremely severe due to the impact of the exogenous COVID-19 shock. The domestic economy then entered an upward phase of the business cycle in May 2020 as the recovery from the COVID-19 lockdowns commenced.

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