BUREAU for ECONOMIC RESEARCH

SURVEY PUBLICATION | FOURTH QUARTER 2024

Manufacturing

Quarterly analysis of manufacturing activity

Volume 39 Number 04

Stellenbosch UNIVERSITY IYUNIVESITHI UNIVERSITEIT

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

ISSN 0258-9338

Executive summary

Following unchanged confidence in Q3, the latest Absa Manufacturing Survey showed that business confidence in the factory sector gained 8 points to reach a level of 36 in 2024Q4. This is the highest confidence level since 2022Q1; it is the first time in almost three years that confidence is above 30 points. The improvement was broad-based, with most subsector confidence levels comfortably above their long-term averages.

Demand from both the domestic and global markets recovered strongly. In the domestic market, sales grew significantly as consumers' buying power improved, in part supported by retirement savings claims through the two-pot system and relief from an interest rate cut. The bulk of sales are consumer goods. On the global market, export volumes expanded, but export selling price inflation slowed amid a relatively stronger rand during the period. The increase in export volumes cushioned export manufacturers on the turnover front.

Production volumes increased in most subsectors, matching the improved sales. While there were no significant gains in employment as manufacturers remained cautious, the average hours worked per worker increased significantly. A stronger rand and fuel price cuts helped to lower production costs. Respondents reported another increase in fixed capital stock and maintained an improved view of the political climate after the 100-day review of the Government of National Unity (GNU) formation.

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Introduction

The South African (SA) manufacturing sector registered 0.2% quarterly growth in the third quarter of 2024 (2024Q3) despite only three of the ten manufacturing subsectors expanding. This follows a growth of 0.6% in Q2 when six subsectors reported positive growth. The latest Absa Manufacturing Survey suggests the sector improved in Q4, with a recovery in both domestic and global demand.

This report provides an overview of the situation in the manufacturing sector as it developed during 2024Q4 and expectations for 2025Q1 and 12 months hence. The main section of the report discusses the trends in the overall manufacturing industry with the assistance of graphs, followed by a brief outlook for the sector. After this section, separate tables and graphs of the survey data are provided for each sector and province.[1]

An overview of the latest official data

SA MANUFACTURING SECTOR EXPANDS IN Q3

According to Statistics South Africa (Stats SA), manufacturing production grew by 0.2% (seasonally adjusted, sa) in 2024Q3, following 0.6% growth in Q2. Only three subsectors recorded production growth; metals and machinery, food and beverages, and furniture and other manufacturing products not elsewhere classified (n.e.c). To clarify, furniture production actually declined, but the other segments, like scrap metal, which fall in this category, expanded significantly. The metals subsector expanded by 3.6% in Q3 compared to Q2, saving the manufacturing sector from a contraction as production of basic iron and steel products, machinery (general and special purpose), and household appliances outpaced the decline in the structural steel product declines, which remained under pressure because of the slowdown in the construction sector. The textile subsector remained flat, while five other subsectors contracted in the quarter. The textile industry struggles with cheaper imports and counterfeit goods. Issues in the transport sector continue to drag down the sector's performance. Production in the transport sector declined by 5.7% in Q3, with significant declines in the production of motor vehicles (11.5%) and other transport equipment (9.8%), as sales declined by 2.2%, the worst in all the manufacturing product sales. The next biggest drag came from the wood and wood products subsector as there was a decline in demand for wood products as cash-strapped consumers bought fewer semi- and durable goods. This was also exacerbated by low, and as general sales were low, so was the demand for packaging materials due to constrained sales of other goods in general. As demand recovers, we expect a sustained recovery in manufacturing production.

[1] The Manufacturing Survey separately covers eight of the main subsectors of the manufacturing industry as well as the three main provinces (Gauteng, KwaZulu-Natal and the Western Cape).

Manufacturing production (sa) was flat in September 2024 compared to August 2024. This follows a monthly contraction of 0.7% in August, while the sector expanded by 1.7% at the start of the quarter in July.

On an annual basis, manufacturing production decreased by 0.8% in September, following another 0.8% contraction in August. Again, the transport sector dragged total output lower, contracting by 18.7% and shaving 1.7%pts off growth. Three other subsectors declined: textiles, wood, and glass products. New tariffs have been imposed on imported textile products from companies such as Shein and Temu to relieve pressure on the textile industry. Growth in the metals subsector was flat, while there was expansion in the five other subsectors. The chemicals subsector grew by 3.1% (contributing 0.6%pts), followed by the food and beverages subsector (1.2%, 0.3%pts) and electrical machinery (5.8%, 0.1%pts). Seasonally adjusted sales in 2024Q3 decreased by 0.9% compared to 2024Q2. Sales in September 2024 declined by 2% y-o-y and 1% m-o-m.

The latest Absa Purchasing Managers' Index (PMI) suggests that the manufacturing sector improved further in October as the index came in at 52.6 points, following 53 points in September, the second consecutive month of a reading above 50 points. This is the index's first time in expansionary terrain for consecutive months since a streak in late 2022 and early 2023. The PMI average for Q3 was 49.8 points, Q2 (48.1), and Q1 (47.8), suggesting a slow but steady recovery in the sector from quarter to quarter. This is a welcome trend and is supported by improvement in business activity as new orders are coming in. The employment index of the PMI is cautiously increasing, waiting for a sustained recovery in demand before manufacturers commit to significant employment. The good news comes from the recovery in both domestic and global demand, a sustained downward inflation trend, reduced borrowing costs, and improved disposable incomes for consumers.

GLOBAL MANUFACTURING REMAINED SUBDUED

The latest J.P. Morgan global manufacturing PMI registered 49.4 index points in October, slightly up from the reading of 48.7 points in September, but remained below the neutral 50-point mark for a fourth consecutive month. Nonetheless, the 0.7-point gain in the index indicates a deceleration in the rate of decline. Three of the five components signalled a contraction in activity at the start of the fourth quarter – new sales orders, employment, and stock of purchases (inventories). Stressed supply chains led to further delays in supplier delivery times, even though output stabilised at September levels. There was an expansion in the consumer goods category, while the intermediate and capital goods industries deteriorated, albeit slower. China's operating conditions continue to improve while India, Spain, and Brazil expand faster. Downturns eased in the US and the EZ; however, Germany, France, and Italy, the biggest economies in the region, remain at the bottom of the PMI rankings with massive contractions.

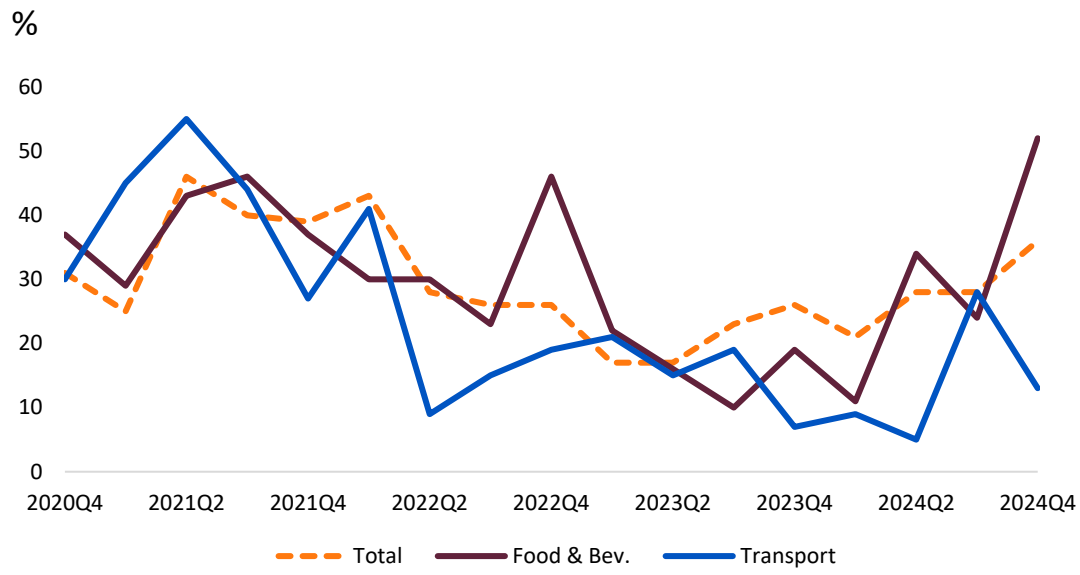
The 2024Q4 Absa Manufacturing Survey results

MANUFACTURING BUSINESS CONFIDENCE IMPROVES IN Q4

Manufacturing business confidence increased by 8 points to 36 index points in Q4, following unchanged confidence in 2024Q3. The confidence index matches the long-term average of 36 index points. This is the highest confidence level since 2022Q1, where confidence came in at 43 points, and it is the first time since then that the index has been above 30 points. Still, just over 6 out of 10 respondents are unsatisfied with the current business conditions.

Confidence was highest in the consumer goods segment (45), followed by intermediate goods (34), and then capital goods (26). Confidence in capital goods remained below the long-term average of 33 points. However, the direction of the change, an increase for two consecutive quarters, is welcome and bodes well with the expectation of an improvement in the purchase of investment goods.

Figure 1: Total confidence improved, but disparities exist between the subsectors



Source: BER

Five of the eight major manufacturing subsectors surveyed experienced increased confidence, while the other three saw decreased confidence. The food and beverages subsector reported the highest confidence level (52 points) and the biggest gain in confidence (28 points), followed by the chemicals subsector (42) and metals (41). The confidence in these three subsectors was above their respective long-term averages. The wood and wood products subsector saw a rise in confidence of 9 points, reaching 25 points in Q4, but still remained below the long-term average of 31 points. The sector is faced with declining sales, which could be due to consumers prioritising essential goods and food items. The glass subsector gained 2 points to 18 but remained significantly below the long-term average as it battles constrained activity in the motor vehicle and the building and construction sectors.

Confidence in the transport subsector deteriorated significantly, losing 15 points to 13 in Q4, below the long-term average of 33 points. This follows a 23-point improvement in Q3, but sales contracted with the continued supply chain strain, and the subdued demand for transport parts from the country's big trading partners declined.

SALES VOLUMES INCREASE AS BOTH DOMESTIC AND GLOBAL DEMAND RECOVERS

A net majority of 6% reported an increase in domestic sales volumes in Q4, the best level since 2022Q1 when 14% experienced an increase in sales. Sales volumes have declined since the beginning of 2024 due to a high debt burden on consumers and shrinking disposable incomes due to high interest rates and high inflation. The heightened political uncertainty also restricted activity as many consumers and businesses waited to see how the election year would unfold, and following the election, they did not know how the government would be formed as there was no political power with enough votes to form a government on its own. Following the formation of the GNU, the relief from the interest rate cut, and increased buying power from withdrawals from retirement savings through the two-pot system, domestic demand recovered. Sales grew significantly in the Western Cape (WC) as a net majority of 21% reported an increase in sales, while Gauteng and KwaZulu-Natal (KZN) saw a decline in sales compared to 2023Q4.

