

BUSINESS CONFIDENCE AND COMPOSITE INDICES

Line	Indicator	Unit	$\mu-\sigma$	μ	$\mu+\sigma$	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	25Q1	25Q2	Δ	σ_{Δ}
Business confidence															
1	South Africa														
2	RMB/BER business confidence ¹	%	27	42	58	33	31	30	35	38	45	45	40	-5	6
3	Building contractors	%	20	42	63	41	41	42	47	41	51	45	35	-10	8
4	Manufacturing	%	20	35	50	23	26	21	28	28	36	34	33	-1	7
5	Retail*	%	30	40	50	32	47	34	39	45	54	50	42	-8	9
6	Wholesale*	%	35	45	56	38	36	37	53	51	60	42	50	8	9
7	New vehicle dealers	%	17	40	63	30	6	16	10	27	23	52	42	-10	14
8	Composite confidence per province ²														
9	Gauteng	%	23	40	56	31	27	23	33	33	46	40	37	-3	8
10	KwaZulu-Natal	%	29	45	62	37	41	18	39	53	40	44	24	-20	14
11	Western Cape	%	31	47	62	35	37	40	40	43	55	52	51	-1	9
Composite indicators															
12	Business conditions: realised ¹	Net %	-51	-27	-3	-39	-40	-46	-36	-23	-3	-17	-29	-12	15
13	Business conditions: expected ¹	Net %	-31	-11	8	-16	-25	-19	-17	3	6	7	-8	-15	14
14	Business climate ^{#,1}	Net %	-41	-19	2	-28	-33	-33	-27	-10	2	-5	-19	-14	13
15	Activity ³	Net %	-40	-18	4	-24	-28	-29	-21	-22	-4	-3	-16	-13	12
16	Employment ⁴	Net %	-26	-12	2	-5	-3	-13	-6	-9	-7	-8	-9	-1	7
17	Purchasing prices ⁵	Net %	39	56	73	59	64	63	60	58	42	48	51	3	12
18	Selling prices ⁶	Net %	8	24	41	32	26	40	34	28	21	23	24	1	10
19	Inventories ⁷	Net %	0	12	25	21	23	18	22	24	19	14	20	6	7

*Descriptive statistics calculated since 2009 #Average between realised and expected business conditions

1. Building (build) (contractors only), manufacturing (mnf), retail (ret), wholesale (whs) and new vehicles (mot), 2. Build, mnf, ret, whs & mot, 3. Build, mnf, ret, whs, mot & other services (serv), 4. Build, mnf, ret, whs & serv, 5. Mnf, ret & whs, 6. Mnf, ret, whs & serv, 7. Mnf, ret, whs & mot.; stocks relative to expected demand

Subscribers to the BER's Macro Service can download the data [here](#).

