THE REAL ECONOMY BULLETIN

TRENDS, DEVELOPMENTS AND DATA

FIRST QUARTER 2023

The Real Economy Bulletin is a TIPS review of quarterly trends, developments and data in the real economy, together with a comprehensive analysis of the main manufacturing industries and key data in Excel format.*

GDP growth

The economy grew by 0.4% in the first quarter of 2023, reversing the decline in the previous quarter. Still, the growth is slow, so the economy grew only 0.2% in the year to March 2023. Lower export prices and pro-cyclical fiscal and monetary stances were compounded by loadshedding. National electricity generation is now around 25% below 2007 levels. That said, Eskom increased generation by 7% in March and April, and auto sales were up by 29% for the quarter.

The GDP grew 0.4% in the first quarter of 2023, with the decline in the previous quarter revised from the originally reported 1.4% to 1.1%. (Graph 1) Still, GDP growth for the year to the first quarter was near zero. Moreover, in the first quarter of 2023 the economy was only 0.2% larger than in the first quarter of 2020, just before the pandemic lockdown. (Graph 2) In other words, the pandemic essentially cost South Africa three years of economic growth. That means production per person is down by around 3%, as population growth has also slowed to just over 1% annually.

Growth has remained extraordinarily volatile since the pandemic, as shown in Graph 2. The recovery has been marked by substantial swings in quarteron-quarter figures within the trend toward slower growth overall.

*Available at www.tips.org.za/ the-real-economy-bulletin

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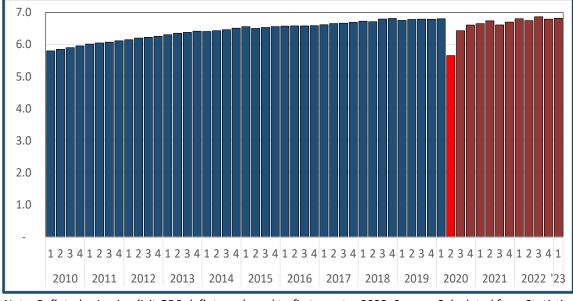
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Graph 1. Quarterly change in GDP, seasonally adjusted, 1994 to first quarter 2023

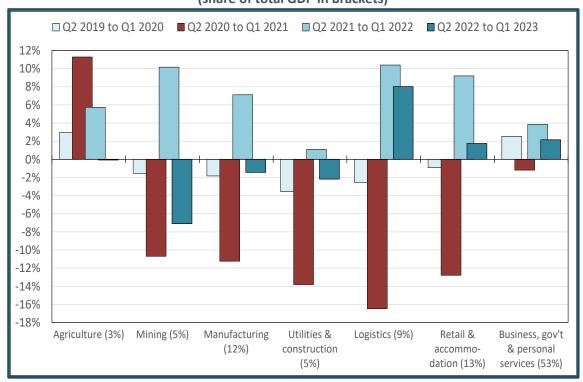
Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2023Q1. Excel spreadsheet.



Graph 2. Quarterly GDP in trillions of constant (2023) rand (a) from 2010

Note: Reflated using implicit GDP deflator rebased to first quarter 2023. Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2023Q1. Excel spreadsheet.

Growth in the first quarter of 2023 was driven primarily by manufacturing and business services. Still, over the two years to March 2023, the real economy saw recovery stall. Relatively rapid growth in 2021/22 following the pandemic downturn gave way to near-zero expansion in the next two years. In contrast, logistics and other services continued to grow in the year to March 2023, although at a slower rate than in 2021. (Graph 3)



Graph 3. Annual growth in gross value added by sector, year to March, 2020 to 2023 (share of total GDP in brackets)

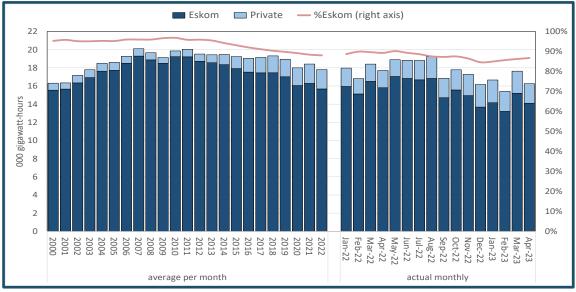
Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2023Q1. Excel spreadsheet.

Slow growth reflected deep-seated structural constraints in South Africa, aggravated by international economic and political volatility. Heavy and prolonged loadshedding and falling export prices proved particularly damaging. They were aggravated by pro-cyclical fiscal and monetary policies; the latter is discussed in the briefing note *Why inflation targeting does not work in a highly unequal country* (see page 22).