The indicator tracking domestic selling price inflation ticked down further, losing 7 points to reach 30 points. This is the lowest rate of increase in four years since the 25 points of 2020Q4. The selling price indicator edged below the 32-point long-term average, consistent with the downward inflation trend and a string of fuel price declines. The relatively stronger rand in this period played a role in reducing imported material costs.

Figure 2: Domestic and global sales volumes

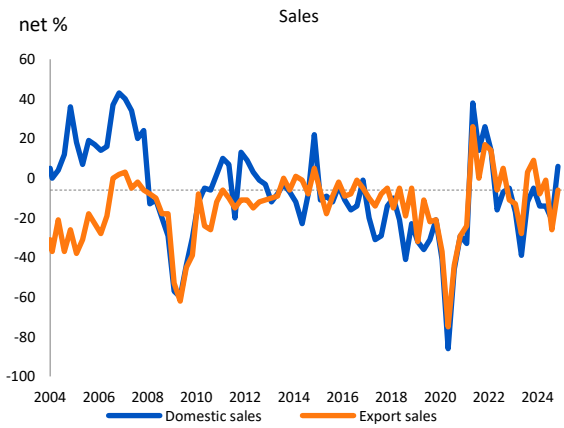
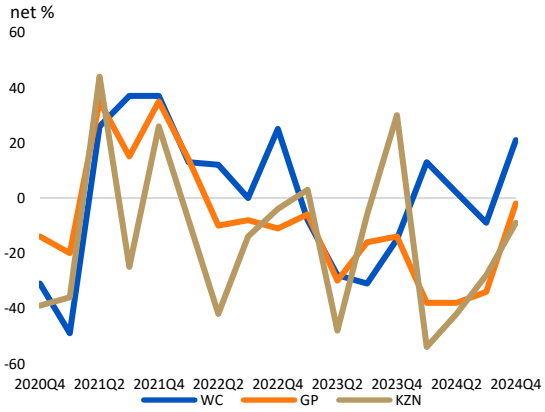


Figure 3: Domestic sales by province



Source: BER

Export sales recovered significantly in Q4, gaining by 20 points. This meant that only a net of 6% reported an export contraction as opposed to a net of 26% in Q3. Export sales have been volatile this year, but the Q4 recovery in export sales was broad-based, with chemicals and metals leading the pack. The transport subsector improved slightly but remains constrained due to the supply chain disruptions in the European markets and increased competition from Chinese goods. Export price inflation edged lower, which is in line with the global disinflation

trend, with a stronger rand also influencing this trend. However, exporters' revenue was likely shielded by the growth in volumes.

PRODUCTION VOLUMES RECOVER AS DEMAND IMPROVES

The seasonally adjusted production indicator gained 27 points, indicating that a net majority of 1% reported increased production volumes in Q4 compared to the same quarter last year. As demand recovered, a significant response was needed from the production front. This follows a 26% that reported decreased production volumes in Q3. All product segments saw a recovery in production, with significant production growth coming from consumer goods (a 43-point gain) due to their strong demand, as the bulk of sales constituted consumer goods. Intermediate goods saw gains of 35 points, while capital goods production gained 18 points. At a provincial level, production growth was the strongest in the WC where a net majority of 29% experienced growth in production, followed by GP (6%), while KZN experienced production declines.

Figure 4: Production costs declined

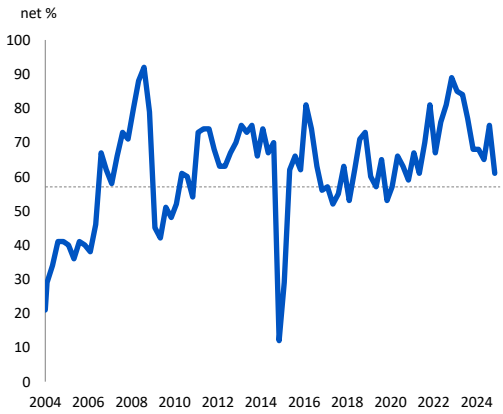
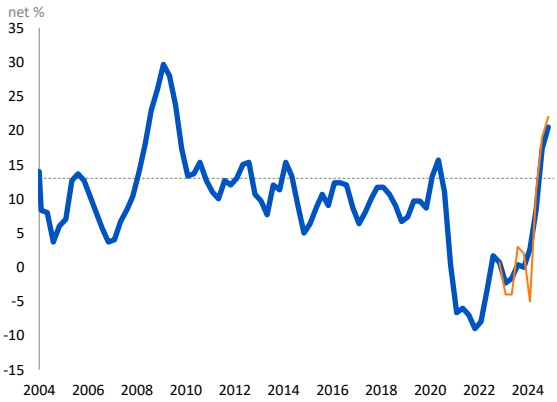


Figure 5: Stock of finished goods increased



Source: BER

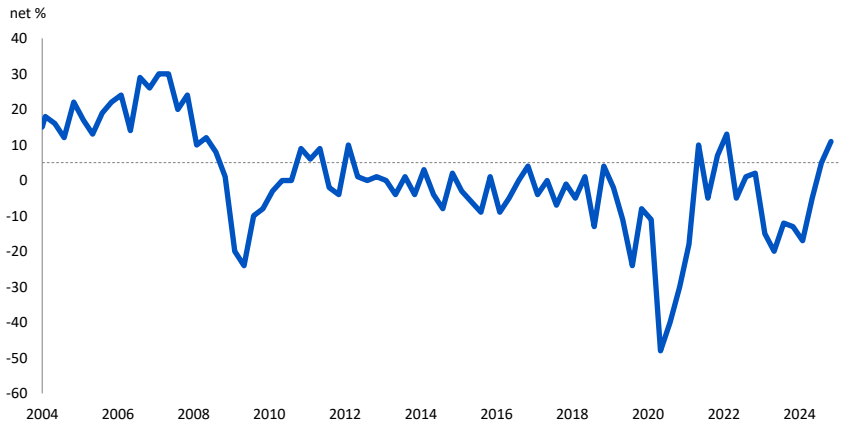
The indicator tracking the average rate of increase in per unit production costs decreased by 14 points to a more than three-year low of 61 points in Q4, following an unexpected increase in 2024Q3. This came at the back of a stronger rand, leading to cheaper imported materials and reduced fuel prices. The indicator tracking the average cost of raw materials per unit declined by 20 points. Most importantly, as production volumes increased, average production costs declined. The indicator tracking average labour cost per unit also decreased, despite a slight improvement in employment. However, a net majority of 23% reported declines in employment as manufacturers remain cautious with employment decisions as the recovery in demand may not be sustained as the trading environment remains constrained.

In Q4, the stock of finished goods increased relative to demand, in line with the increase in the average number of hours worked. This is the highest inventory level since 2023Q3. This does mean that production does not need to ramp up significantly further should demand increase as stock levels are sufficient.

FIXED CAPITAL STOCK GROWS

A net majority of 11% reported higher fixed investment relative to the same period last year. This was the second consecutive quarter that an increase was recorded and the net 11% is significantly above the long-term average of 0%. Five of the eight subsectors reported an increase in fixed investments, with a significant increase coming from the respondents in the glass subsector at 46%, followed by wood (27%), food and beverages (17%), chemicals (16%), and then transport (7%). It is encouraging to see that the largest subsectors reported a net increase in fixed investments. This aligns with the extended trust on the political front, as the political climate constraint lost a further 3 points in Q4, reaching 60 points – the lowest since 2012Q3 (57 points). Most importantly, this came after the 100-day evaluation of the GNU, so the manufacturers continued to have faith after the formation of this government. A net majority of 11% plans to increase fixed investments in machinery and equipment in 12 months.

Figure 6: Stock of fixed investments increased



Source: BER

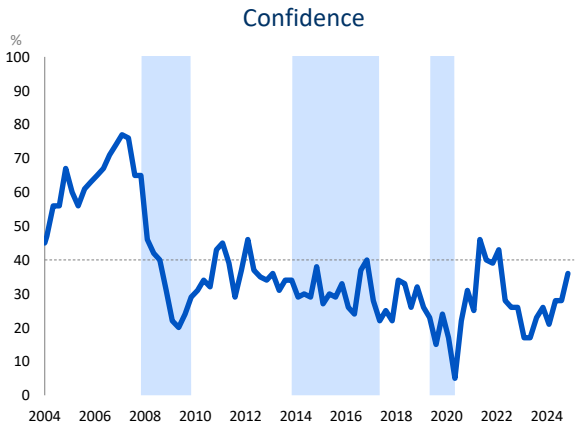
OUTLOOK

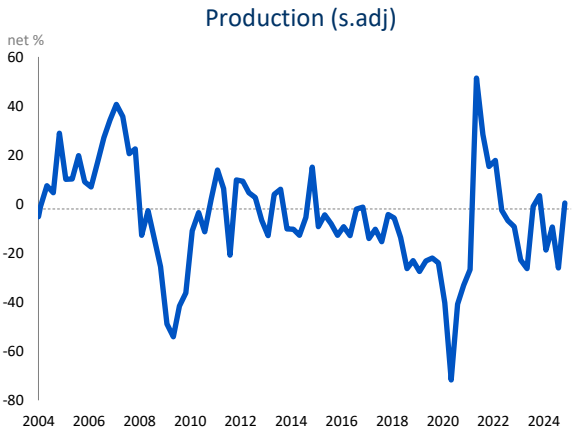
While slightly less optimistic relative to the third quarter, forward-looking expectations are still much better relative to the long-term average. The subsector outlook is mixed. Severe issues in the transport subsector, which suffers from constrained local and global demand, weigh on this sector's view. The metals subsector is the other sector where respondents are downbeat, and fears have been extended due to an increasing reliance on imported products. There are complaints about the brass coil and rods from the US, which are sold at below-cost prices, and the issue of cheaper Chinese steel products. The fears over the closure of ArcelorMittal have subsided. However, there is continued uncertainty over the proposed layoffs, and the standoff between NUMSA and the company is disrupting production capacity. Looking beyond this, all other six subsectors were upbeat about future business conditions. Insufficient demand is becoming less of a constraint; fixed capital stock is improving, fixed investment in 12 months is increasing, and the political climate remains good. There is additional relief from the second rate cut of another 25 basis points. All these should boost the sector going forward.