μ - average

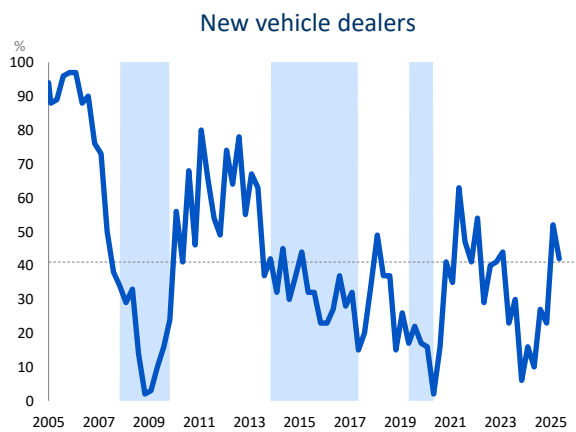
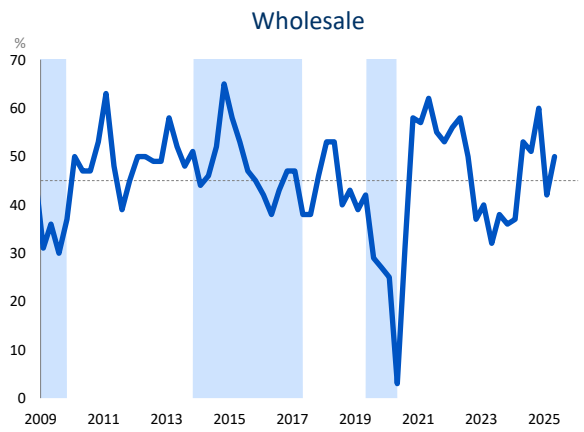
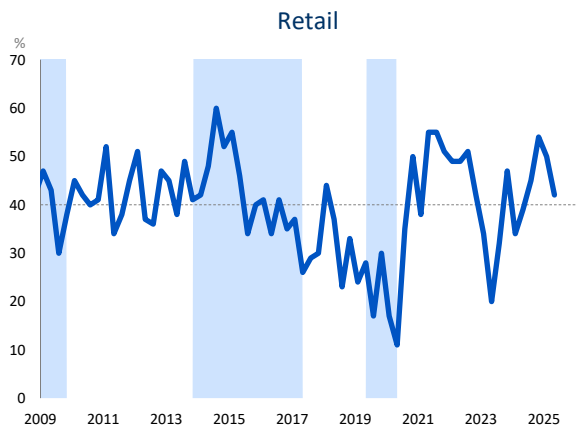
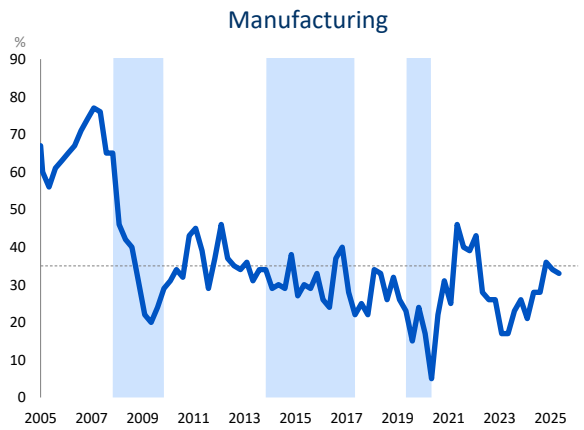
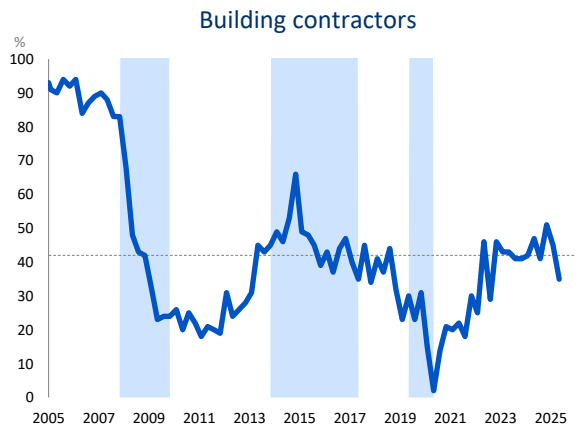
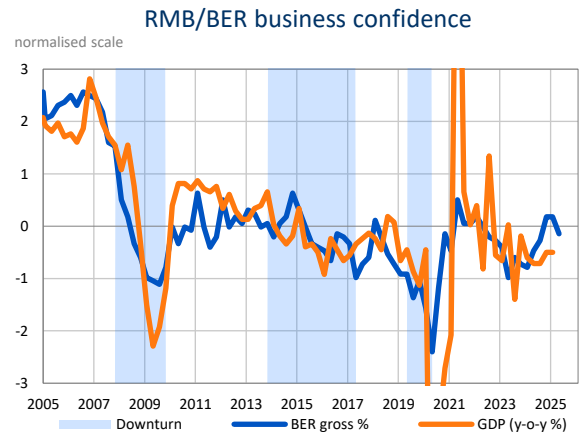
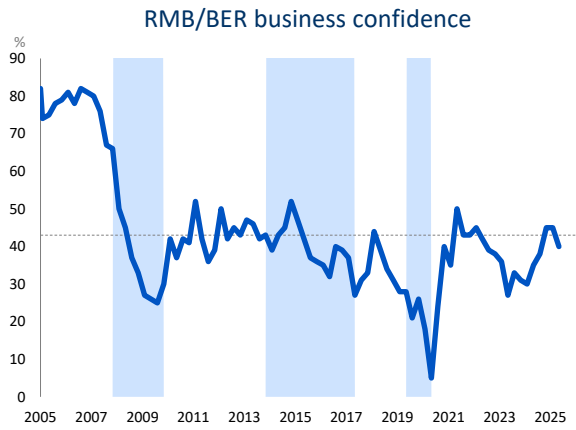
σ - standard deviation