The very high levels of loadshedding over the course of 2022 inevitably undermined growth. As Graph 4 shows, the national electricity supply reached a low point in February 2023, at 8% below a year earlier. It was around 25% lower than the monthly average in 2007, when South Africa's electricity supply peaked. In March and April, Eskom's electricity supply recovered by 7% over the previous two months. Nonetheless, in April 2023, Eskom's electricity output for distribution was more than 10% lower than a year earlier, and 27% under the monthly average in 2007. Moreover, private generation fell slightly in the first four months of 2023. Still, in April 2023 it was 14% higher than a year earlier, and exceeded its 2007 levels by over 150%.

Loadshedding let Eskom effectively externalise the cost of its inability to maintain generation. That made it difficult to measure the full impact. It entailed a wide range of social and economic harms, ranging from breakdowns in substations and production equipment to traffic jams as robots failed and night-shift workers like nurses made their way home in the dark.

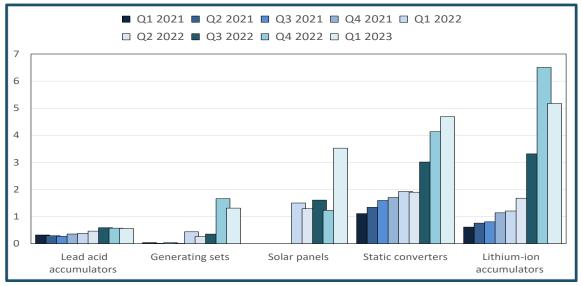
Graph 4. Electricity available for distribution in GWh and share of Eskom in total electricity supply through the national grid, average of monthly figures from 2000 to 2022 and monthly from April 2022 to April 2023



Source: Calculated from Statistics South Africa. P4141. Electricity generated and available for distribution. Excel spreadsheet.

The costs of loadshedding were illustrated by soaring imports for electrical equipment, with the bulk apparently for renewable energy. As Graph 5 shows, the value of imports used in generating or storing electricity doubled from mid-2022. Diesel imports also climbed sharply, but in part the increase reflected a sharp fall in domestic refining capacity. As a result, diesel imports largely replaced crude oil, making it difficult to evaluate the amounts used for generation by Eskom and private users. A similar surge emerged in imports of electrical equipment, with the bulk apparently going for renewable energy, as Graph 5 shows.

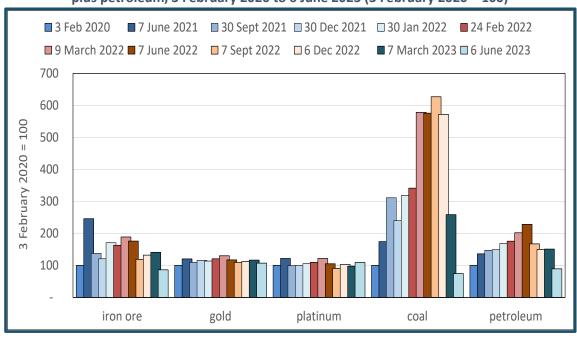
Graph 5. Quarterly imports of electrical equipment, first quarter 2021 to first quarter 2023, in billions of constant 2023 Rand



Note: (a) Reflated with CPI rebased to 2023. (b) Trade data was not reported for solar panels for 2021.

Source: Calculated from South African Revenue Service data.

Through mid-2023, export prices continued to decline for most of South Africa's dominant mining exports with the exception of gold, as Gra[h 6 shows. Minerals and metals still account for over half of South Africa's total exports. Their prices surged immediately after the pandemic, and then again after Russia's brutal invasion of Ukraine. Coal showed the steepest spike by far, but from late 2022 to mid-2023 fell back below pre-pandemic levels. Iron ore also fell below its February 2020 levels. The loss of export revenue was offset in part by a steep fall in the price of petroleum, reflecting slower than expected global growth as well as the price cap imposed by Europe and the United States on Russian oil exports. The disappointing recovery in China and rising interest rates in the Global North helped burst the speculative bubbles that boosted commodities prices during the pandemic and the invasion of Ukraine.



Graph 6. Indices of current US dollar prices for South Africa's leading exports plus petroleum, 3 February 2020 to 6 June 2023 (3 February 2020 = 100)

Source: Trading Economics. Interactive database. Accessed at https://tradingeconomics.com/commodities on 7 March 2023

The soaring coal price bolstered South Africa's trade surplus in 2022, and its fall was an important factor behind its dissipation, as discussed in the section on international trade below.