Survey results

MANUFACTURING: TOTAL[2]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	σ_Δ
Confidence	%	20	36	51	17	17	23	26	21	28	28	**36**	8	7
Activity & prices														
Production	Net %	-28	-6	16	-18	-34	-4	9	-14	-17	-29	**6**	35	18
Seasonally adjusted	Net %	-28	-6	15	-23	-26	-1	4	-19	-9	-26	**1**	27	16
Employment	Net %	-29	-16	-3	-17	-19	-18	-2	-21	-23	-28	**-23**	5	10
Average hours worked / worker	Net %	-29	-13	2	-20	-32	-16	5	-5	-27	-24	**-13**	11	13
Domestic sales	Net %	-33	-9	15	-17	-39	-12	-5	-14	-14	-21	**6**	27	18
Domestic selling prices	Net %	17	32	47	50	31	45	33	38	39	37	**30**	-7	12
Export sales	Net %	-30	-13	3	-13	-28	3	9	-8	-1	-26	**-6**	20	15
Export selling prices	Net %	1	19	37	43	29	30	30	21	24	36	**26**	-10	13
Production costs	Net %	50	64	78	85	84	77	68	68	65	75	**61**	-14	12
Stocks & investment														
Finished goods rel. to demand	Net %	1	10	18	-4	-4	3	2	-5	11	19	**22**	3	7
Smoothed	Net %	2	9	17	-2	-2	0	0	3	8	17	**21**	4	6
Capacity underutilisation	%	65	72	79	74	78	69	73	74	63	73	**76**	3	5
Smoothed	%	66	72	78	73	74	73	72	70	70	71	**75**	4	4
Fixed investment	Net %	-15	0	14	-15	-20	-12	-13	-17	-5	5	**11**	6	10
Constraints														
Insufficient demand	Net %	55	62	70	61	58	60	61	65	60	68	**66**	-2	5
Political climate	Net %	47	65	83	91	86	84	82	85	84	63	**60**	-3	6
Expected in 12 months														
Business conditions	Net %	-34	-15	5	-45	-59	-29	-33	-46	-26	6	**-1**	-7	16
Smoothed	Net %	-31	-14	2	-44	-44	-40	-36	-35	-22	-7	**3**	10	13
Fixed investment	Net %	-16	-1	13	-13		-8		-20		14		34	14



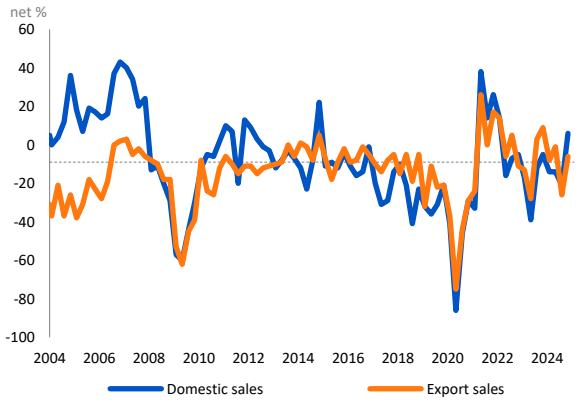


[2] The total consists of 1) food & beverages, 2) textiles, clothing, leather & footwear, 3) wood, paper, printing & publishing, 4) chemical products, rubber & plastics, 5) glass & non-metallic mineral products, 6) basic metals, metal products & machinery, 7) electrical machinery, radio, TV and professional equipment, 8) motor vehicles, parts & transport equipment and 9) furniture & other. Although the BER covers the electrical machinery etc. sector and includes it in the total, it does not publish the results of this sector separately. The BER does not cover petroleum refining (which is part of the chemical etc. sector) and scrap metal (which is part of "other") and they are therefore not included in the total.

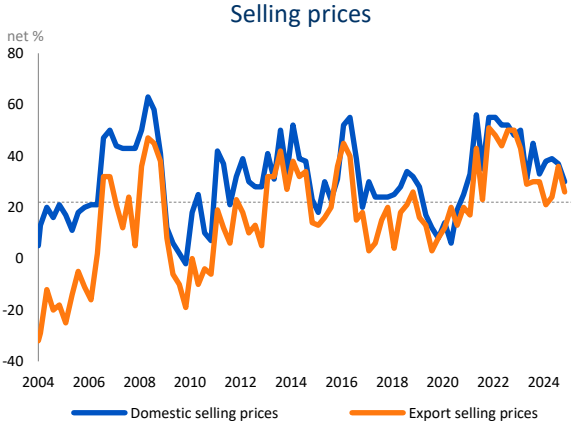
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

MANUFACTURING: TOTAL

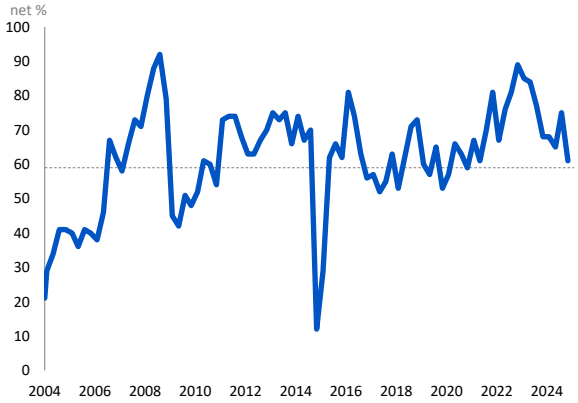
Sales



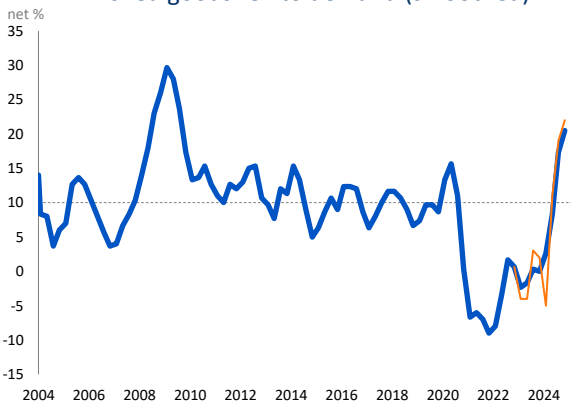
Selling prices



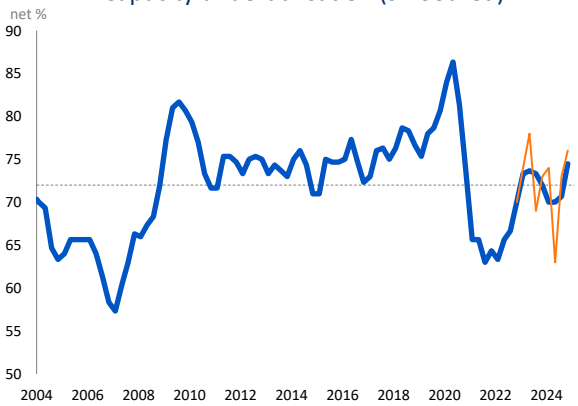
Production costs



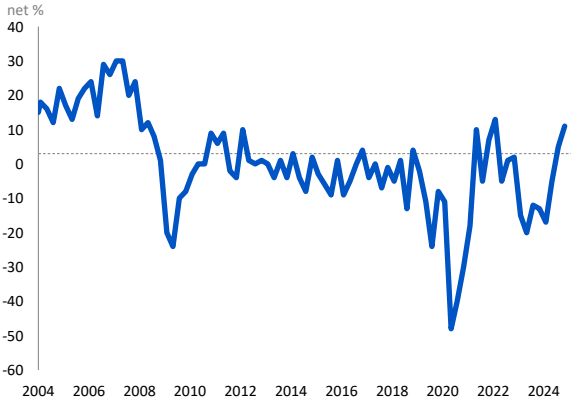
Finished goods rel. to demand (smoothed)



Capacity underutilisation (smoothed)



Fixed investment



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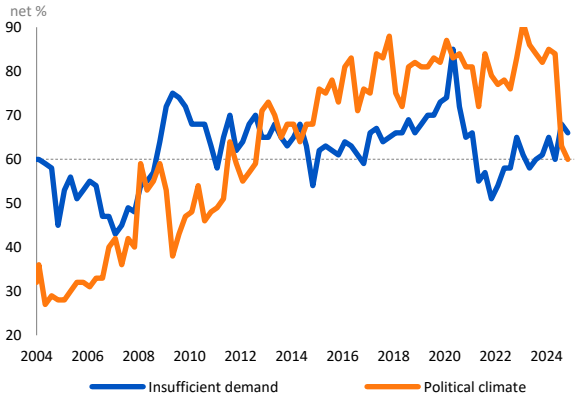
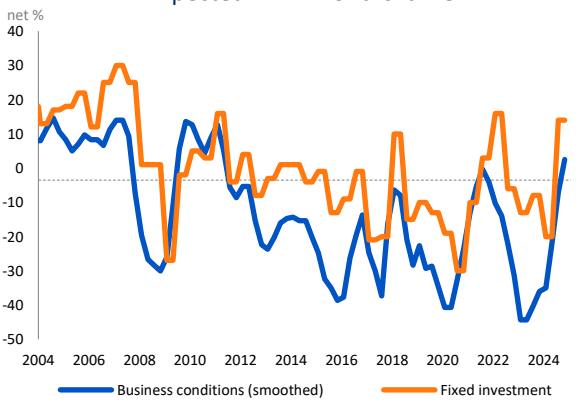
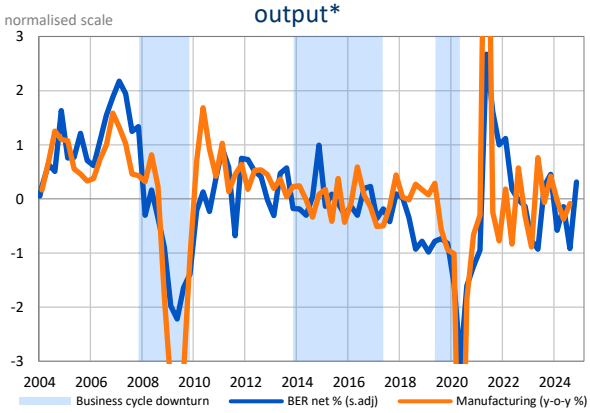


Expected in 12 months' time

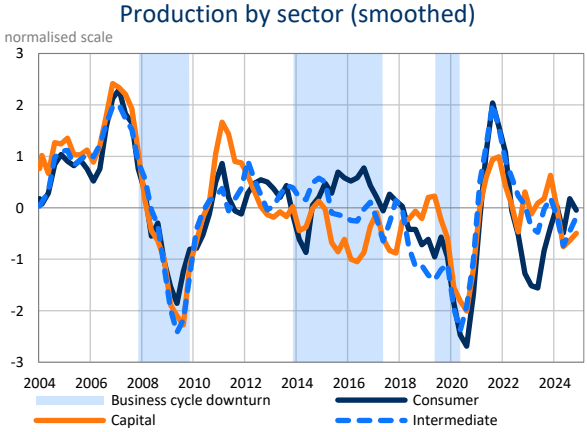


SUMMARY

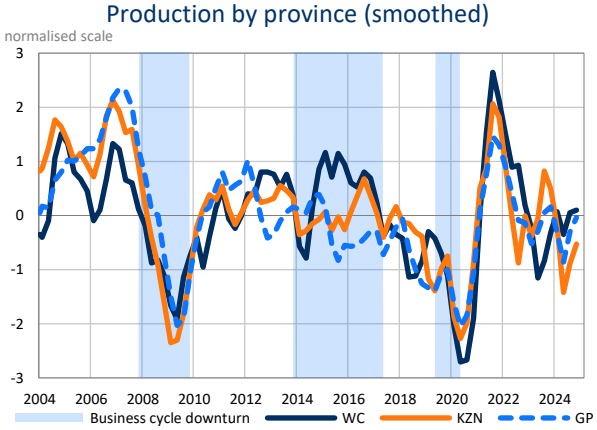
Production & actual manufacturing output*