Δ - change from previous period

σ_{Δ} - volatility (standard deviation of the changes)

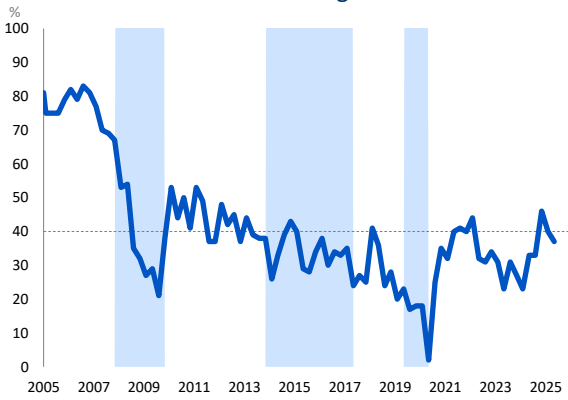
All above calculated over the last 20 years

BUSINESS CONFIDENCE & COMPOSITE INDICES

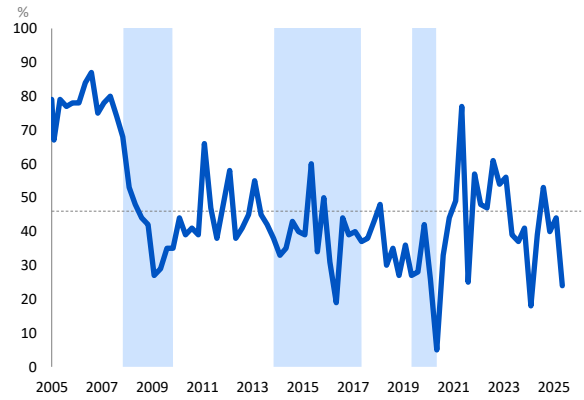


PROVINCIAL BUSINESS CONFIDENCE INDICES

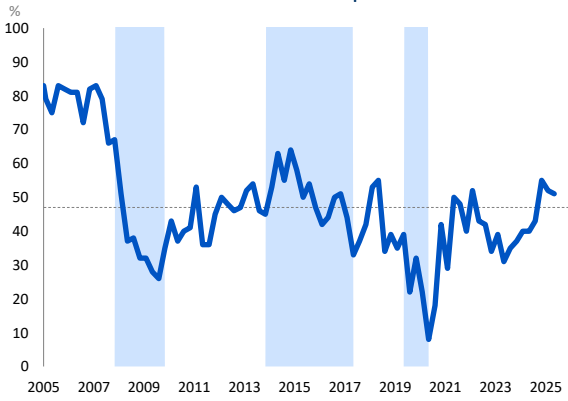
Gauteng



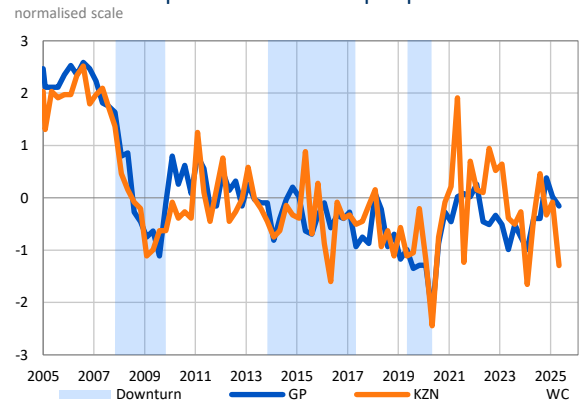
KwaZulu-Natal



Western Cape

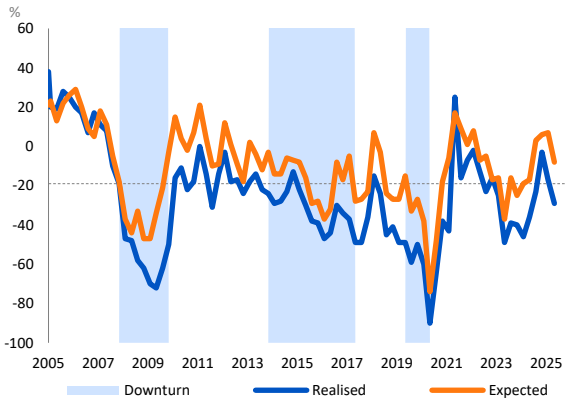


Composite confidence per province

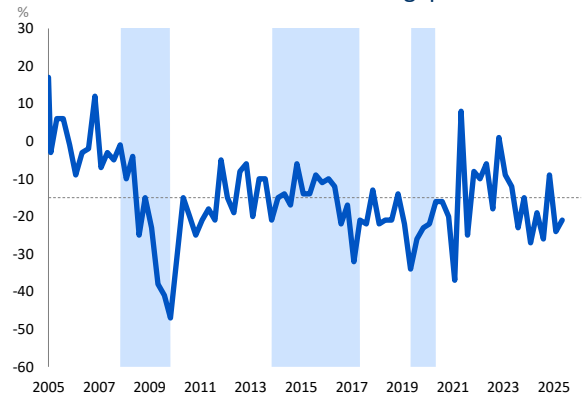


COMPOSITE INDICATORS

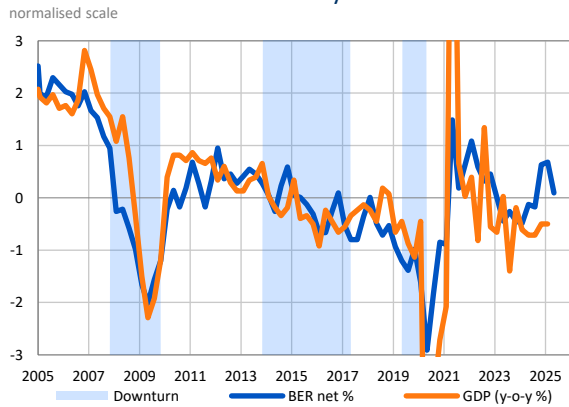
Business conditions



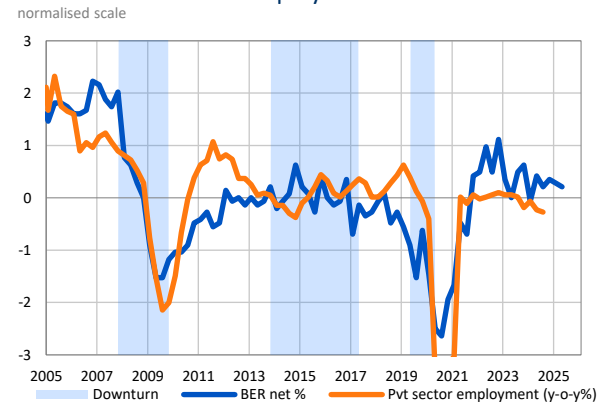
Business conditions: gap



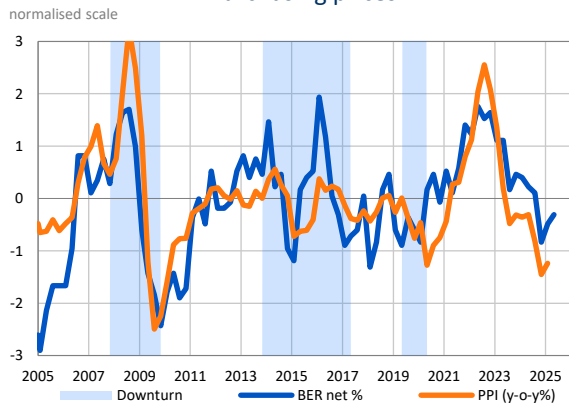
Activity



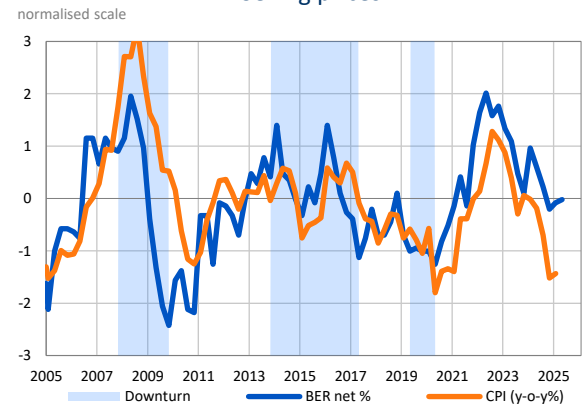