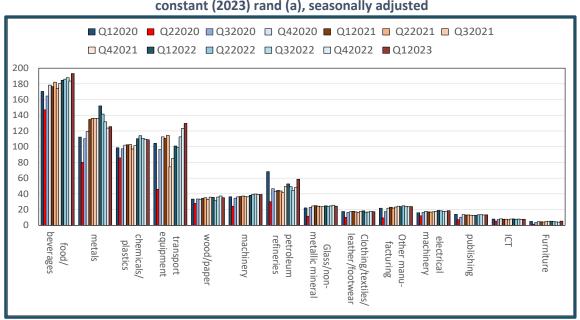
The picture for manufacturing in the first quarter of 2023 proved mixed. Although manufacturing value added stagnated, its gross sales have grown in constant rand terms for the past six quarters. In 2023 rand, manufacturing sales grew by 3% in the first quarter of 2023, climbing to R807.8 billion from R780.6 billion in the previous quarter. Overall, manufacturing sales are 10% higher than in the first quarter of 2020, before the pandemic, and have recovered some 60% above the pandemic low in the second quarter of 2020. (Gra[h 7)

6 7 8 9 101112 1 2 3 4 5 6 7 8 9 101112 1 2 3 4 5 6 7 8 9 20112 2 3 4 5 6 7 8 9 101112 1 2 3

Graph 7. Monthly manufacturing sales in billions of constant (2023) rand (a), seasonally adjusted, January 2020 to March 2023

Note: (a) Reflated with CPI. Source: Calculated from Statistics South Africa. Manufacturing: Production and Sales, May 2023. P3041.2.

In real terms, transport equipment sales were the main driver of growth for manufacturing sales in the year to the first quarter of 2023. They climbed some 29% to R130 billion over this period. However, the impact of this growth was diminished by a decline in the value of metals sales, from R152 billion to R126 billion in the year to the first quarter of 2023, mostly due to lower global prices. Sales of food and beverages grew over this period, from R185 billion to R193 billion, as did petroleum products, from R53 billion to R59 billion.

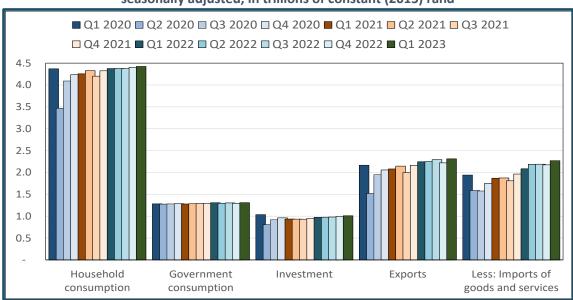


Graph 8. Quarterly sales by manufacturing industry in billions of constant (2023) rand (a), seasonally adjusted

Note: (a) Reflated with CPI. Source: Calculated from Statistics South Africa.

Manufacturing: Production and Sales, March

In terms of expenditure, household and government consumption and increased investment all contributed to the modest growth. The surging deficit in goods and services trade was the main drag. (Graph 9) As noted, the trade deficit was affected on the one hand by rising imports of equipment to deal with loadshedding, and on the other by falling commodity prices, and in particular the slump in coal. While government consumption spending increased 1.2% for the quarter, in year-on-year terms it remained almost flat. The increase in investment was driven almost exclusively by the public sector, as discussed in the relevant section below.



Graph 9. Quarterly expenditure on GDP, first quarter 2020 to first quarter 2023, seasonally adjusted, in trillions of constant (2015) rand

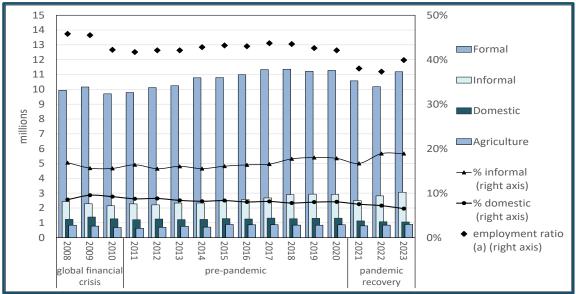
Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2021Q4. Excel spreadsheet.