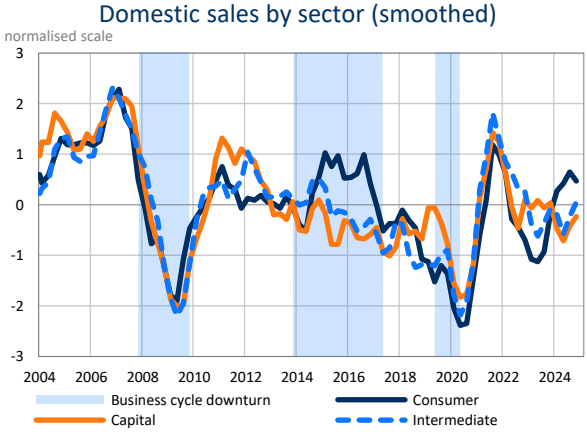
Production by sector (smoothed)



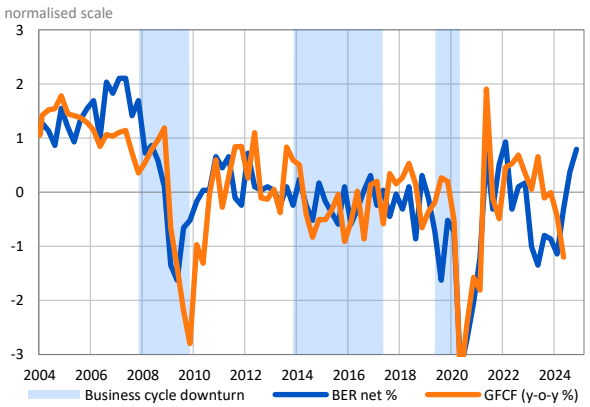
Production by province (smoothed)



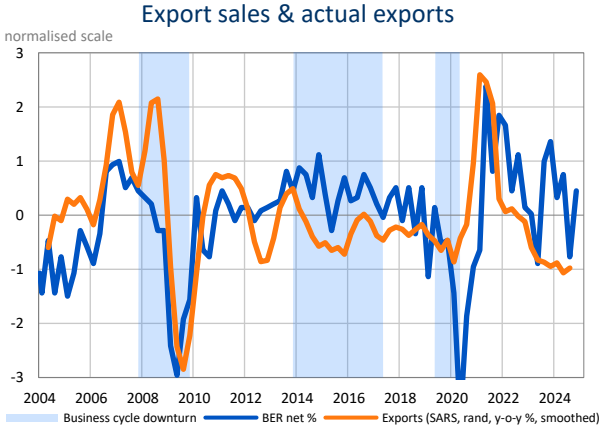
Domestic sales by sector (smoothed)



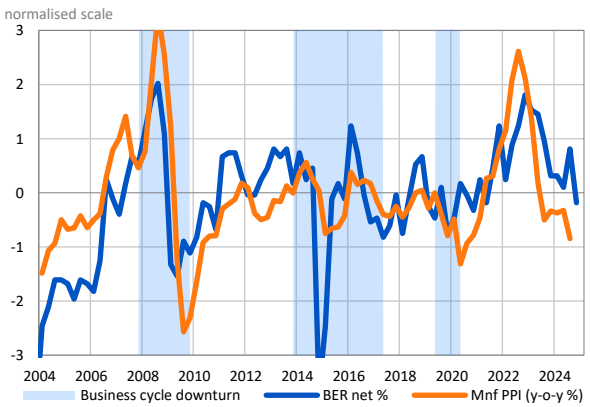
Fixed investment & Private GFCF



Export sales & actual exports



Production cost & PPI-inflation



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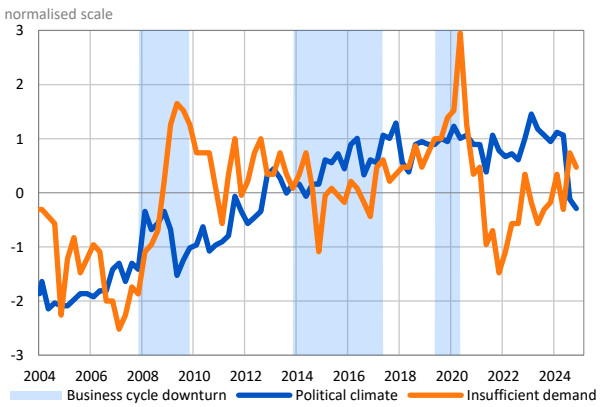


CAPITAL[3], INTERMEDIARY[4] AND CONSUMER[5] GOODS

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Capital goods														
Confidence	%	13	33	53	13	10	21	19	16	16	25	**26**	1	11
Smoothed	%	14	33	52	16	15	17	19	17	19	22	**26**	4	8
Production	Net %	-44	-12	19	17	-60	13	24	-25	-36	-34	**-16**	18	30
Smoothed	Net %	-38	-12	14	-15	-10	-8	4	-12	-32	-29	**-25**	4	20
Domestic sales	Net %	-46	-16	15	5	-48	3	-6	-41	-36	-25	**-18**	7	26
Smoothed	Net %	-41	-15	10	-17	-13	-17	-15	-28	-34	-26	**-22**	4	19
Export sales	Net %	-41	-18	6	-12	-25	-21	15	-6	-5	-54	**-36**	18	24
Smoothed	Net %	-36	-18	1	-11	-19	-10	-4	1	-22	-32	**-45**	-13	18
Intermediate goods														
Confidence	%	19	34	50	15	20	29	28	20	27	24	**34**	10	8
Smoothed	%	19	34	49	18	21	26	26	25	24	28	**29**	1	7
Production	Net %	-33	-8	17	-21	-26	-7	8	-12	-30	-29	**6**	35	20
Smoothed	Net %	-29	-8	14	-16	-18	-8	-4	-11	-24	-18	**-12**	6	17
Domestic sales	Net %	-38	-11	15	-19	-36	-22	-1	-16	-30	-28	**8**	36	21
Smoothed	Net %	-34	-11	12	-20	-26	-20	-13	-16	-25	-17	**-10**	7	17
Export sales	Net %	-32	-14	4	-7	-23	11	21	-11	-11	-28	**2**	30	17
Smoothed	Net %	-28	-14	0	-17	-6	3	7	0	-17	-12	**-13**	-1	12
Consumer goods														
Confidence	%	25	39	54	21	15	16	27	25	36	37	**45**	8	9
Smoothed	%	26	39	52	24	17	19	23	29	33	39	**41**	2	7
Production	Net %	-20	-1	18	-33	-32	-10	1	-11	9	-23	**20**	43	18
Smoothed	Net %	-16	-1	15	-24	-25	-14	-7	0	-8	2	**-2**	-4	13
Domestic sales	Net %	-24	-2	20	-23	-38	-7	-12	5	17	-4	**18**	22	19
Smoothed	Net %	-20	-2	17	-22	-23	-19	-5	3	6	10	**7**	-3	13
Export sales	Net %	-28	-10	8	-21	-35	7	-12	-6	13	-1	**0**	1	17
Smoothed	Net %	-25	-10	5	-20	-16	-13	-4	-2	2	4	**-1**	-5	12

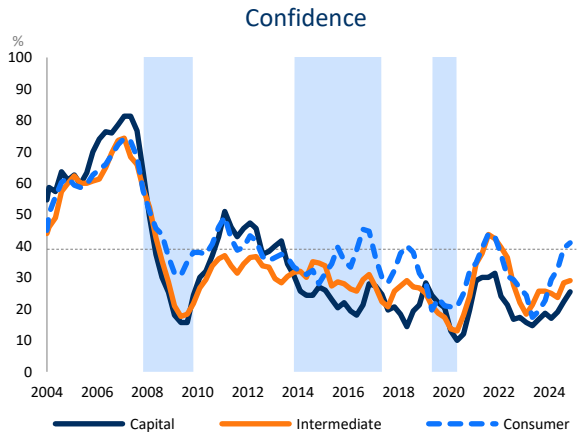
[3] Capital goods: Structural metal products (SIC code 353-4), general purpose machinery (356), special purpose machinery & machine tools (357), electrical motors & generators (361), medical appliances, photo equipment (374-6), motor vehicles & bodies (381-2), parts & accessories (383), other transport equipment (384-7)

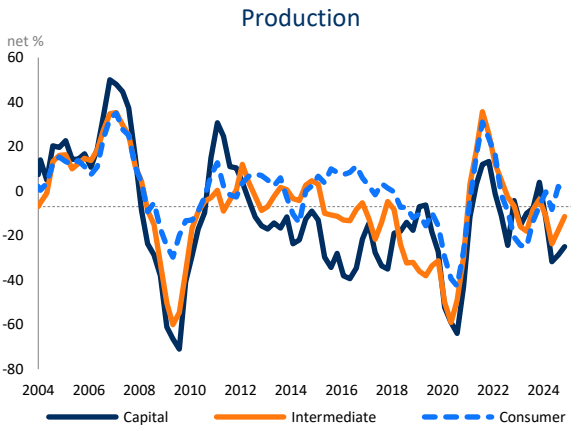
[4] Intermediary goods: Grain mill products, starches & animal feeds (303), spinning, weaving & finishing of textiles, yarns (311), knitted & crocheted fabrics (313), sawmilling, preserving of timber, bark grinding & compressing (321), wood & wood products (322), paper and products (323), basic chemicals (334), rubber (337), plastic products (338), glass & glass products, fibreglass (341), other non-metal mineral products (bricks, tiles, cement, prefab concrete, asphalt, mica products) (342), basic iron & steel (351), basic precious (gold, platinum, silver) & non-ferrous metal (aluminium, copper, lead, nickel, tin, zinc) products (352), other fabricated metal products (355), electrical distribution & control apparatus (362), wire & cable (363), batteries, electrical bulbs & other (364-6)

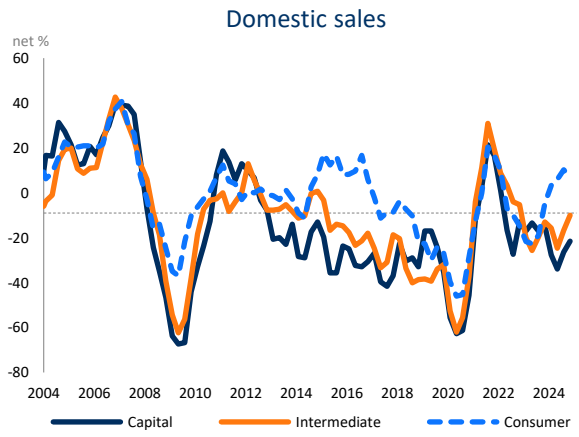
[5] Consumer goods: Meat, fish, fruit, vegetables, oils & fats (301), dairy products (302), other (304), beverages (305), tobacco (306), other textiles (312), wearing apparel & articles of fur (314-5), leather (316), footwear (317), other chemical products (335-6), computers & office machines, household appliances (358-9), TV, radio & communication equipment (371-3), furniture (391), other (e.g. jewellery, musical instruments, games & toys, recycling NOT COVERED) (392)