Employment



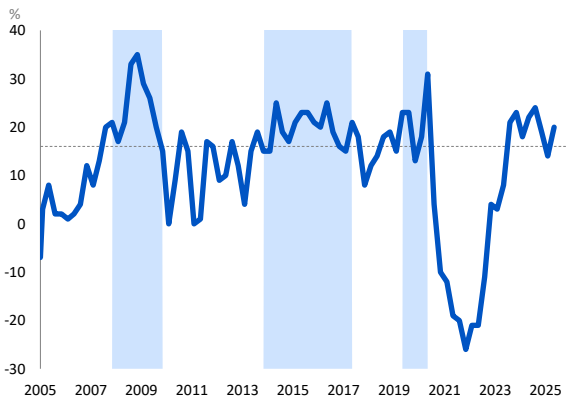
Purchasing prices



Selling prices



Inventories



Business cycle clock



BUSINESS CLIMATE

In South Africa, business confidence reflects the results of a single, dedicated question. In other countries, business confidence is measured as a combination of various questions or as the average of realised and expected business conditions, in which case it is called “business climate”¹.

While business confidence in South Africa indicates the percentage of respondents that is satisfied with prevailing business conditions at a specific point in time², business climate indicates the change (expressed as a net percentage) in realised and expected business conditions relative to the same period a year ago. Realisation refers to the survey quarter and expectations for the next quarter³.

