BER | BUREAU for ECONOMIC RESEARCH

Other services

Quarterly analysis of activity in hotels & restaurants, transport & storage, real estate and business services

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Please refer to the glossary on the BER's **website** for explanations of technical terms.

Executive summary

In the third quarter of 2023 (2023Q3), business confidence within the other services sector increased by 5 points to 48. This improvement brings the index to just below its long-term average of 52 and brings the industry closer to a more optimistic outlook, as just under half of the surveyed business executives in this sector express satisfaction with the prevailing business conditions. The improvement in confidence comes despite a decline in activity, although there are divergent trends among the subsectors.

After tumbling by 23 points in Q2, the hospitality subsector regained some confidence, jumping from 52 points to 67 points in the third quarter (+15 index points) and boasting the highest confidence out of the surveyed subsectors. Increased confidence was supported by robust performance in business volumes, which, despite a further slowdown in selling prices, saw profitability improve during the quarter.

Business confidence in the transport, storage and communication subsector increased by 35 points to reach 46 in 2023Q3, just one point below its long-term average. This corresponds with an underlying improvement in business conditions and business volumes.

Confidence among realtors continued along its downward trajectory, falling for a fifth consecutive quarter to 24 in 2023Q2. Despite improving business conditions, four out of every ten surveyed business executives are experiencing worse business conditions than a year ago. A significant drop in business volumes and a slowdown in selling prices will likely continue weighing on sentiment in the real estate subsector.

Confidence in the business services sector remained level at 59, despite a decline in business volumes, as higher selling prices appeared to support profitability and conditions in the sector.

Various constraints continue to shape the landscape of the other services sector, with insufficient demand remaining a significant impediment. Moreover, skilled labour shortages continue to affect the sector, while financial constraints appear to be less of a constraint overall. That said, these constraints vary across different sectors within the industry.

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Introduction

In the third quarter of 2023 (2023Q3), business confidence within the other services sector[1] increased by 5 points, bringing the index just below its long-term average of 52 at 48 points. Although this is a positive development, the sector has yet to regain the 25 points it lost in the first half of this year. At the current level, just under half of the surveyed business executives in this sector express satisfaction with the prevailing business conditions.

As illustrated in Figure 1, confidence edged closer to the long-term average level (of 52) but remains 20 points below the recent (multi-year) peak of 68 reached in 2022Q4. The uptick in confidence was met by an improvement in business conditions to levels above its long-term average. Despite this, a net majority of 8% reported a <u>decline</u> in business volumes (down from 6% in Q1). However, despite the decline, the current level of activity is normally associated with a somewhat higher level of confidence. Several factors contribute to weigh on sentiment, as mentioned by respondents. The challenging business environment, marked by frequent (although less intense) load-shedding episodes during the survey period[2], coupled with elevated borrowing costs, continue to shape the landscape of the other services sector, though these constraints vary across different subsectors.

The remainder of the report explores the significant and divergent movements within the four subsectors encompassed in the 'other services total'. Additionally, individual tables and graphs detailing survey data for each subsector are presented, along with a summary of survey results for the three main provinces, namely Gauteng, KwaZulu-Natal, and the Western Cape.

Figure 1: Other services confidence edges closer to long-term average in the third quarter
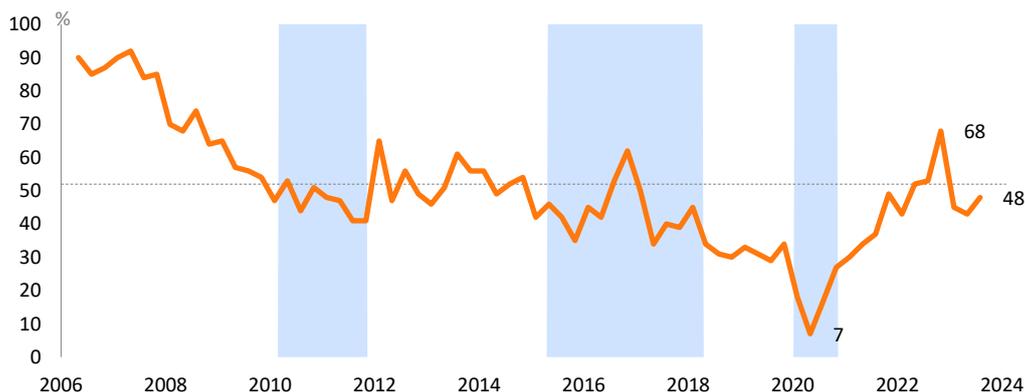
Source: BER, SARB
Note: business cycle downswings are shaded

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[1] Hotels, restaurants, transport, real estate and business services make up the other services sector. They are denoted as "other" services to distinguish them from the retail, wholesale and motor trade sectors, which are also part of the services sector but included in the RMB/BER business confidence index (BCI). The other services sector is not included in the BCI due to its lagging business cycle characteristics, i.e., it recovers/deteriorates later than the BCI sectors. Although the other services sector contributes a considerable 22% (2019) to GDP and employment, the BER does not include it in the BCI to safeguard its advanced signalling properties.

[2] The survey was conducted between 6 and 29 August 2023.

Details

Business confidence in two of the four subsectors improved relative to Q2[3]. The sharpest increase was seen in the **transport** subsector (up 35 points to 46), while the **hospitality** sector displayed the highest level of sentiment after increasing by 15 points to 67. Respondents in the **real estate** subsector had the lowest confidence reading of just 24 points, down from 34 in Q2, while confidence remained unchanged at 59 in the **business services** subsector.

SIGNIFICANT IMPROVEMENT IN TRANSPORT[4] CONFIDENCE FOLLOWING DIRE SENTIMENT IN 2023H1

After recording its second-lowest level of 11 index points in the second quarter, business confidence in the transport, storage and communication subsector regained 35 points, reaching 46 in 2023Q3. This is just one index point below its long-term average. This corresponds with a significant jump in business conditions and business volumes, although both remain net negative (i.e. the business conditions and activity of a majority of 24% of the respondents came out lower compared to a year ago).

The improvement in sentiment in the subsector comes as somewhat of a surprise, as the net majority of respondents expected a further deterioration in the third quarter and most of the news flow around the sector in the quarter centred around the ongoing underperformance of South African ports, the burning of trucks on the N3 in KwaZulu-Natal, which subsequently spread to Mpumalanga and Limpopo early in July and the damaging taxi strike in the Western Cape. However, issues in the rail, road and freight subsectors typically have positive spillover effects on storage and warehousing activity, which appears to be thriving despite the hurdles faced in the transport sector.

Respondents also noted a sharp improvement in profitability following two consecutive declines, and appear to be bullish for the fourth quarter. This comes as the rate of increase in average selling prices charged rose in Q3. Expectations could have been further supported by the recent update of Operation Vulindlela published on 27 August 2023, where it was indicated that a new 'Freight Logistics Roadmap' is currently undergoing an internal government consultative process for publication before the end of the year. "The roadmap will incorporate proposals to resolve the immediate operational challenges while developing interventions to fundamentally restructure the logistics sector to support inclusive economic growth," the update states.

Compared to the second quarter, all of the constraint indicators fell, although serious constraints remain. Finances as a constraint on activity fell from a record high of 78 in the second quarter to 56 in Q3, as the SARB kept the repo rate on hold in the July MPC meeting against expectations for another increase. Insufficient demand tops the list as the most serious constraint in the sector.

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[3] In the BER's survey, business services contribute 45%, transport 25%, real estate 20% and hospitality (i.e., hotels and restaurants) 10% to the total.

[4] The BER survey covers road freight transport and other supporting services (such as travel agencies, cargo handling and freight forwarding).