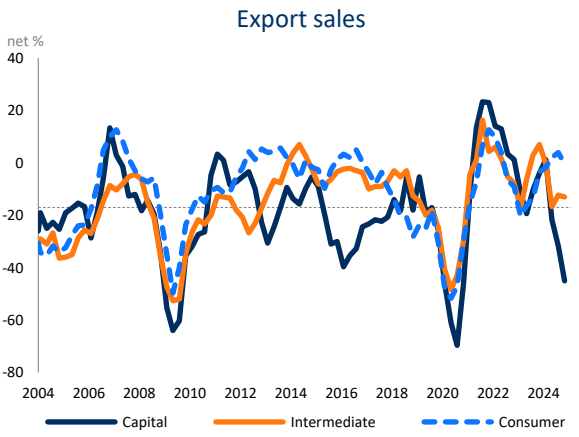
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

CAPITAL, INTERMEDIARY AND CONSUMER GOODS





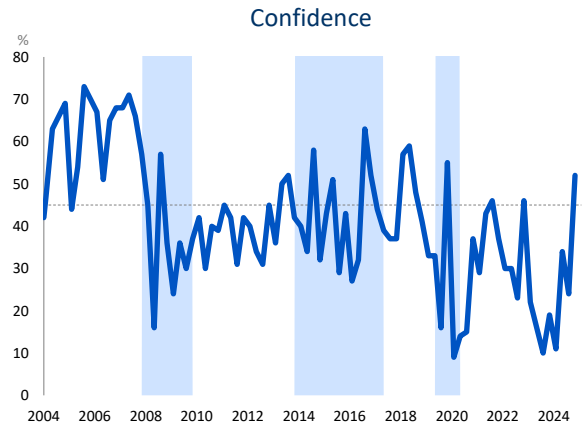


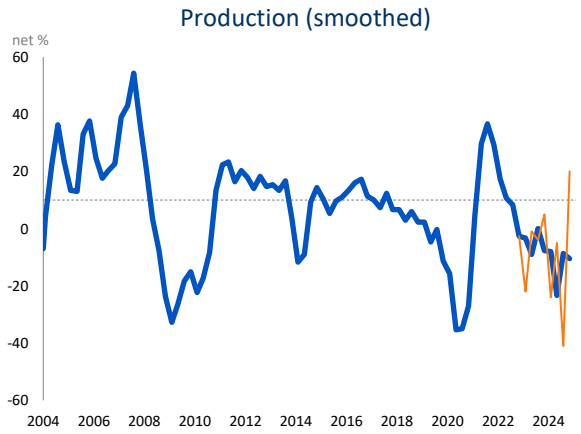


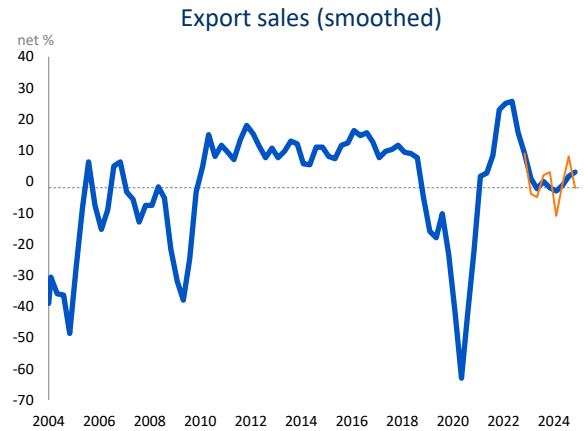
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

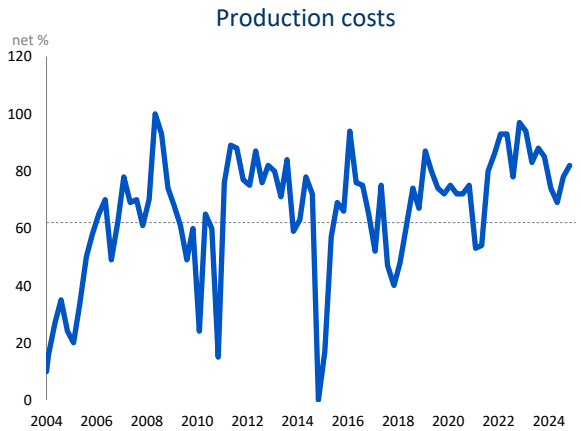
FOOD AND BEVERAGES[6]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	25	40	56	22	16	10	19	11	34	24	**52**	28	15
Production	Net %	-17	6	29	-22	-1	-4	5	-24	-5	-41	**20**	61	24
Smoothed	Net %	-12	6	25	-3	-9	0	-8	-8	-23	-9	**-11**	-2	16
Export sales	Net %	-21	0	21	-4	-5	2	3	-11	-1	8	**-2**	-10	21
Smoothed	Net %	-16	0	17	1	-2	0	-2	-3	-1	2	**3**	1	15
Production costs	Net %	49	68	88	94	83	88	85	74	69	78	**82**	4	18
Business conditions in 12m	Net %	-32	-10	12	-18	-53	-27	-36	-70	-36	-26	**13**	39	23







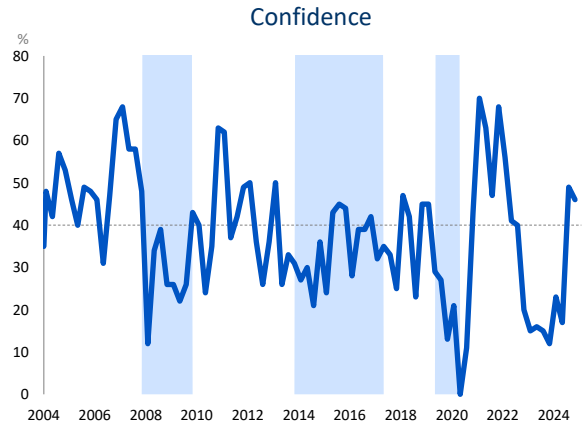


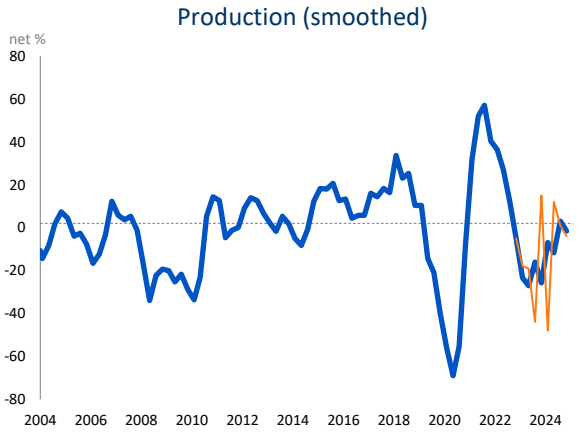
[6] Food & Beverages: Meat, fish, vegetables, oils & fats (SIC code 301), dairy products (302), grain mill products, starches & animal feeds (303), other food (304) and beverages (305). In 2017, this sector contributed 28.4% to production and 11.1% to manufactured exports, petroleum and other excluded in both cases. We recommend that users attach more weight to the trend (smoothed series) than a single data point, as the correlation between the survey production data and reference series is low.

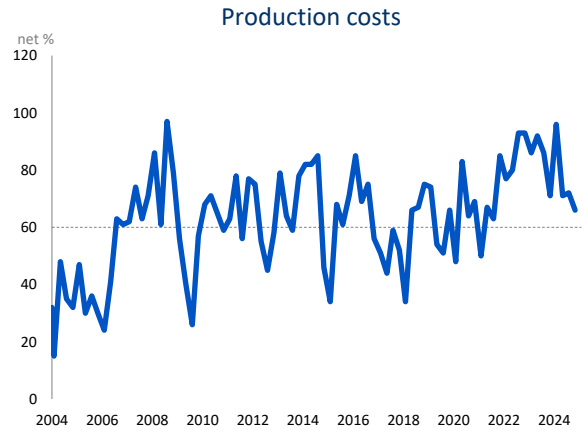
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

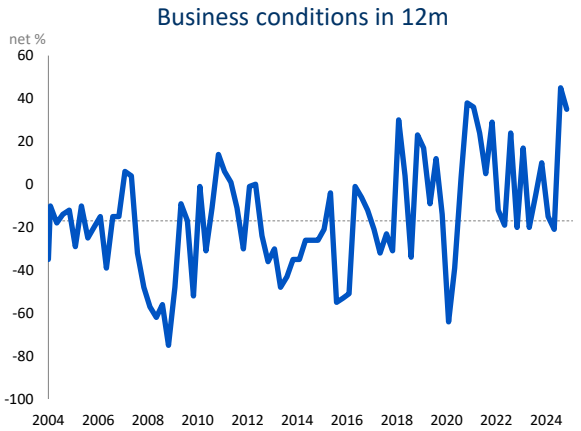
TEXTILES, CLOTHING LEATHER AND FOOTWEAR[7]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	22	37	52	15	16	15	12	23	17	49	**46**	-3	14
Production	Net %	-29	-1	28	-18	-19	-44	15	-48	12	1	**-4**	-5	28
Smoothed	Net %	-23	-1	22	-23	-27	-16	-26	-7	-12	3	**-2**	-5	21
Production costs	Net %	48	65	82	86	92	86	71	96	71	72	**66**	-6	16
Business conditions in 12m	Net %	-42	-15	11	17	-20	-5	10	-15	-21	45	**35**	-10	26







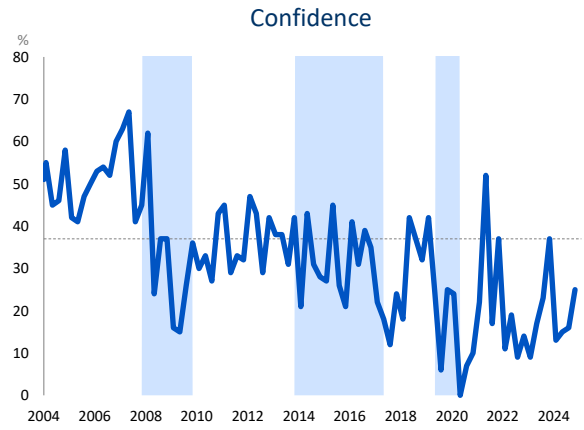


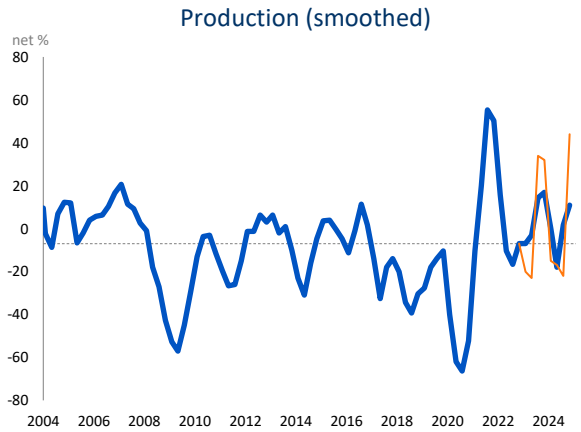
[7] Textiles, Clothing, Footwear & Leather: spinning, weaving & finishing of textiles, yarns (SIC code 311), other textiles (312), knitted & crocheted fabrics (313), wearing apparel & articles of fur (314-5), leather (316) and footwear (317). In 2017, this sector contributed 3.7% to production excluding petroleum and other.