It has become possible to calculate a business climate indicator for South Africa since time series of expected business conditions were constructed in 2019. To bolster the cyclical characteristics of and make it comparable to the RMB/BER business confidence index, realised and expected business conditions are calculated as the unweighted average of the five cyclical most sensitive sectors, namely building contractors, manufacturing, retail trade, wholesale trade and the new vehicle trade. The business climate indicator is calculated as the unweighted average of realised and expected business conditions⁴.

Figure 1: Realised and expected business conditions

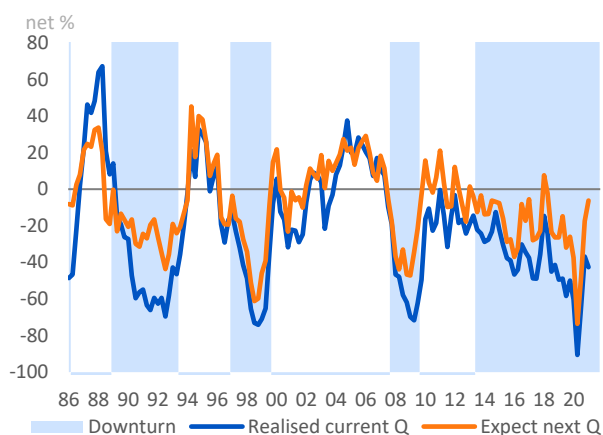
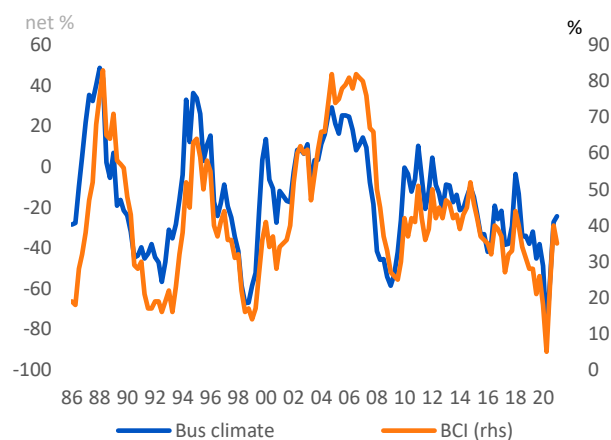