LOWER REAL ESTATE VOLUMES DRAG DOWN SENTIMENT

Business confidence among realtors continued along its downward trajectory, falling for a fifth consecutive quarter to 24 in 2023Q2 (-10 points), which means roughly a quarter of respondents are satisfied with prevailing business conditions. The drop in confidence was despite a slightly smaller net majority reporting a decline in business conditions relative to Q2, with further improvement expected in conditions in Q4. Despite the improvement in business conditions, four out of every ten of the surveyed business executives are experiencing worse business conditions than a year ago. A significant drop in business volumes and a slowdown in selling prices are likely to continue weighing on sentiment in the real estate subsector, with further deterioration expected in Q4. Although a net majority of 10% experienced a decline in profitability compared to a year ago, this is a slight improvement following four consecutive quarters of declines. However, expectations are for another downtick in Q4, as most of the comments received centred around the long-lasting impact of the high interest rate environment and affordability hampering activity in the subsector.

The sector faces challenges primarily related to insufficient demand and skilled labour, although finances seemed less of a constraint due to expectations of a repo rate hike in the July meeting not materialising, signalling the end of the tightening cycle.

HOSPITALITY INDUSTRY BOASTS ROBUST PERFORMANCE

Hotels and restaurants exhibited a notable recovery, with confidence soaring from 52 to 67. This means that over a third of the respondents were satisfied with prevailing business conditions. At first glance, this may appear unexpected. However, it appears that where load-shedding is hampering activity in other sectors, it buoys activity in restaurants, as people tend to frequent restaurants and opt for takeout meals during periods of load-shedding. Further highlighting the dynamic shifts in the other services sector, the hospitality industry has emerged as the star of this quarter, boasting the highest confidence levels. This marks a notable departure from the previous quarter when business services took the top position.

Increased volumes and higher profitability were observed despite a dip in selling prices. Expectations for the sector, particularly business conditions and selling prices, are at record highs in light of the upcoming festive season.

Key constraints include skilled labour shortages, with respondents highlighting the emigration trends in young professionals in the industry as an increasing risk, while others highlighted worsening safety perceptions for overseas visitors as having a negative impact on activity.

BUSINESS SERVICES SENTIMENT REMAINS STEADY

Confidence in the business services sector remained steady at 59, 3 points above its long-term average. Business confidence in the subsector was supported by improving business conditions and higher average selling prices, while business volumes took a 10-point dip to 11 index points in 2023Q3. A net majority of 12% of respondents indicated lower profitability compared to a year ago, despite a small uptick during the quarter (+2 points). The subsector holds bullish expectations, foreseeing increased profitability and selling prices in the fourth quarter. The sector's top constraints, shortages of skilled labour and insufficient demand, saw a decrease in their constraint impact during the quarter, while finances became slightly more

constraining. Poor government service delivery and "non-stop red tape" were other impeding factors highlighted by respondents' comments.

Final remarks

The surge in confidence in the hospitality subsector and the partial recovery in the transport, storage and communication subsector were supportive of overall sentiment in other services, with confidence edging closer to its long-term average. Hotels and restaurants experienced a significant confidence boost, with over a third of respondents satisfied with business conditions, driven by load-shedding's positive impact on restaurant activity; this dynamic shift marked the hospitality industry as the standout performer, surpassing business services this quarter. Challenges in rail, road, and freight sectors had positive effects on warehousing activity which likely buoyed sentiment. The real estate subsector grapples with reduced volumes, slowing prices, and profitability concerns, largely due to high interest rates and affordability issues.

Despite a decline in overall business volumes in Q3, they still surpass the long-term average, indicating potential support for the economy, especially as energy-intensive industrial sectors face challenges. However, most services in the survey, except for foreign tourism, depend on the local economy's strength, making it challenging to sustain relative outperformance without a broader economic recovery.

Survey results

OTHER SERVICES: TOTAL[5]

Indicator	Unit	μ-σ	μ	μ+σ	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3	Δ	σ Δ
Confidence	%	33	52	71	49	43	52	53	68	45	43	**48**	5	8
Business conditions	Net %	-40	-14	13	13	24	2	11	13	-4	-23	**-10**	13	18
Smoothed	Net %	-37	-13	12	5	8	13	12	9	7	-5	**-12**	-7	9
Business volumes	Net %	-40	-10	20	2	28	21	12	23	-4	-6	**-8**	-2	16
Smoothed	Net %	-40	-13	14	-7	1	17	20	19	10	4	**-6**	-10	9
Selling prices / fees charged	Net %	-22	-3	15	6	20	26	13	22	18	15	**18**	3	12

Confidence

Business conditions (smoothed)

Business volumes (smoothed)

Selling prices / fees charged

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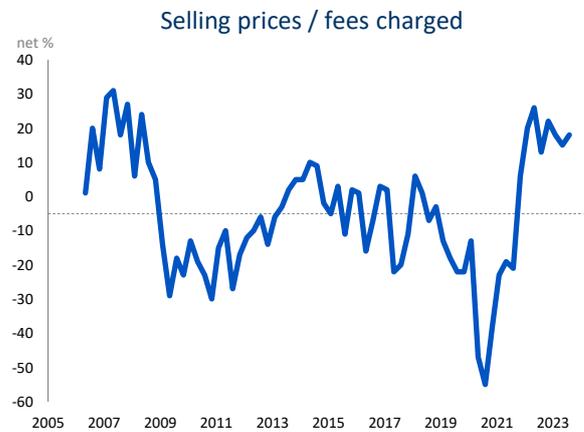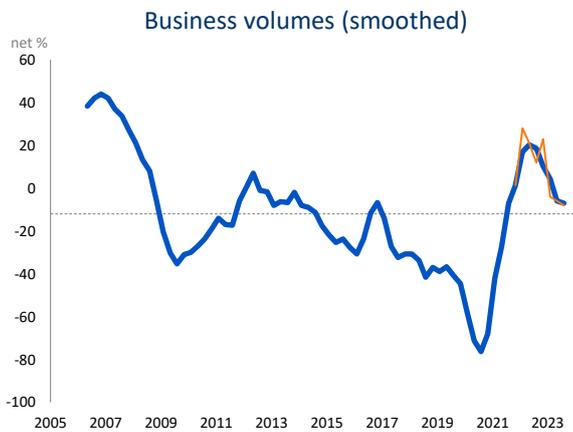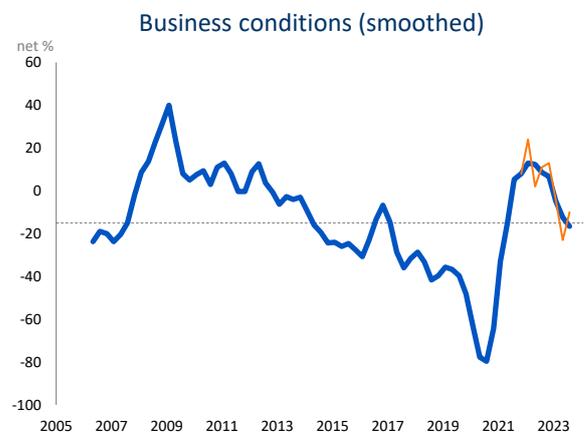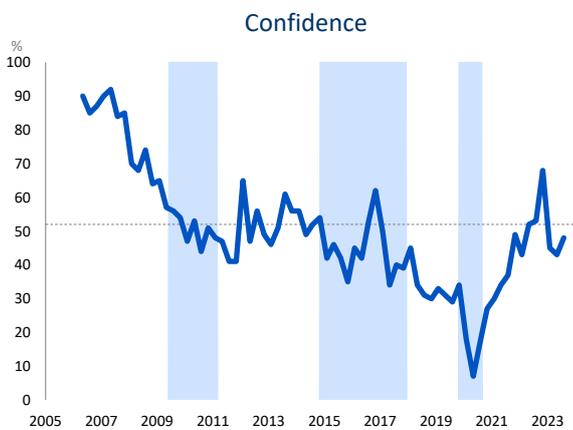
[5] The "other services: total" includes hotels & restaurants (15%), transport & storage (22%), real estate (18%) and business services (45%). The figures in brackets indicate the BER's weights, which account for the sector coverage and participation. Consult **Error! Reference source not found.** for the sub-sector's share according to Stats SA's business censuses.