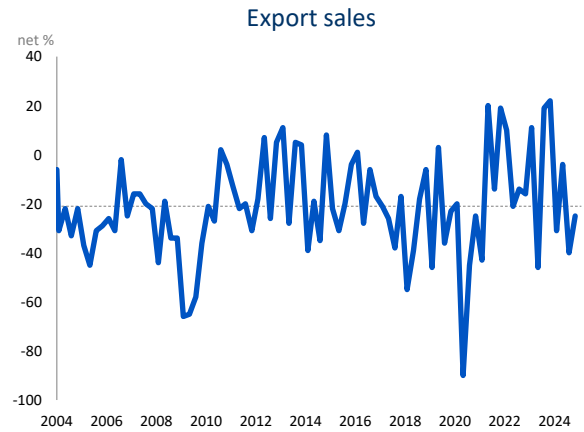
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

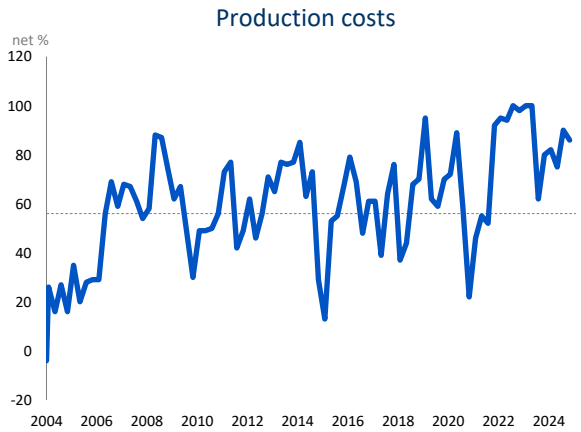
WOOD, PAPER, PRINTING AND PUBLISHING[8]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	17	31	46	9	17	23	37	13	15	16	**25**	9	14
Production	Net %	-38	-10	19	-20	-23	34	32	-15	-17	-22	**44**	66	30
Smoothed	Net %	-31	-9	13	-7	-3	14	17	0	-18	2	**11**	9	23
Export sales	Net %	-42	-21	0	11	-46	19	22	-31	-4	-40	**-25**	15	27
Production costs	Net %	43	63	83	100	100	62	80	82	75	90	**86**	-4	18
Business conditions in 12m	Net %	-37	-13	10	-47	-57	-29	-33	-64	-19	9	**0**	-9	27







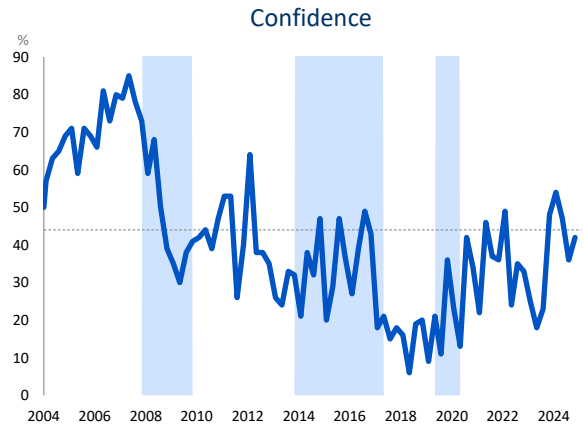


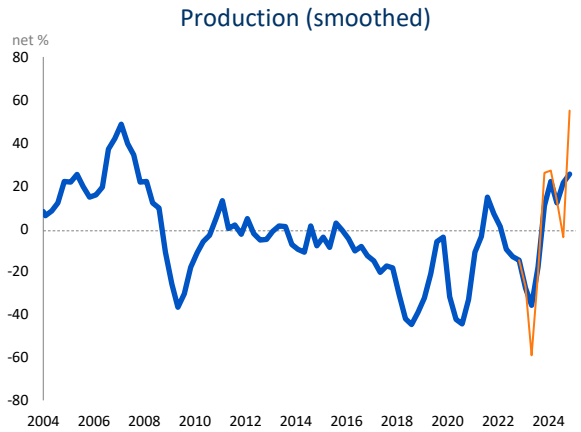
[8] Wood, Paper, Printing & Publishing: sawmilling, preserving of timber, bark grinding & compressing (SIC code 321), wood & wood products (322), paper and products (323) and printing, publishing & recorded media (324-6). In 2017, this sector contributed 13.1% to production and 4.7% to manufactured exports, petroleum and other excluded in both cases. We recommend that users attach more weight to the trend (smoothed series) than a single data point, as the correlation between the survey production data and reference series is low.

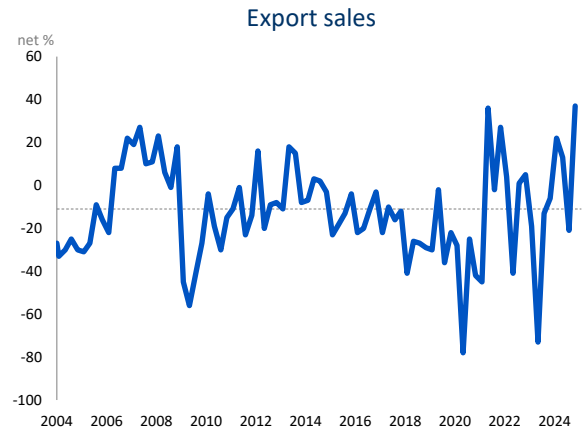
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

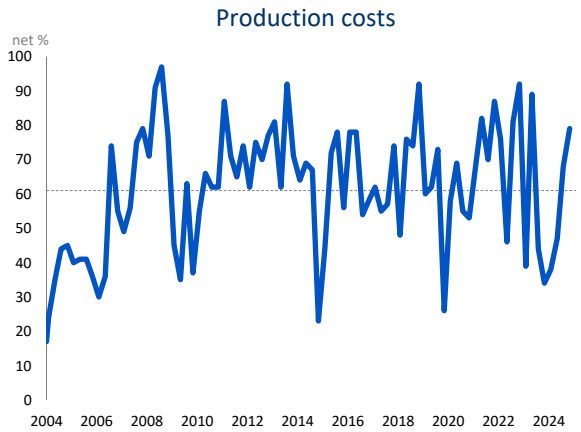
CHEMICAL, RUBBER AND PLASTIC PRODUCTS[9]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	21	40	59	25	18	23	48	54	47	36	**42**	6	12
Production	Net %	-30	-3	23	-27	-59	-21	26	27	13	-4	**55**	59	25
Smoothed	Net %	-25	-4	17	-28	-36	-18	11	22	12	21	**26**	5	16
Export sales	Net %	-34	-11	11	-19	-73	-13	-6	22	13	-21	**37**	58	25
Production costs	Net %	46	63	80	39	89	44	34	38	47	68	**79**	11	20
Business conditions in 12m	Net %	-37	-11	15	-41	-68	-53	-3	3	-21	13	**24**	11	23







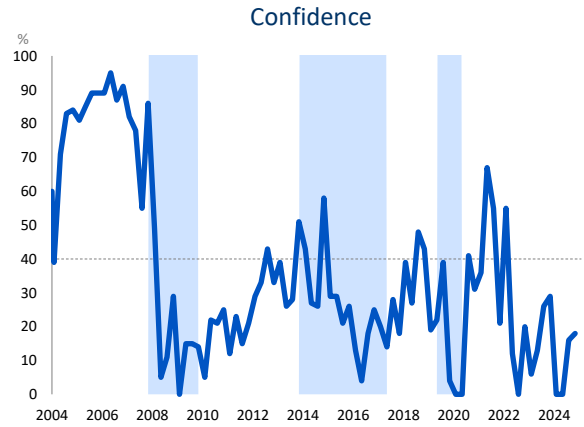


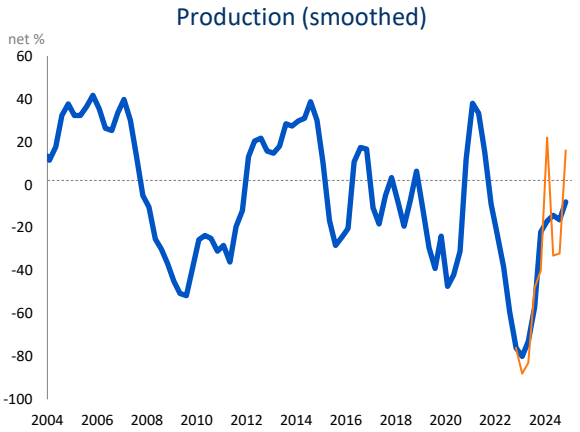
[9] Chemicals, Rubber & Plastics: Refined petroleum & coke (SIC code 331-3) (NOT COVERED), basic chemicals (334), other chemical products (335-6), rubber (337) and plastics (338). In 2017, this sector contributed 16.6% to production and 15.4% to manufactured exports, petroleum and other excluded in both cases. We recommend that users attach more weight to the trend (smoothed series) than a single data point, as the correlation between the survey production data and reference series is low.

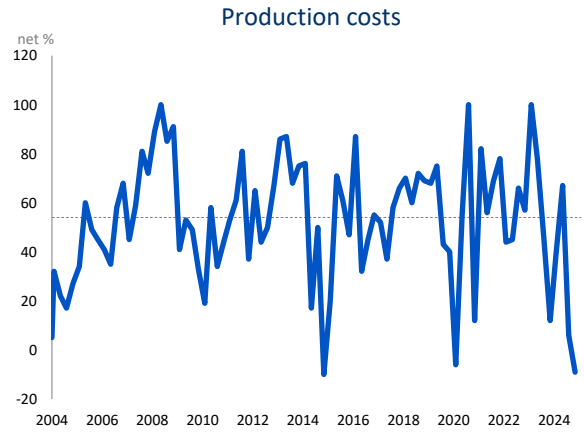
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

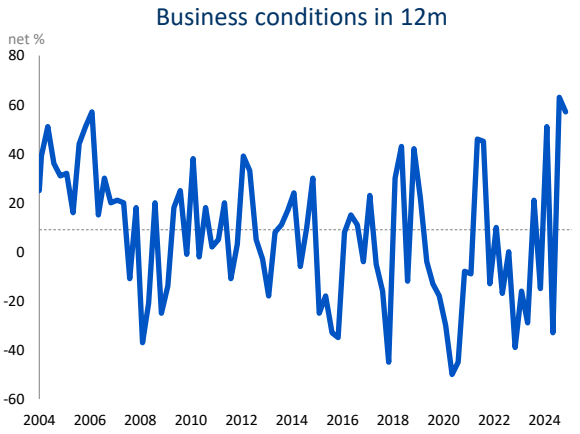
GLASS AND NON-METALLIC MINERAL PRODUCTS[10]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	7	33	59	6	13	26	29	0	0	16	**18**	2	17
Production	Net %	-44	-7	29	-88	-83	-48	-40	22	-33	-32	**16**	48	32
Smoothed	Net %	-38	-7	24	-80	-73	-57	-22	-17	-14	-16	**-8**	8	23
Production costs	Net %	30	55	79	100	78	46	12	40	67	6	**-9**	-15	29
Business conditions in 12m	Net %	-21	6	33	-16	-29	21	-15	51	-33	63	**57**	-6	32