Employment

Total employment remains lower than in the first quarter of 2020, before the pandemic, mostly because of extraordinary shrinkage in domestic work as well as a very slow recovery in formal employment, primarily for skilled production workers. That said, in the year to the first quarter of 2023, formal employment grew faster than informal employment for the first time since the pandemic lockdown in 2020. The loss of domestic work means that women have suffered disproportionately from the loss of jobs during the pandemic. In the year to the first quarter of 2023, within manufacturing, metals, transport equipment and clothing saw significant employment gains, but food processing faced job losses.

In the year to the first quarter of 2023, total employment increased by 1.3 million, or 8%, to reach 16.2 million jobs. Excluding domestic work, 70 000 more people had employment in the first quarter of 2023 than three years earlier, just before the pandemic. That represented a net gain of 0.5% in total employment. Domestic work, however, lost almost one in five positions after the lockdown in March 2020, declining by 290 000. Including domestic work, there are almost 200 000 fewer employment opportunities, or 1.2%, than before the pandemic. The sharp decline in domestic work meant women bore the brunt of the pandemic job losses.

Graph 10. Formal, informal, domestic and agricultural employment in millions, with the employment ratio (a) and share of informal and domestic work in total employment, first quarter 2008 to 2023

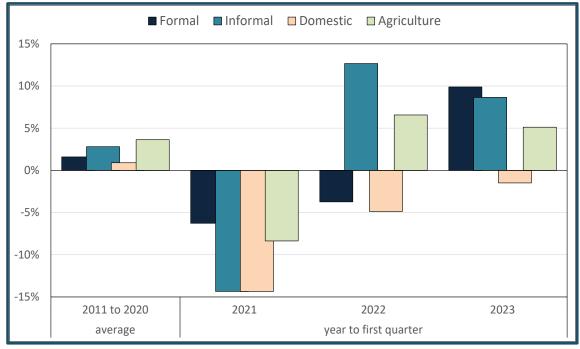


Note: (a) Employed as percentage of total working aged. Source: Calculated from Statistics South Africa.

Quarterly Labour Force survey (QLFS) Trends 2008-2023Q1. Excel spreadsheet.

The past year saw a surge in formal employment, which had declined more gradually than informal work but also recovered more slowly. As a result, the formal sector saw a net gain in jobs for the first time since the pandemic.

Graph 11. Percentage change in employment by sector, first quarter, average for 2010 to 2020 and actual percentage change in year to first quarter for 2001 to 2023



Source: Calculated from Statistics South Africa. QLFS Trends 2008-2023Q1. Excel spreadsheet.

In the real economy, employment increased by 280 000 over the year to the first quarter of 2023. (Graph 12) Construction saw the largest year-on-year growth, adding 130 000 new jobs. Manufacturing saw a net increase of 70 000 jobs in the year to the first quarter of 2023.

Utilities Other (right axis) Agriculture Manufacturing Construction 7 000 6 000 5 000 thousands 4 000 3 000 2 000 1 000 ō Q1 2022 Q4 2022 202C

Graph 12. Employment in agriculture, manufacturing, utilities and construction compared to the rest of the economy, first quarter 2008 to 2023, and first quarter 2023

Source: Calculated from Statistics South Africa. QLFS Trends 2008-2023Q1. Excel spreadsheet.

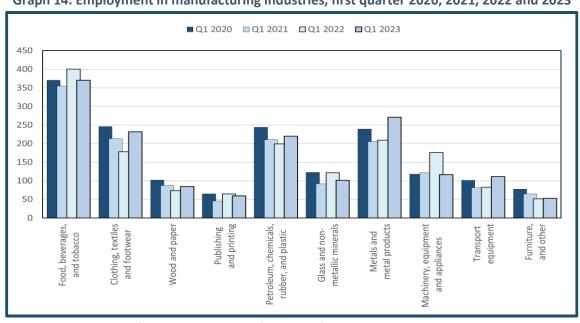
The employment recovery in the formal sector continued to favour higher-level workers, although service and elementary jobs both reported strong recoveries in the past year. Formal managers, professionals and technicians, clerical and sales workers, and elementary workers added around 400 000 jobs each in the year to the first quarter of 2023. As a result, employment for highly skilled workers was up by 205 000 or 6% compared to pre-pandemic days, while elementary employment was up by 3% and service work had fully recovered. In contrast, skilled production workers still faced hard times, with around 334 000 fewer jobs than in the first quarter of 2020, for a loss of 14%, with no net employment gains over the past two years (see Gra[h 13).