HOTELS & RESTAURANTS[6]

Indicator	Unit	μ-σ	μ	μ+σ	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3	Δ	σ Δ
Confidence	%	28	50	71	58	46	59	53	73	75	52	**67**	15	16
Business conditions	Net %	-49	-9	32	61	67	57	46	53	79	26	**21**	-5	32
Smoothed	Net %	-44	-8	28	19	37	62	57	52	59	53	**42**	-11	15
Business volumes	Net %	-55	-10	36	55	69	57	48	56	80	18	**36**	18	32
Smoothed	Net %	-54	-12	29	16	36	60	58	54	61	51	**45**	-6	15
Selling prices / fees charged	Net %	-25	13	50	32	44	45	27	51	85	62	**36**	-26	31
Smoothed	Net %	-20	13	46	-20	3	40	39	41	54	66	**61**	-5	13

Confidence

Business conditions (smoothed)

Business volumes (smoothed)

Selling prices / fees charged (smoothed)

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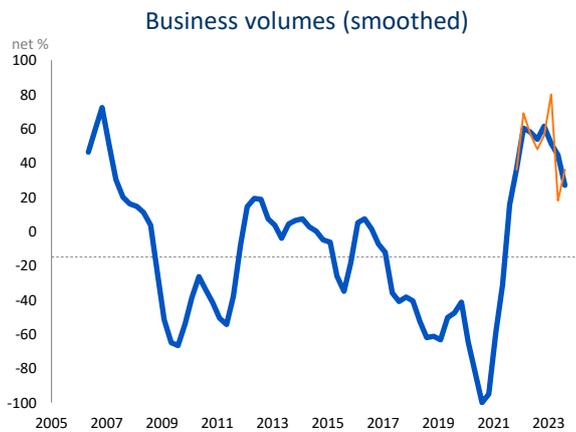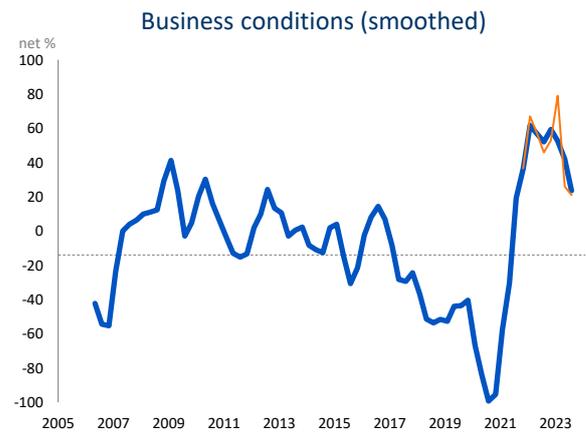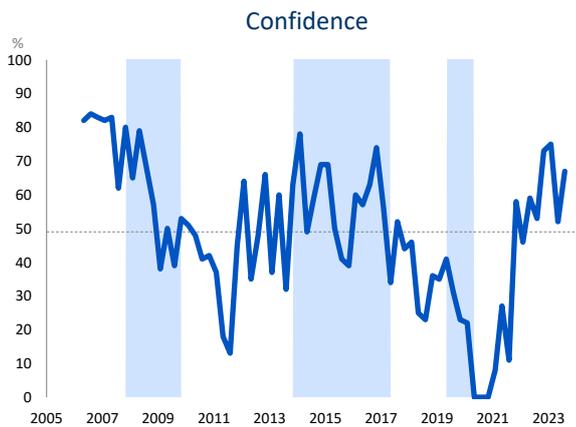
[6] Hotels & other accommodation (SIC code 641) (74%), restaurants and other food outlets (642) (26%). The figures in brackets indicate the BER's weights, which account for the sector coverage and participation. Consult **Error! Reference source not found.** for the sub-sector's share according to Stats SA's business censuses.

TRANSPORT & STORAGE[7]

Indicator	Unit	μ-σ	μ	μ+σ	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3	Δ	σ Δ
Confidence	%	25	47	69	48	38	19	27	94	14	11	**46**	35	19
Business conditions	Net %	-48	-11	26	1	18	-62	-37	25	-52	-75	**-24**	51	37
Smoothed	Net %	-39	-9	20	-3	-7	-14	-27	-25	-21	-34	**-50**	-16	13
Business volumes	Net %	-48	-11	26	-2	32	-26	-10	48	-43	-74	**-24**	50	34
Smoothed	Net %	-42	-14	15	-8	-5	1	-1	4	-2	-23	**-47**	-24	14
Selling prices / fees charged	Net %	-14	6	25	25	36	22	25	58	33	-11	**28**	39	19
Smoothed	Net %	-11	6	22	12	21	28	28	35	39	27	**17**	-10	8

Confidence

Business conditions (smoothed)

Business volumes (smoothed)

Selling prices / fees charged (smoothed)
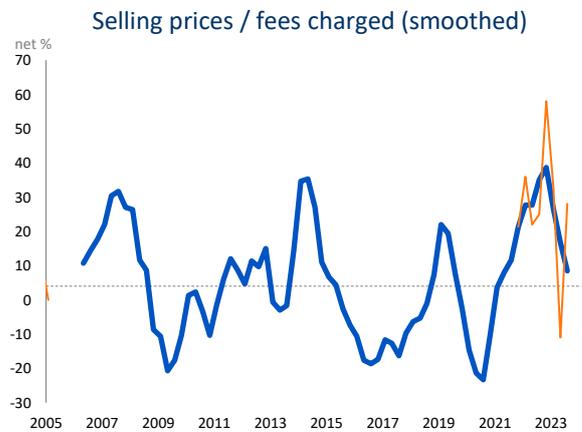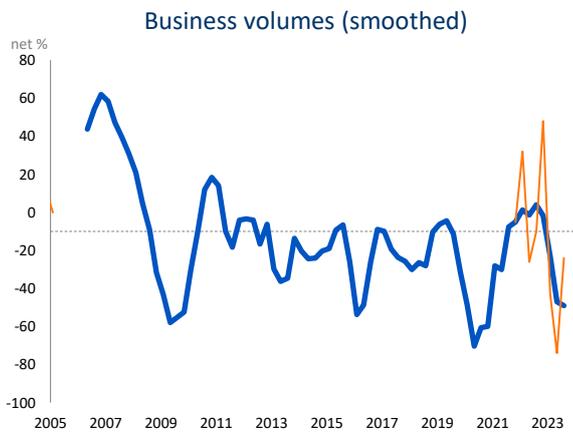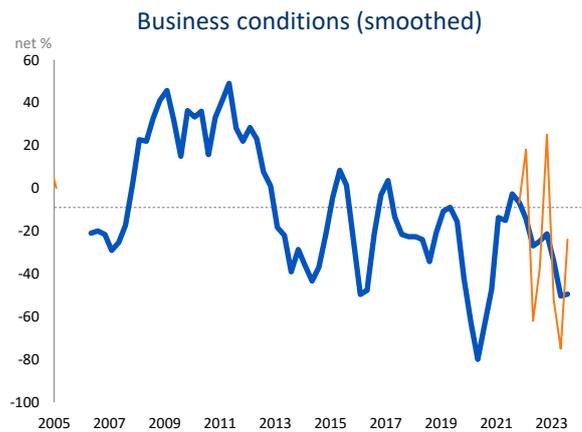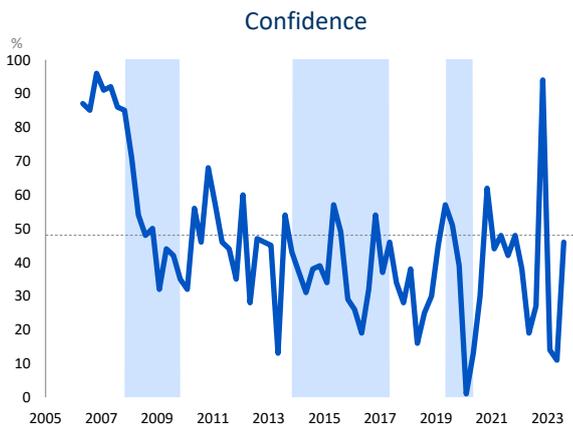
[7] 1) Land transport (39%): road freight (SIC code 7123)
2) Supporting transport & travel agencies (61%): cargo handling (7411), travel agencies & tour operators (7414), other (e.g., freight forwarding) (7419)
The figures in brackets indicate the BER's weights, which account for the sector coverage and participation. Consult **Error! Reference source not found.** for the sub-sector's share according to Stats SA's business censuses.