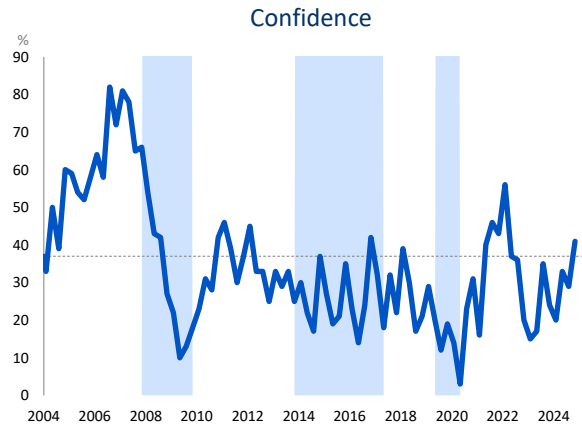


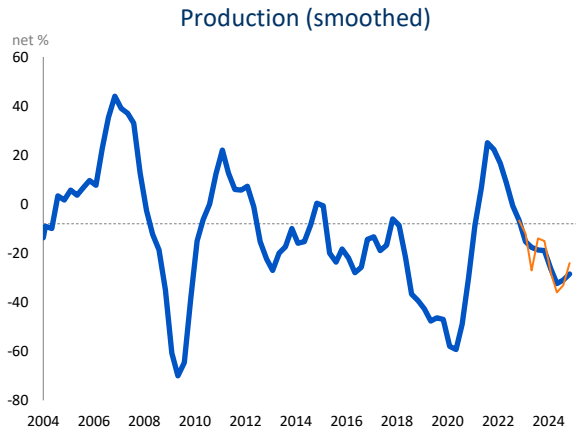
[10] Glass & Non-metallic minerals: Glass & glass products, fibreglass (SIC code 341), other non-metallic mineral products (bricks, tiles, cement, prefab concrete, asphalt, mica products) (342). In 2017, this sector contributed 4.4% to production, excluding petroleum and other.

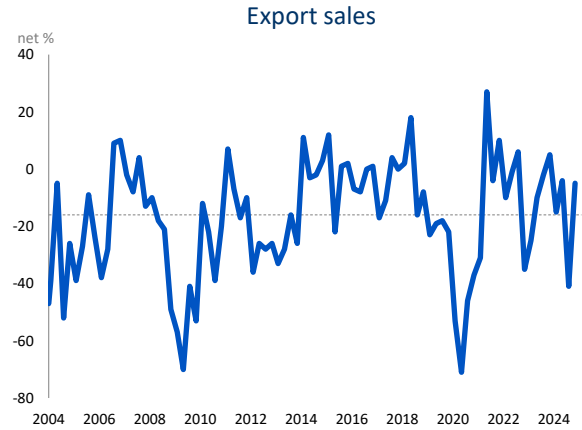
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

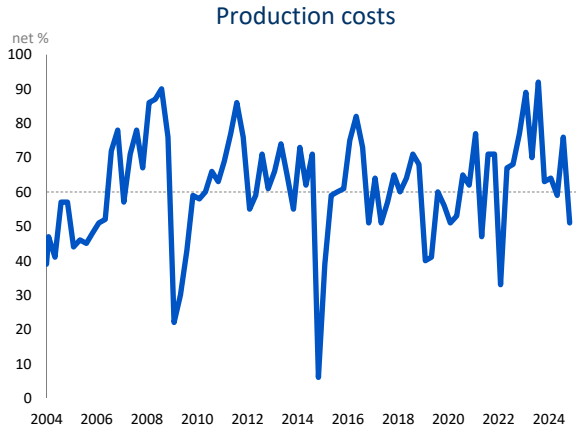
BASIC METALS, METAL PRODUCTS AND MACHINERY[11]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	17	34	51	15	17	35	24	20	33	29	**41**	12	10
Production	Net %	-41	-12	16	-12	-27	-14	-15	-28	-36	-33	**-24**	9	22
Smoothed	Net %	-37	-12	13	-15	-18	-19	-19	-26	-32	-31	**-29**	2	18
Export sales	Net %	-36	-16	4	-25	-10	-2	5	-15	-4	-41	**-5**	36	19
Production costs	Net %	47	62	78	89	70	92	63	64	59	76	**51**	-25	17
Business conditions in 12m	Net %	-41	-20	2	-72	-58	-19	-42	-52	-15	-3	**-24**	-21	18







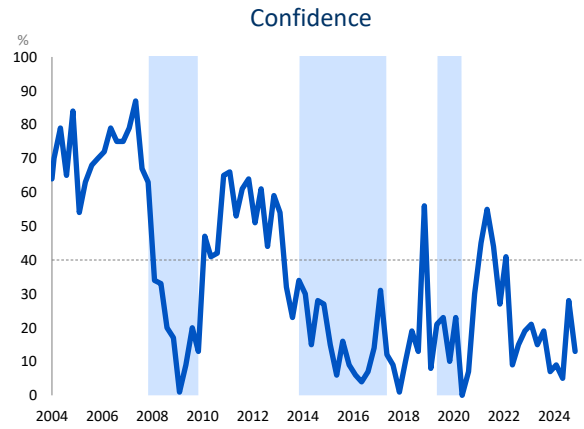


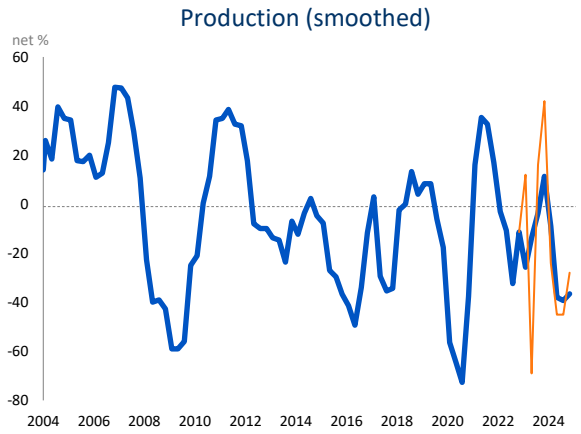
[11] Basic metals, Metal Products & Machinery: Basic iron & steel (SIC code 351), basic precious (gold, platinum, silver) & non-ferrous metal (aluminium, copper, lead, nickel, tin, zinc) products (352), structural metal products (353-4), other fabricated metal products (355), general purpose machinery (356), special purpose machinery & machine tools (357), computers & office machines (358) and household appliances (359). In 2017, this sector contributed 21.1% to production and 42.5% to manufactured exports, petroleum and other excluded in both cases.

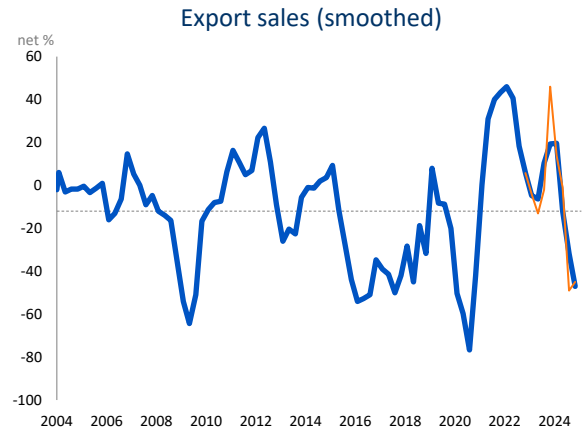
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

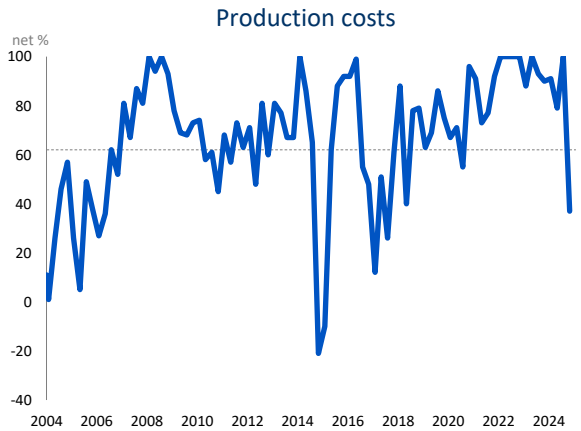
MOTOR VEHICLES, PARTS AND TRANSPORT EQUIPMENT[12]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	9	33	57	21	15	19	7	9	5	28	**13**	-15	15
Production	Net %	-46	-8	30	12	-69	16	42	-24	-45	-45	**-28**	17	41
Smoothed	Net %	-37	-8	21	-26	-14	-4	11	-9	-38	-39	**-37**	2	27
Export sales	Net %	-47	-12	23	-4	-13	-2	46	14	-1	-49	**-45**	4	39
Smoothed	Net %	-39	-12	15	-5	-6	10	19	20	-12	-32	**-47**	-15	24
Production costs	Net %	43	69	95	88	100	93	90	91	79	100	**37**	-63	24
Business conditions in 12m	Net %	-57	-24	9	-45	-90	-62	-69	-83	-58	10	**-18**	-28	30







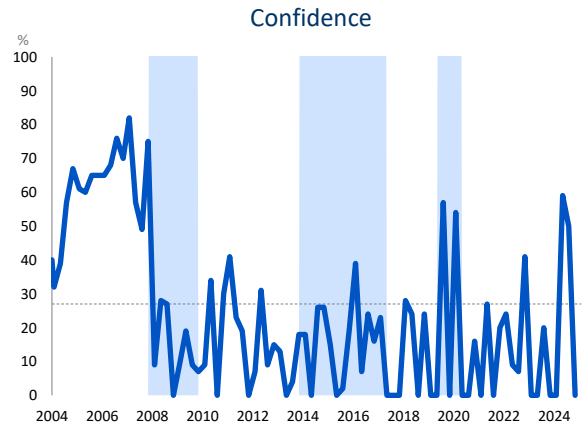


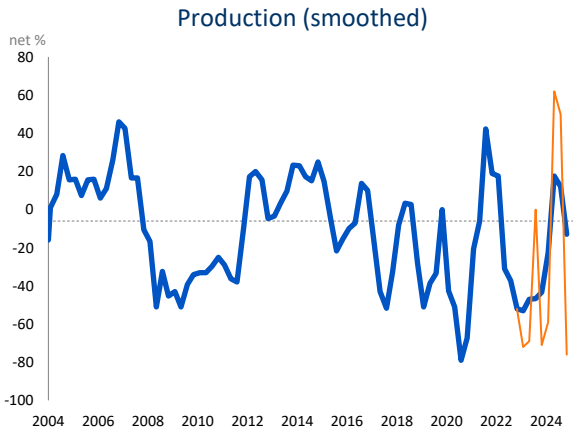
[12] Transport equipment: Motor vehicles & bodies (SIC code 381-2), parts & accessories (383), other transport equipment (384-7). In 2017, this sector contributed 7.7% to production and 16.1% to manufactured exports, petroleum and other excluded in both cases.