Q1 2021 □ Q1 2022 ■ Q1 2020 Q1 2023 4,0 3,5 3,0 2,5 Millions 2,0 1,5 1,0 0,5 managers/profesclerical/service skilled producelementary total total sionals/technicians workers tion workers workers informal domestic

Graph 13. Employment by occupation, first quarter, 2020 to 2023

Source: Calculated from Statistics South Africa. QLFS for relevant quarters. Electronic databases.

Within manufacturing, only metals and metal products and transport equipment showed employment growth from the first quarter of 2020, with slightly more than 40 000 jobs added in both industries in the past three years. These industries added more jobs in the year to the first quarter of 2023 than in the preceding two years. Clothing and textiles reported a sharp recovery over the past year, adding more than 50 000 jobs in the year to the first quarter of 2023, up from a low of 180 000 in the first quarter of 2022. In contrast, food, beverages and tobacco, the largest employer in manufacturing, lost about 30 000 jobs in the year to the first quarter of 2023.



Graph 14. Employment in manufacturing industries, first quarter 2020, 2021, 2022 and 2023

Source: Calculated from Statistics South Africa. QLFS for relevant quarters. Electronic databases.

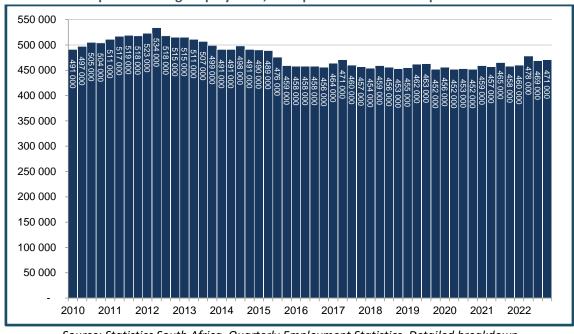
Manufacturing declined slightly as a share of total employment, from 10.6% in the first quarter of 2022 to 10.2% in the first quarter of 2023. Even with jobs gains in some years, the QLFS reports that manufacturing employment has declined significantly since 2008. In the first quarter of 2023, it remained well below pre-pandemic levels.

 Manufacturing $Q1\ 2008 = 100$

Graph 15. Employment in manufacturing and the rest of the economy, first quarter 2008 to the first quarter 2023

Source: Calculated from Statistics South Africa. QLFS for relevant quarters. Electronic databases.

Mining employment reached its highest level (487 000 jobs) in the first quarter of 2022 - the latest reliable data – having fallen from a peak of 534 000 jobs in the second quarter of 2012. The sector had about 471 000 jobs in the fourth quarter of 2022, up about 0.4% over the third quarter of the same year.



Graph 16. Mining employment, first quarter 2010 to first quarter 2023

Source: Statistics South Africa. Quarterly Employment Statistics. Detailed breakdown.

First quarter 2022 Excel spreadsheet.

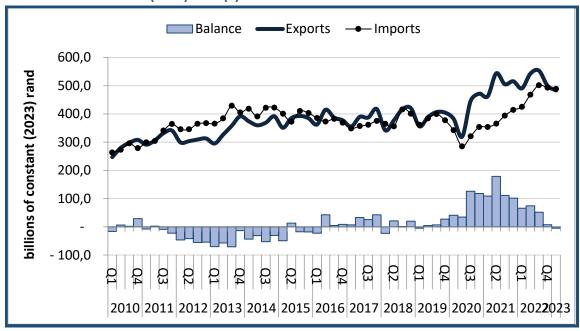
International trade

In the first quarter of 2023, South Africa saw its first trade deficit since the pandemic, as falling commodity prices, especially for coal, and economic growth gradually ate away at historically high recent surpluses. The shift to a deficit mostly reflected falling export revenues as global mining prices dropped while imports rose, in large part to develop new electricity capacity.

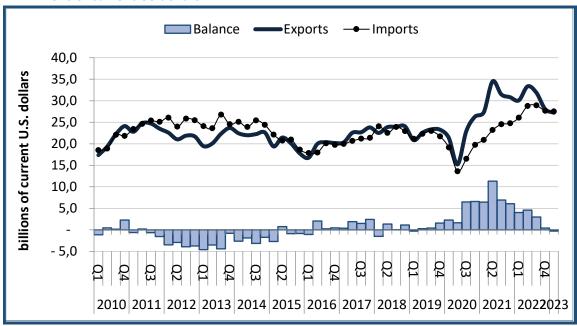
The first quarter of 2023 saw South Africa record a trade deficit for the first time since the first quarter of 2019. The deficit remained modest by historic standards, at R5.1 billion in the first quarter of 2023. It followed a steady fall in in the trade surplus over the past six quarters, with a particularly sharp drop at the end of 2022. The deficit resulted primarily from a fall in the value of exports by R17 billion in constant rand terms, mostly due to a sharp global decline in mining prices. Imports rose R5 billion during the same period. (Gra[h 17)