REAL ESTATE[8]

| Indicator	Unit	μ-σ	μ	μ+σ	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3	Δ	σ Δ
Confidence	%	22	44	67	30	51	56	54	47	43	34	**24**	-10	15
Business conditions	Net %	-48	-12	25	10	26	-26	-20	-32	-38	-52	**-44**	8	29
Smoothed	Net %	-43	-11	22	16	13	3	-7	-26	-30	-41	**-45**	-4	12
Business volumes	Net %	-55	-26	3	-3	32	9	-13	-13	-28	-22	**-52**	-30	28
Smoothed	Net %	-50	-28	-5	-2	0	13	9	-6	-18	-21	**-34**	-13	10
Selling prices / fees charged	Net %	-43	-12	19	-17	13	27	12	-20	-20	9	**2**	-7	25
Smoothed	Net %	-38	-15	8	-18	-6	8	17	6	-9	-10	**-3**	7	11

Confidence

Business conditions (smoothed)

Business volumes (smoothed)

Selling prices / fees charged (smoothed)
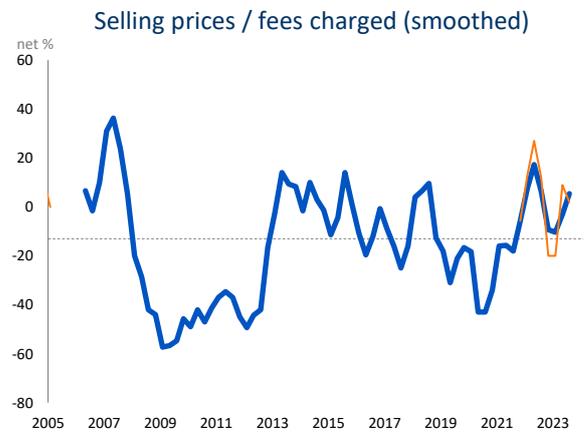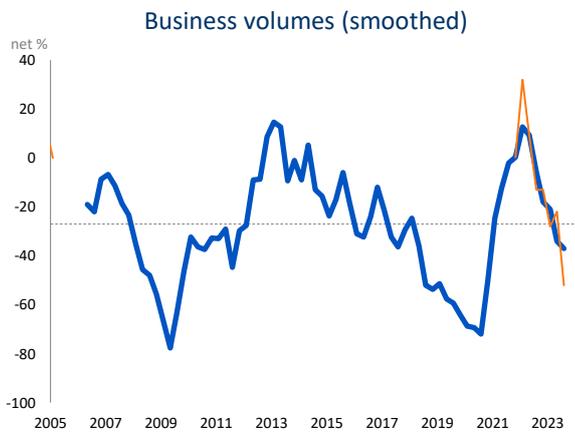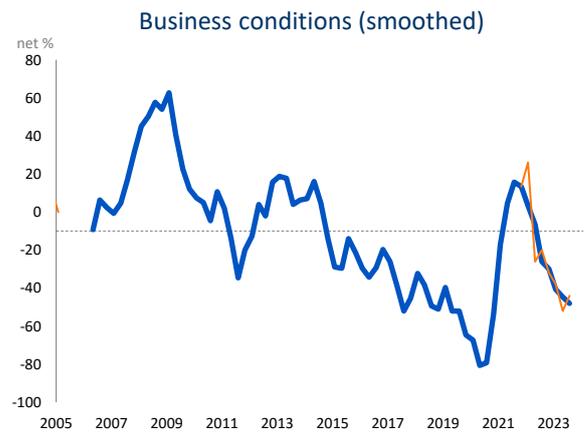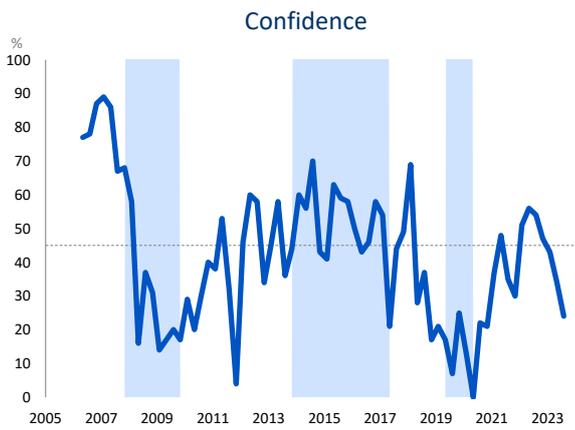
[8] Estate agents (auctioneering and sale of property) (SIC code 841) (35%) and property management (841) (65%). The figures in brackets indicate the BER's weights, which account for the sector coverage and participation. Consult **Error! Reference source not found.** for the sub-sector's share according to Stats SA's business censuses.

BUSINESS SERVICES[9]

Indicator	Unit	μ-σ	μ	μ+σ	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3	Δ	σ Δ
Confidence	%	35	56	78	55	38	63	64	64	47	59	**59**	0	11
Business conditions	Net %	-43	-16	10	-3	2	23	35	14	0	-6	**6**	12	19
Smoothed	Net %	-39	-15	8	-5	-2	7	20	24	16	3	**0**	-3	9
Business volumes	Net %	-38	-6	26	-23	0	32	20	13	-9	21	**11**	-10	16
Smoothed	Net %	-38	-10	19	-25	-15	3	17	22	8	8	**8**	0	10
Selling prices / fees charged	Net %	-30	-11	8	-11	4	16	-1	18	3	5	**12**	7	15
Smoothed	Net %	-29	-13	3	-20	-7	3	6	11	7	9	**7**	-2	6

Confidence

Business conditions (smoothed)

Business volumes (smoothed)