Figure 2: Business climate vs. the RMB/BER BCI



¹ The most famous example is Ifo’s “Geschäftsklima” (business climate) indicator in Germany.

² The Confederation of British Industries (CBI) that conducts business tendency surveys in the United Kingdom (UK) is the only other institution in the world that includes a specific question for business confidence in its industrial, services (excluding the distributive trade) and financial services surveys. Respondents have to indicate whether they are more, the same or less optimistic than four months ago about the general business situation in their industry. While the South African survey only has two answering options and refer to the present, the UK one have three answering options, which are therefore expressed in the form of a net balance and respondents have to rate the present situation relative to four months earlier.

³ In many other countries respondents are instructed to consider the next six months.

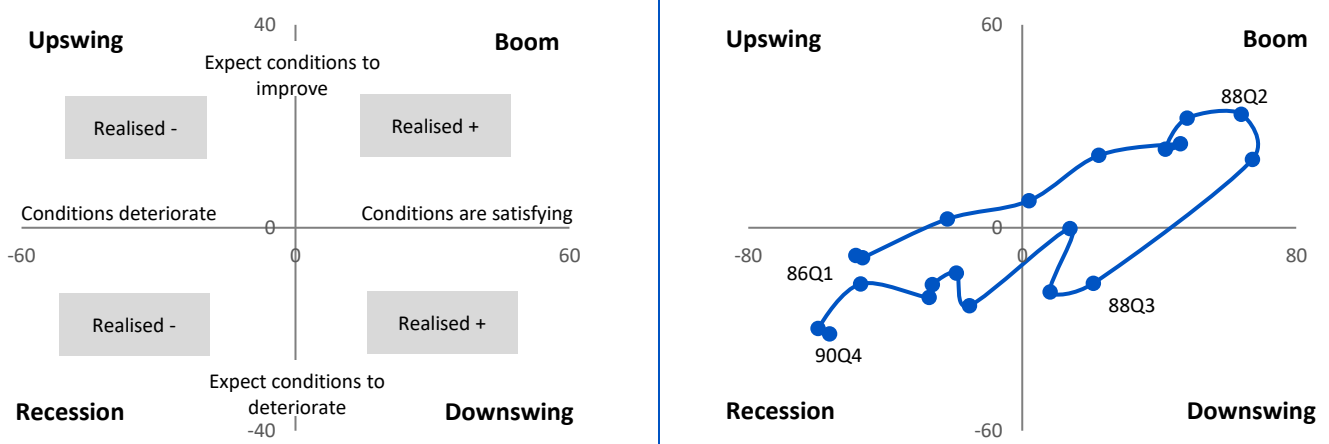
⁴ Macro clients can download the time series [here](#).

BUSINESS CYCLE CLOCK

The chronology of business cycles typically is 1) recession (also the late phase of a downturn and through), 2) upswing (also recovery and expansion), 3) boom (also consolidated upturn and peak) and 4) downswing (also cooling down and contraction). A business cycle clock is a plot of realised and expected business conditions on a matrix and shows how the business cycle progresses clockwise from a recession to an upswing, a boom and a downswing.

If realised conditions are measured on the horizontal axes and expected conditions on the vertical axes, the bottom left quadrant would show negative realised and expected conditions and be equivalent to a recession. The second (clockwise) quadrant (i.e. top left) will show negative realised conditions, but positive expectations, and correspond to an upswing. The third quadrant will agree with a boom and the fourth one with a downswing.