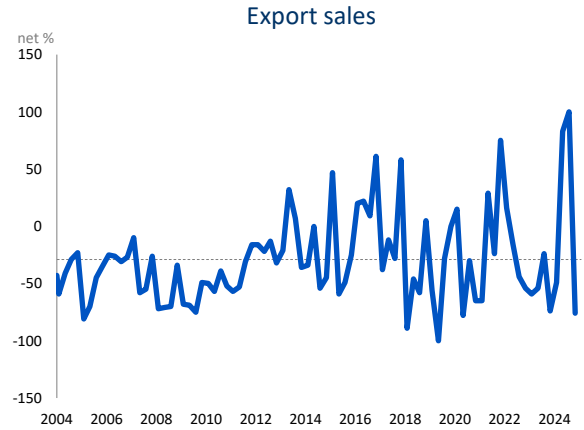
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

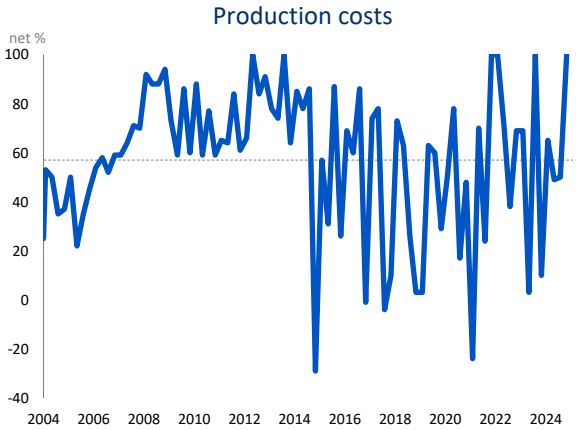
FURNITURE AND OTHER[13]

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Confidence	%	-1	23	46	0	0	20	0	0	59	50	**0**	-50	23
Production	Net %	-55	-13	29	-72	-69	0	-71	-59	62	50	**-76**	-126	52
Smoothed	Net %	-41	-12	16	-53	-47	-47	-43	-23	18	12	**-13**	-25	28
Export sales	Net %	-70	-29	11	-59	-54	-24	-74	-49	83	100	**-76**	-176	50
Production costs	Net %	29	59	89	69	3	100	10	65	49	50	**100**	50	41
Business conditions in 12m	Net %	-58	-21	16	-80	-100	20	-16	-69	-28	0	**100**	100	42







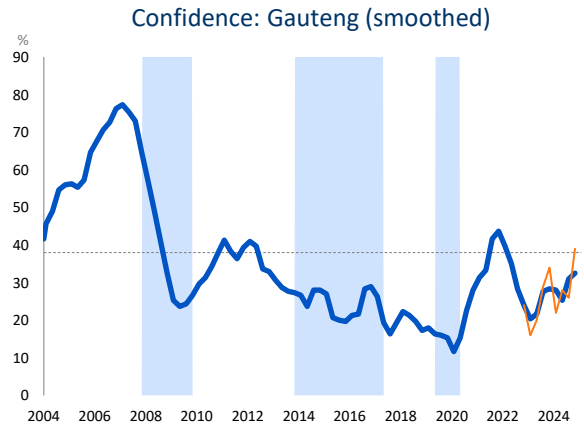


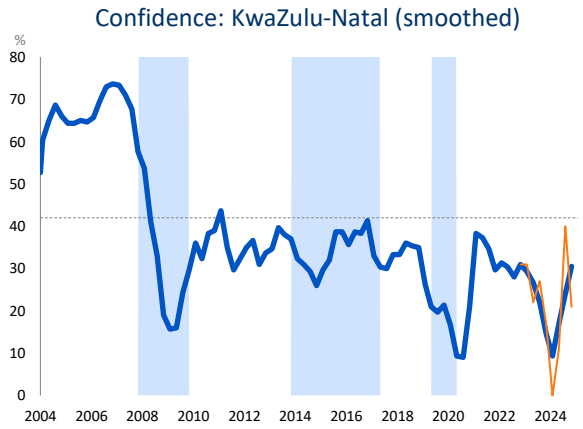
[13] Furniture & Other: Furniture (SIC code 391), other (e.g. jewellery, musical instruments, games & toys, recycling NOT COVERED) (392), tobacco (306). In 2017, this sector contributed 1.2% to production and 1.0% to manufactured exports, petroleum and other excluded in both cases. We recommend that users attach more weight to the trend (smoothed series) than a single data point, as the correlation between the survey production and export data vis-à-vis the reference series is low.

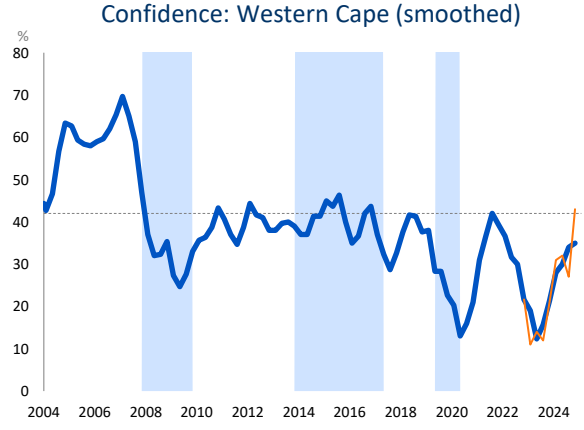
μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

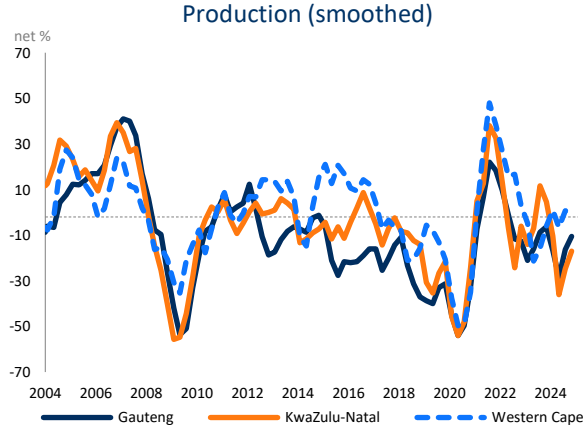
BY PROVINCE

Indicator	Unit	μ-σ	μ	μ+σ	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4	Δ	Δσ
Gauteng														
Confidence	%	17	34	52	16	20	29	34	22	28	26	**39**	13	8
Smoothed	%	18	34	51	20	22	28	28	28	25	31	**33**	2	7
Production	Net %	-34	-10	15	-14	-37	3	8	-30	-28	-27	**6**	33	19
Smoothed	Net %	-31	-10	12	-21	-16	-9	-6	-17	-28	-16	**-11**	5	15
KwaZulu-Natal														
Confidence	%	18	36	53	31	22	27	17	0	11	40	**21**	-19	12
Smoothed	%	20	36	52	29	27	22	15	9	17	24	**31**	7	9
Production	Net %	-33	-6	22	3	-29	5	59	-50	-40	-18	**-16**	2	30
Smoothed	Net %	-27	-6	16	-14	-7	12	5	-10	-36	-25	**-17**	8	18
Western Cape														
Confidence	%	24	38	52	11	14	12	21	31	32	27	**43**	16	11
Smoothed	%	26	38	50	19	12	16	21	28	30	34	**35**	1	8
Production	Net %	-23	0	23	-20	-22	-22	-3	7	-1	-26	**29**	55	23
Smoothed	Net %	-18	0	18	-5	-21	-16	-6	1	-7	1	**2**	1	17









μ – average
σ – standard deviation
Δ – change from previous period
σ_Δ – volatility (standard deviation of the changes)
All of the above calculated over the last 20 years
See technical note for further details

Technical note

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 sales, production, employment, selling prices, capacity utilisation, investment etc. (for which official figures are published), but also provide unique information, such as business confidence, business conditions, constraints 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.

THE SURVEY METHOD

The survey results are obtained from questionnaires completed by senior executives in the trade, manufacturing and building sector 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 production 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. 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.

To provide for widely differing sizes, each firm in the manufacturing and trade 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.

The BER conducted its first survey of the manufacturing and trade (i.e. retail, wholesale and motor trade) sectors in 1954. The sector coverage was expanded to the building sector (i.e. main contractors and sub-contractors) in 1969. Architects, quantity surveyors and civil engineering contractors were added later to the building survey.

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

THE UNIQUE UNITS OF MEASUREMENT OF QUALITATIVE SURVEYS

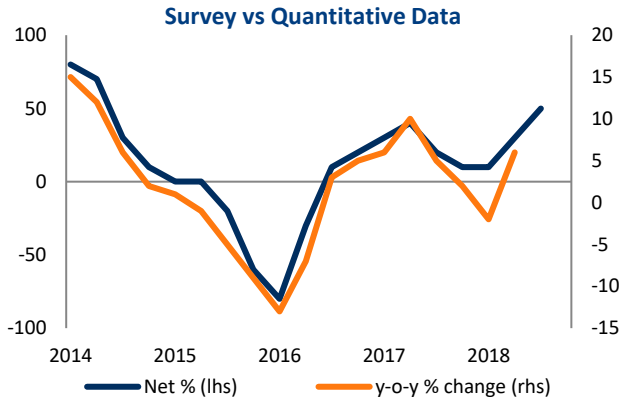
Net percentage (net %)

The responses related to the change in production, prices, employment, business conditions etc. are presented as a "net percentage" (also called a "net balance" or a "net majority"). If, for example, the percentages of respondents rating production 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 production. The net percentage is calculated as the percentage of respondents rating "production" 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 production compared to a year ago. Take note that this does not mean a year-on-year contraction of 10%. It only means that the production 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).



Percentage (%)

The responses relating to business confidence and constraints are presented as percentages.

In the case of business confidence, 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.

In the case of the constraints, respondents have to rate if a particular issue – for instance, a shortage of skilled labour – "seriously", "slightly" or "not at all" hampers their activity. Composite constraint indices are calculated by weighting the responses as follows: The answers of respondents rating a particular constraint as "serious" are weighted by 0.67%; "slightly" by 0.33% and "not a constraint at all" are discarded. The results are then multiplied by 100/67 = 1.49 to convert it to an index that can vary between zero and 100.

Care must be taken when making inferences from the constraints indices given that the list of constraints (issues) remains unchanged over time. Each constraint ought to be analysed relative to its own historical performance rather than comparing the ratings of the different constraints at a specific point in time. The latter inference would be more appropriate if respondents had to list all issues hampering their activity at a particular point in time and rank them in order of their impact.

Theoretically, the confidence and constraints series can vary between a minimum of zero and a maximum of 100. A value of zero would reflect an extreme lack of confidence/no limitation at all and 100 extreme confidence/complete limitation. 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.