Selling prices / fees charged (smoothed)
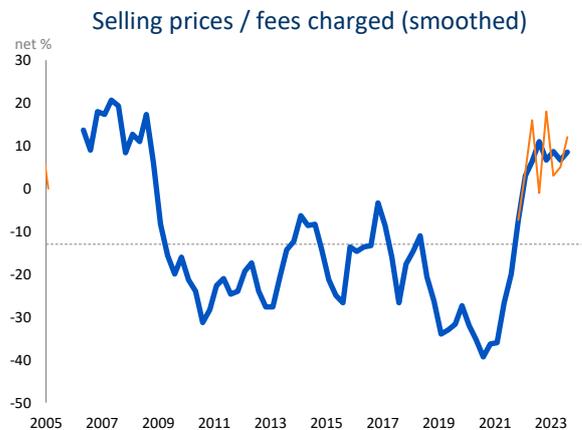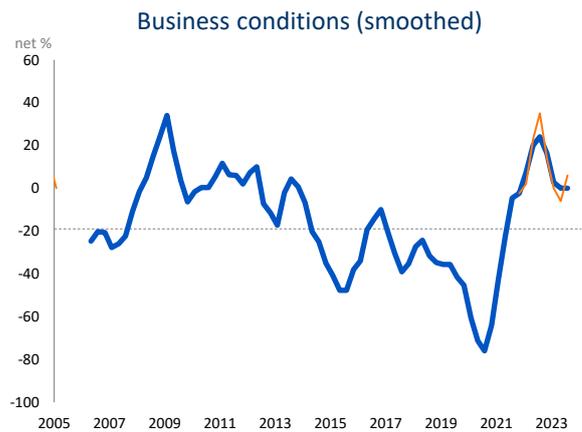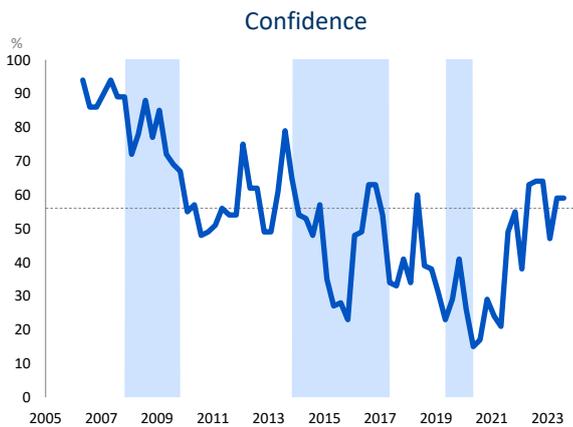
[9] 1) Renting of machinery & equipment (8%): transport equipment (SIC code 851), other machinery & equipment (852).
2) Computer services (19%): hardware consultancy (861), software consultancy (862).
3) Legal services, accounting & other (30%): legal services, accounting, bookkeeping, auditing & tax consulting (8811-2), business & management consulting (8814).
4) Consulting engineering activities (88211) (23%)
5) Advertising (883) (3%)
6) Other (16%): building & industrial plant cleaning activities (8893), other (8899) e.g., debt collection, interior design, exhibitions.
The figures in brackets indicate the BER's weights, which account for the sector coverage and participation. Consult **Error! Reference source not found.** for the sub-sector's share according to Stats SA's business censuses.
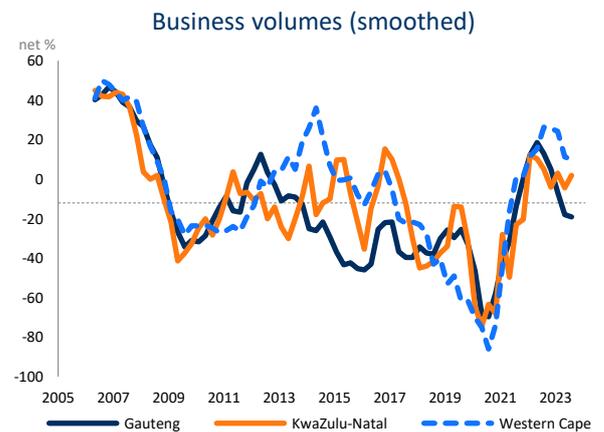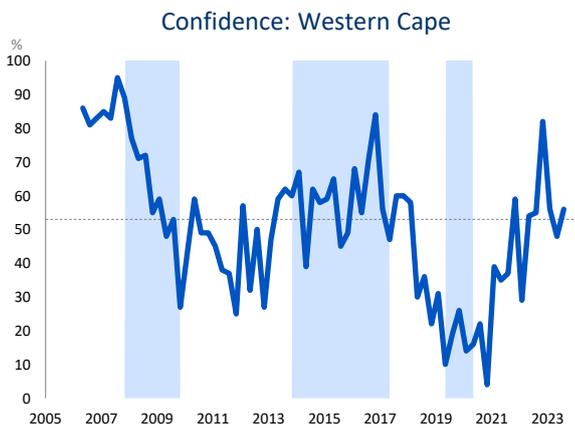
PROVINCES

Indicator	Unit	μ-σ	μ	μ+σ	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3	Δ	σ Δ
Gauteng														
Confidence	%	31	51	71	54	49	51	56	63	39	38	**43**	5	12
Business volumes	Net %	-44	-12	20	0	29	8	19	12	-16	-16	**-22**	-6	20
Smoothed	Net %	-42	-15	12	-14	0	12	19	13	5	-7	**-18**	-11	10
KwaZulu-Natal														
Confidence	%	30	53	76	32	54	47	31	86	27	65	**46**	-19	19
Business volumes	Net %	-45	-9	27	-16	43	10	-22	27	-17	-1	**5**	6	39
Smoothed	Net %	-42	-15	12	-14	0	12	19	13	5	-7	**-18**	-11	10
Western Cape														
Confidence	%	31	53	75	59	29	54	55	82	56	48	**56**	8	15
Business volumes	Net %	-39	-5	30	11	8	16	22	41	14	18	**2**	-16	20

Confidence: Gauteng

Confidence: KwaZulu-Natal

Confidence: Western Cape

Business volumes (smoothed)
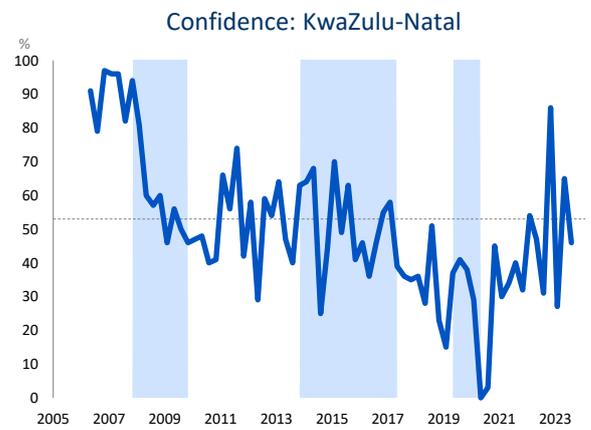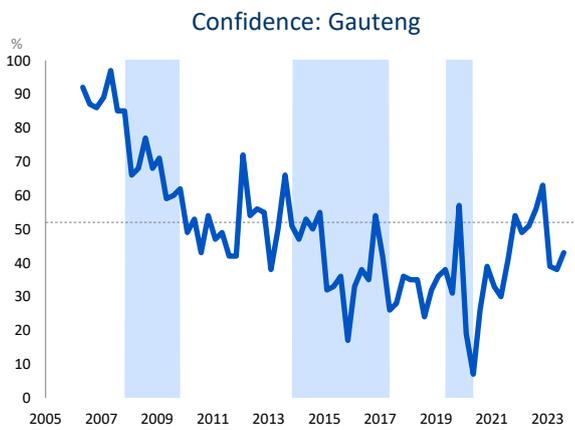
SUMMARY

Business confidence by sector

normalised scale

Business cycle downturn | Manuf.
Trade¹ | Other services

¹ *Trade = average of retail, wholesale & motor trade*
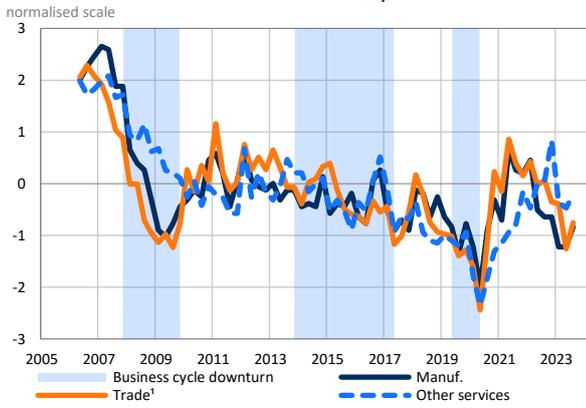
Business confidence by province

normalised scale

Business cycle downturn | GP* | KZN* | WC*

Business volumes

normalised scale

Business cycle downturn | Total
Hotels & restr.* | Bus. serv.