Figure 3: Business cycle clock



Occasionally there are false signals. Since the Global Financial Crisis (GFC) the typical chronology of an upswing followed by a boom and downswing did not occur.

Table 1 Chronology according to the business cycle clock

Recession	Upswing	Boom	Downswing
86Q1-86Q2	86Q3	86Q4-88Q2	88Q3-89Q1
89Q2-94Q1		94Q2-96Q3 ¹	
96Q2-99Q3	99Q4	00Q1	00Q2
00Q3-01Q4	02Q1	02Q2-07Q2 ²	
07Q3-09Q4	10Q1-12Q2 ³		
12Q3+ ⁴			

False signals: 1. 95Q3; 2. 03Q2-03Q4; 3. 10Q3, 11Q3-11Q4; 4. 13Q1, 18Q1

DESCRIPTIVE STATISTICS IN THE TABLES

Smoothed

Some series show erratic/volatile movements, i.e. data jumps around quite a bit between consecutive quarters. In such cases, it is necessary to smooth these movements over a longer period to obtain a general trend. Another case where we added moving averages is when the correlation between the survey results and the corresponding reference series is low or non-existent.

Three-quarter centred moving averages (3qcm) were selected in order to not disturb turning points too much, e.g. the moving average of 17Q4 is calculated as the average of 17Q3, 17Q4 and 18Q1, that of 18Q1 is calculated as the average of 17Q4, 18Q1 and 18Q2 etc. In order for the smoothed series to run up to the last unsmoothed data point, the last smoothed data point is only the average of two quarters, namely the previous and current quarter.

When a smoothed series is added, it is prudent not to attach too much value to the unsmoothed results of a particular quarter, but rather to evaluate it in its historical context.

Seasonal adjustment (SA)

In theory, the time series ought to display no seasonal patterns because respondents are instructed to compare the current quarter with the same one of a year ago (e.g. they have to compare the current Festive Season or wet/dry winter period with the same time a year ago). However, in practice, some series nevertheless reveal seasonal patterns, probably because some respondents incorrectly compare the survey quarter with the one directly preceding it. In such cases, a seasonally adjusted series (i.e. where such seasonal variation is eliminated with X12 ARIMA) is added.

Average (μ)

The neutral level of the time series for the two measurement types, net percentage and percentage, is 50 or zero respectively. The long-term average (mean) is often not equivalent to this neutral level. In such cases, it is more useful to evaluate the current results relative to such a long-term average than the neutral level.

One standard deviation below ($\mu-\sigma$) and above ($\mu+\sigma$) the average

The standard deviation indicates the common variation in or dispersion of the values. Data points falling between one standard deviation below and above the average could be regarded as common. Any data point falling outside these ranges, therefore, displays statistically significant variation.

Change (Delta: Δ)

This statistic indicates the change in the results of the latest quarter relative to the preceding quarter.

Volatility (standard deviation of the deltas: $\Delta\sigma$)

This statistic indicates the volatility of the quarter-on-quarter change. If the size (regardless if it is an increase or decline) of the change is greater than the standard deviation of the deltas, then it displays a statistically significant variation.

CONVENTIONS AND AIDS PROVIDED IN THE CHARTS

Shaded areas

Indicates cyclical downturns as demarcated by the South African Reserve Bank. Users need to take note that the business cycle could have already reversed course towards the end of the period covered in the chart, but usually we wait until the bank determines a turning point before changing the shaded areas.

Solid vs. dotted horizontal (X) axes:

A solid line indicates the theoretical mid-points of 50 or zero respectively, while a dotted line indicates the long-term average (mean). Also see the section on the “average” above.

Normalised scale

Time series data is normalised (standardised) when one wishes to observe the co-movement among indicators with different units of measurement, say for instance, between a diffusion index (confidence) and the growth rate in a volume index (GDP growth). Normalisation converts both series to the same scale (unit) by subtracting the long-term average from each series and dividing it by its standard deviation. This ensures that one compares “apples” with “apples” when making a visual inspection and not mistakenly identify co-movements or deviations that different scales could produce.

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