Business volumes

normalised scale

Business cycle downturn | Total
Transport* | Real estate*
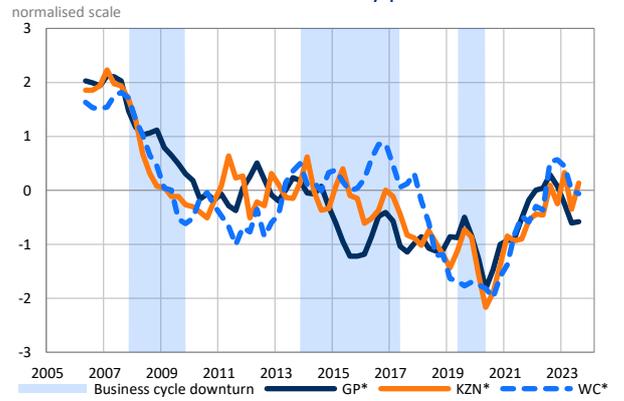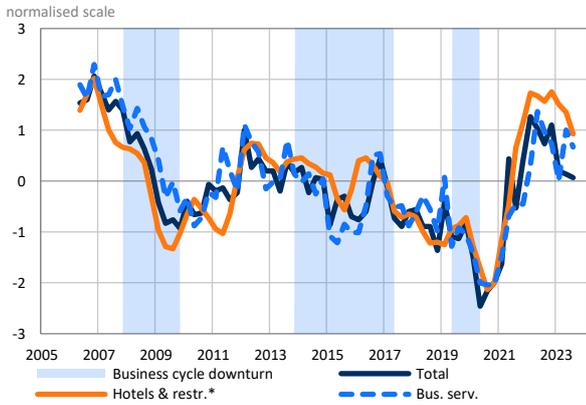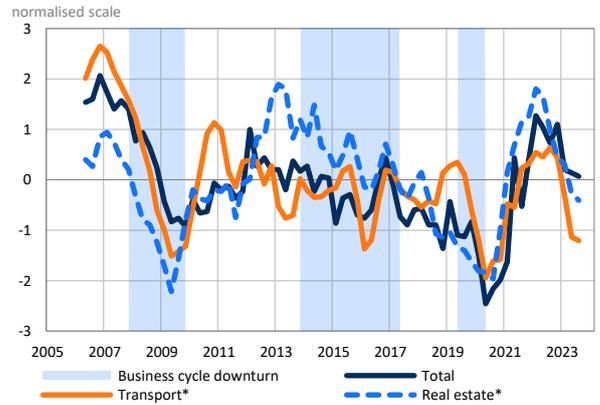
Total other services: volumes

normalised scale

Business cycle downturn | BER net %
GDP: Other services² (y-o-y %)
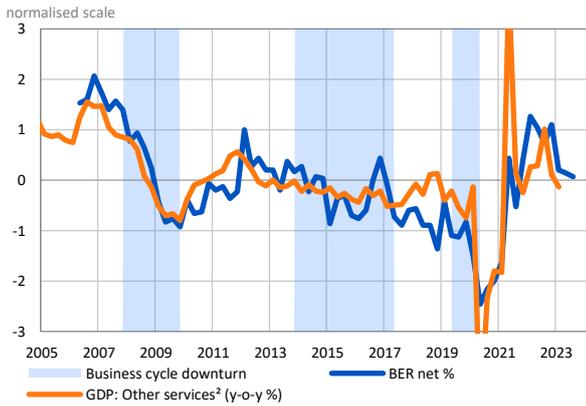
Business services: volumes

normalised scale

Business cycle downturn | BER net %
GDP: Bus. & fin. serv.³ (y-o-y%)

* *three-quarter centred moving average*

15
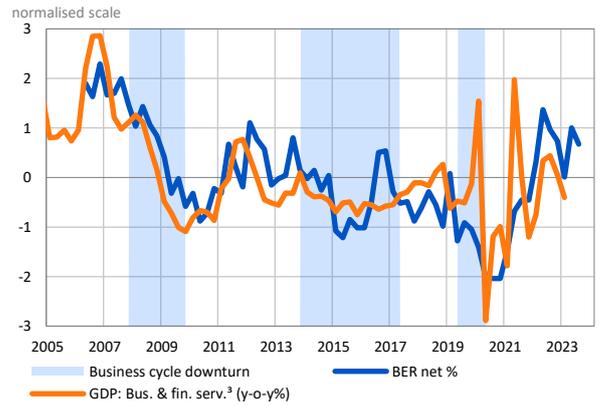
SUMMARY CONTINUES

Transport: volumes

normalised scale

Legend: Business cycle downturn; BER net %*; GDP: Transp. & comm. (y-o-y%)

Real estate: volumes

normalised scale

Legend: Business cycle downturn; Ber net %*; Building plans passed* (y-o-y%)
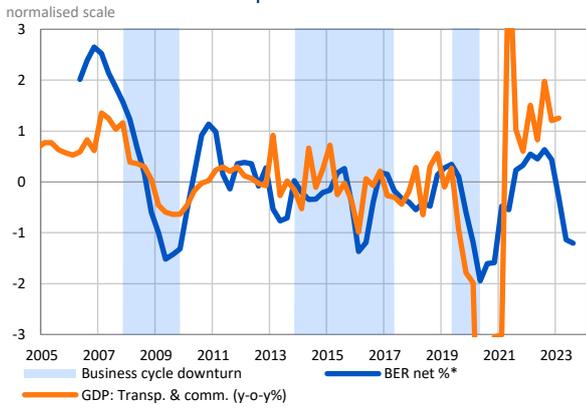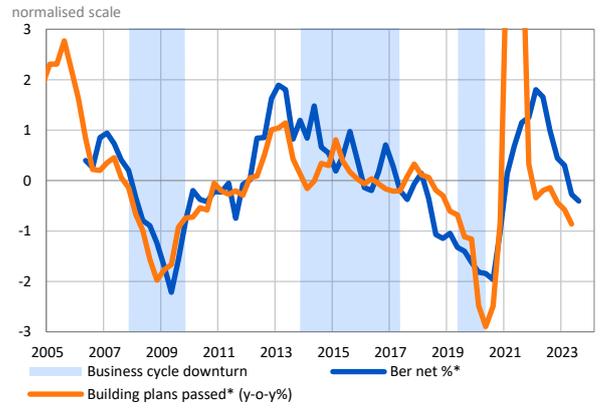
Hotels & restaurants: volumes
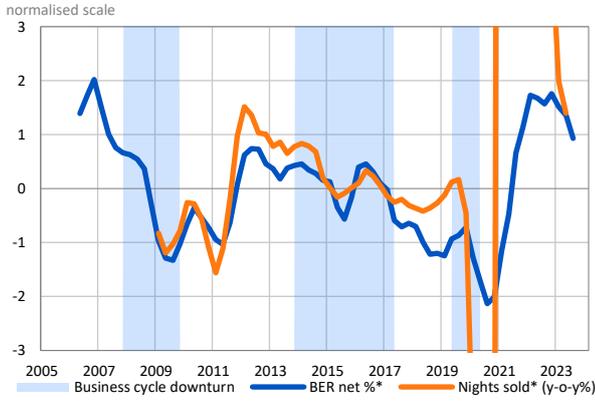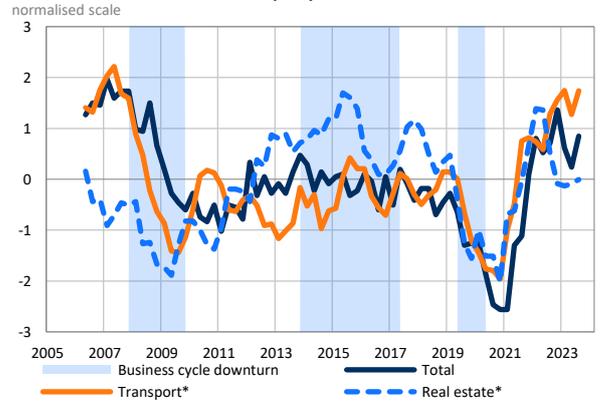
normalised scale

Legend: Business cycle downturn; BER net %*; Nights sold* (y-o-y%)

Employment

normalised scale

Legend: Business cycle downturn; Total; Transport*; Real estate*

Selling prices / fees charged

normalised scale

Legend: Business cycle downturn; Total*; Hotels & restr.*; Bus. serv.*

Selling prices / fees charged

normalised scale

Legend: Business cycle downturn; Total*; Transport*; Real estate*
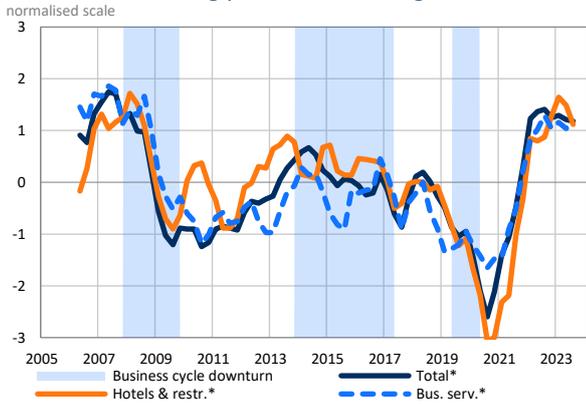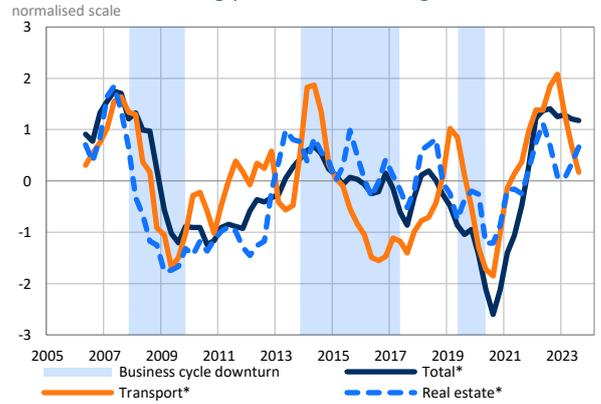
three-quarter centred moving average

Technical note

THE OTHER SERVICES SURVEY METHOD

Short-term planning is hampered as official (quantitative or numeric) data is released with a time lag. Business tendency *survey* (BTS) *results reveal what happened between the release of the last official figures and the current state of affairs*. The survey results not only reveal earlier developments in activity, employment etc. (for which official figures are published), but also provide unique information, such as business confidence and respondents' expectations (or forecast) for the next quarter for which no official figures exist. It is now widely recognised that such subjective individual expectations play a key role in economic developments. Furthermore, the survey results of successive quarters *provide a means of tracking cyclical movements, pinpointing trend changes* and establishing forecasts.

Of the various sub-sectors making up the services sector of the economy, the BER's surveys have covered the domestic trade sectors (i.e. the retail, wholesale and motor trade) since their inception in the 1950s. In 2005, the BER expanded the surveys' sector coverage to select other services sectors, namely catering (restaurants and take-away outlets), accommodation (hotels and guest houses), transport, real estate and business services. Click **here** for a short video about the BER's other services survey.

In deciding which of the remaining services sector to cover, the BER followed its international counterparts. While the government provides the bulk of services, the selected sectors are those in which private firms dominate. For reasons of focus and feasibility, the BER does not cover personal services and sectors dominated by a few large firms (e.g. telecommunication and air transport).

These other services sectors are responsible for a large and rising share of GDP and employment, but the cyclical turning points in their overall confidence, business climate and activity time series lag those of the sectors that the BER traditionally reported on. Therefore, they are not included in the BER's composite cyclical indicators (e.g. the business confidence index). A short video on how this survey compares to the RMB/BER BCI can be found **here**.

Firms in the other services sector differ from those that the BER has been reporting on traditionally (i.e. building contractors, manufacturers, retailers, wholesalers and vehicle dealers) in several important aspects.

The most obvious difference is that other services providers do not carry stocks to balance unexpected changes in demand. In contrast to stocks of raw material inputs and finished goods in manufacturing, as well as retail, wholesale and new vehicle inventories, other services cannot be stored temporarily. Instead, other service providers have to take care of short-term fluctuations in demand via adjustments in the utilisation of their workforce and/or space.

Another difference is that the cyclical peaks and troughs in other services sector's activity are not symmetrical and do not move in synch with those of the sectors reported on traditionally. While the five sectors included in the RMB/BER business confidence index (BCI) reach upper and lower cyclical turning points at more or less the same time, other services lag the recovery at the bottom, as it takes time before capital and other business spending increase and starts to

lift accommodation, transport and business services. To safeguard the cyclical and advanced signalling (predictive) properties of the RMB/BER BCI, the other service sector is not included in the BCI. Whereas quantitative estimates benefit from an expanded sector coverage, this is not necessarily the case for cyclical measures.

A final major difference is that there is no readily available equivalent official monthly reference measure of other services activity. Stats SA has been producing high-frequency data on the performance of hotels, restaurants and transport for a couple of years, but nothing on real estate and business services. The latter two are only covered together with financial intermediation in the quarterly GDP production numbers.

Table 1: A comparison of the sectors covered in the BCI vis-à-vis Other Services survey

	GDP %	Employment %	BCI	Other services
Primary sector	**10.3**	**10.2**		
Agriculture, forestry & fishing	2.2	7.1		
Mining and quarrying	8.2	3.1		
Secondary sector	**21.7**	**15.5**		
Manufacturing	14.0	9.3	√	
Electricity, gas and water	3.7	0.4		
Construction	4.0	5.8	√	
Tertiary (services) sector	**68.0**	**74.3**		
Trade, catering and accommodation	14.9	23.2		
Wholesale trade	4.9	5.1	√	
Retail trade; repair of household goods	7.0	10.7	√	
Motor trade; repair of motor vehicles	2.1	4.0	√	
Catering and accommodation	1.0	3.4		√
Transport, storage & communication	10.0	4.7		
Transport	8.0	3.9		√
Communication	2.0	0.7		
Finance, real estate & business services	19.4	17.6		
Finance and insurance	6.1	2.5		
Real estate	5.5	1.1		√
Business services *	7.8	13.9		√
General government services	17.8	12.9		
Personal services **	5.9	16.0		
All sectors	**100.0**	**100.0**	**31.9**	**22.3**

Notes:GDP = Gross Domestic Product (National Accounts) from the production side; sector division according to the Standard Industrial Classification (SIC) of All Economic Activities, at current prices, 2019

Employment covers the formal and informal sector.

Data source: Quantec, author's own calculations

BCI = RMB/BER business confidence index

* Business services consist of 1) the renting of machinery and equipment (8%), 2) computer services (16%), 3) legal, accounting, market research & management consultancy (27%), 4) consulting engineering (21%), 5) advertising (3%) and 6) other (e.g. labour recruitment, security activities, building and plant cleaning, and miscellaneous such as debt collection, interior design and exhibitions) (25%).

** Personal services consist of 1) education (20%), 2) health & social work (45%), 3) other community services (e.g. refuse removal) (2%), 4) activities of membership organisations (e.g. those of trade unions) (2%), 5) recreation (e.g. cinemas, TV production), cultural (arts, news agencies, libraries, museums, nature reserves) & sport activities (26%) and 6) other (washing & dry-cleaning of clothes, hair dressing & beauty treatments, funeral services & miscellaneous (4%)

Table 2: Composition of the other services sector (sub-sectors as % of the total)

	Stats SA		BER	
	2016	2020	2016	2020

1. Hotels & restaurants	**5.4**	**5.9**	**12.8**	**15.2**
Hotels and other accommodation	2.5	2.5	9.4	11.2
Restaurants and other food outlets	2.9	3.4	3.4	4.0
2. Transport, storage & communication	**40.9**	**41.8**		
2.1 Transport & storage	**25.2**	**26.2**	**24.4**	**22.1**
2.1.1 Land transport & pipelines	9.8	10.4	11.5	8.7
Rail transport	2.8	2.9	2.4	
Other land transport	6.7	7.1	9.0	8.7
Bus & other passenger transport	0.6	0.7	1.2	
Road freight	6.0	6.4	7.7	8.7
Pipelines	0.3	0.4		
2.2.2 Water transport	0.0	0.0	0.1	
2.2.3 Air transport	3.2	3.0		
2.2.4 Supporting transport & travel agencies	12.1	12.7	12.8	13.4
Cargo handling	0.9	0.8	2.1	1.8
Storage & warehousing	1.3	1.5	1.9	
Other (e.g., airport & harbour operation)	1.4	1.6		
Travel agencies & tour operators	0.8	1.0	1.8	3.1
Other (e.g., freight forwarding)	7.8	7.8	7.1	8.5
2.2 Post & telecommunication	**15.7**	**15.6**		
Postal and courier activities	0.7	0.8		
Telecom & cellular	15.0	14.8		
3. Real estate	**12.9**	**12.1**	**16.7**	**17.8**
Auctioneering & property sales	4.5	4.6	5.6	6.3
Property management & other	8.5	7.5	11.1	11.5
4. Business services	**40.8**	**40.2**	**46.1**	**44.9**
4.1 Renting of machinery & household goods	**2.4**	**2.0**	**3.5**	**3.5**
Rental of transport equipment	0.9	0.5	0.9	0.7
Rental of other machinery & equipment	1.4	1.3	2.5	2.8
Rental of personal & household equipment	0.1	0.2	0.1	
4.2 Computer and related services	**6.1**	**7.4**	**7.5**	**8.7**
Hardware consultancy	0.3	0.3	0.5	1.3
Software consultancy	4.6	5.9	5.9	7.4
Data processing & database activities	0.7	0.9	0.8	
Maintenance, repair & other	0.4	0.2	0.3	
4.3 Research & development	**0.9**	**0.7**		
4.4 Other business activities	**31.3**	**30.0**	**35.0**	**32.6**
4.4.1 Legal, accounting & consultancy	8.4	9.3	12.5	13.4
Legal services	1.7	1.9	7.1	7.5
Accounting, auditing & tax consultancy	1.4	1.8		
Market research & public opinion polling	0.2	0.2	0.2	
Business & management consultancy	5.0	5.3	5.1	6.0
4.4.2 Architectural & other technical activities	4.5	3.5	9.7	10.4
Architectural & engineering consultancy	4.2	3.1	9.7	10.4
Consulting engineering activities	3.5	2.4	9.7	10.4
Architectural activities	0.3	0.4		
Quantity surveying & other	0.5	0.3		
Technical testing & analysis	0.3	0.3		

	Stats SA	BER		Stats SA
	2016	2020		2016
4.4.3 Advertising	1.3	1.5	1.3	1.5
4.4.4 Business activities n.e.c.	17.1	15.8	11.6	7.3
Labour recruitment & provision of personnel	2.0	2.0	1.4	
Investigation and security activities	3.1	2.9	2.7	
Building & industrial plant cleaning activities	1.2	0.8	1.5	1.5
Photographic activities	0.0	0.0	0.5	
Packaging	0.2	0.2		
Other	10.6	9.9	5.5	5.8
Debt collection & credit rating	4.1	-		
Business brokerage	0.0	-		
Specialised design (e.g., interior design)	1.2	-	1.0	-
Telephone services (e.g., telemarketing)	2.3	-	2.0	-
Other appraisal	0.0	-		
Demonstration & exhibition	1.2	-	1.0	-
Other n.e.c.	1.7	-	1.5	-
Total	**100.0**	**100.0**	**100.0**	**100.0**

Notes: - not available; n.e.c. = not classified elsewhere; shaded = BER does not cover

Stats SA sources:

Accommodation: Report 64-11-01, 2015 & 2018
Restaurants: Report 64-20-01, 2015 & 2018
Land Transport: Report 71-02-01, 2016 & 2019
Post & Telecommunication: Report 75-01-01, 2016 & 2019
Real Estate & Business Services: Report 80-04-02, 2016 & 2020

Used the GDP deflator for "wholesale, retail, hotels & restaurants" and "transport, storage & communication" to estimate income in 2016 and 2020.

BER: 2016 applied to the period 2017 to 22Q2, 2020 applies since 22Q3

The survey results are obtained from questionnaires completed by senior executives during the middle month of every calendar quarter.

The business survey questionnaire contains a small number of questions. These questions are qualitative in nature, e.g., "Compared to the same quarter a year ago, is the volume of sales up, the same or down?". No figures are requested.

The sample of executives remains the same from one survey to the next. A panel is in effect established. The sample provides for the main sectors (see **Error! Reference source not found.**). The list of participants is reviewed every few years to replace those firms that went out of business or stopped responding during the previous two years with new ones. The sector weights are updated every five years and adjusted for the response pattern.

To provide for widely differing sizes, each firm in the manufacturing, trade and other services sectors is allocated a weight based on its turnover. Firms in the building sector are not weighted. Participants have to complete a "participant details form" at the time of recruitment and every few years to ensure that their sector classification and turnover (optional) are correct.

Consult the BER web page (**www.ber.ac.za**) for more information about the business tendency survey method.

THE UNIQUE UNITS OF MEASUREMENT OF QUALITATIVE SURVEYS

Net percentage (net %)

The responses related to the <u>change in activity, prices, employment, business conditions, expected economic performance etc.</u> are presented as a "net percentage" (also called a "net balance" or a "net majority"). If, for example, the percentages of respondents rating the volume of sales as "higher", the "same" or "lower" compared to a year ago are 70%, 10% and 20% respectively, then one can conclude that the majority of participants experienced higher sales. The net percentage is calculated as the percentage of respondents rating "sales" as higher less the percentage rating it as "lower". The percentage rating it as the "same" is ignored. The net percentage in this example is therefore 50%, being the difference between the 70% "higher" and the 20% "lower". A net percentage of –10%, for instance, would indicate a decline in sales compared to a year ago. Take note that this does not mean a year-on-year contraction of 10%. It only means that the activity of a majority of 10% of the respondents was lower compared to a year ago.

The net percentage, or net balance statistic, can theoretically vary between a minimum of -100 (when all participants replied "lower") and a maximum of +100 (when all respondents replied "higher"). Theoretically a value of zero, therefore, indicates no change, between 0 and 100 reflects a rise (or improvement) and between 0 and –100 a decline (or deterioration) compared to the same quarter a year ago. The net balance statistic is a diffusion index, i.e. it indicates the degree to which the indicated change is "diffused" (spread) throughout the sample population. It indicates both the direction and size of the change.

Given that it reflects respondents' estimation of the change in the phenomenon/variable in the current quarter relative to the same quarter a year ago, the net percentage corresponds to a year-on-year percentage change/growth rate in the corresponding/equivalent official data series (see the figure on the right).

Survey vs Quantitative Data

Net % (lhs) — y-o-y % change (rhs)
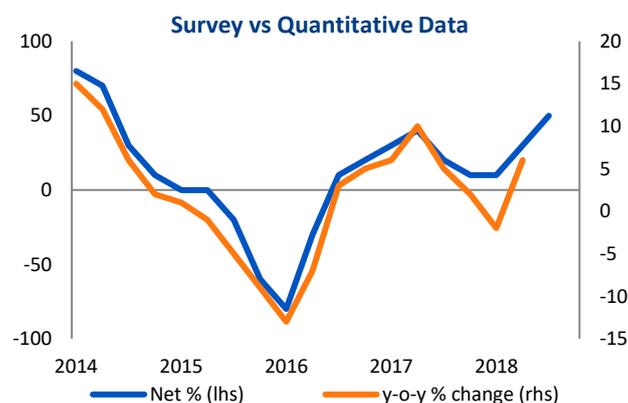
Percentage (%)

The responses relating to business confidence are presented as percentages.

In the case of <u>business confidence</u>, respondents have to rate prevailing business conditions as either "satisfactory" or "unsatisfactory". The percentage of respondents rating prevailing business conditions as satisfactory is taken as an indicator (proxy) for business confidence. A reading of 10 for business confidence, for instance, means that only 10% of the respondents indicated that they were satisfied. In this example, 90% were, therefore, unsatisfied.

Theoretically, the confidence series can vary between a minimum of zero and a maximum of 100. A value of zero would reflect an extreme lack of confidence and 100 extreme confidence. These results reflect respondents' evaluation of the phenomenon/the survey variable in respect to that specific survey quarter, i.e. not relative to some period in the past or future.

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 (3qcma) 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 (μ-σ) and above (μ+σ) 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: Δσ)

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.