Graph 17. Exports, imports and balance of trade in billions of constant rand and current US dollars





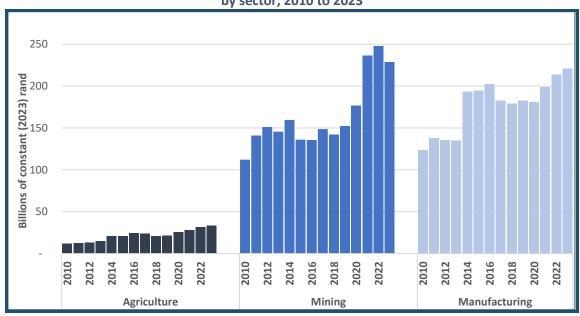
B. Billions of current US dollars



Source: Calculated from South African Revenue Service data.

In constant rand terms, manufacturing and agriculture exports increased by 3% and 6% respectively in the year to the first quarter of 2023. Mining exports declined by 8%, from R247.4 billion to R228.8 billion over the same period. Still, exports from these three sectors remained well above pre-pandemic levels, at 20% above first quarter 2020 exports. Paper and publishing as well as metal products saw the largest growth in exports compared to other products, while motor vehicles, parts and accessories and other transport equipment exports declined by some R2.2 billion in the year to the first quarter of 2023.

Graph 18. First quarter goods exports in billions of constant (2023) rand (a), by sector, 2010 to 2023



Note: (a) Deflated with CPI. Source: Calculated from South African Revenue Service data.

Outside of agriculture, imports grew faster than exports. That mostly reflected the surge in imports of refined petroleum plus lower prices for South African minerals exports, especially coal. Manufactured imports increased by 12% to R358.4 billion in the year to the first quarter of 2023, while agriculture and extractive imports (almost entirely crude oil and petroleum products) grew by 3% to R14.4 billion and 28% to R115.3 billion respectively. Manufacturing imports increased by R37.2 billion in the year to the first quarter of 2023, driven in large part by growth in imports of machinery and appliances, and motor vehicles, parts and accessories, which grew by R19 billion and R22 billion respectively.

billions of constant (2023) rand

Graph 19. First quarter goods imports in billions of constant (2023) rand (a), by sector, 2010 to 2023

Note: (a) Deflated with CPI. Source: Calculated from South African Revenue Service data.

In real terms, for the first quarter of 2023, food and beverages, wood products, and metals and metal products were the only manufacturing industries for which exports exceeded imports. In contrast, major manufacturing industries like machinery and appliances and transport equipment had a trade deficit of R82.6 billion and R41.5 billion respectively in the first quarter of 2023.

Table 1. Trade by manufacturing industry

	Malua (la)	: \	% change from		Change in			
	Value (billions)		Q1 2022		Billions			
INDUSTRY	USD	Rand	USD	Rand	USD	Rand		
EXPORTS								
Food and beverages	1.02	18.3	-1.9%	7.5%	-0.02	1.28		
Clothing and footwear	0.45	8.0	1.1%	11.2%	0.01	0.80		
Wood products	0.13	2.4	-8.3%	0.2%	-0.01	0.01		
Paper and publishing	0.57	10.1	52.5%	65.7%	0.20	4.01		
Chemicals, rubber, plastic	2.13	37.9	-9.8%	-1.4%	-0.23	-0.55		
Glass and non-metallic mineral	0.10	1.8	-1.0%	8.3%	-0.00	0.14		
products								
Metals and metal products	3.20	56.8	-2.5%	6.5%	-0.08	3.47		
Machinery and appliances	2.09	37.3	-5.6%	3.4%	-0.13	1.22		
Transport equipment	2.53	45.2	-13.4%	-4.6%	-0.39	-2.19		

	Value (billions)		% change from Q1 2022		Change in Billions			
INDUSTRY	USD	Rand	USD	Rand	USD	Rand		
IMPORTS								
Food and beverages	0.92	16.4	-10.4%	-2.3%	-0.11	-0.39		
Clothing and footwear	1.19	21.0	-8.7%	-0.9%	-0.11	-0.20		
Wood products	0.10	1.8	-17.8%	-10.6%	-0.02	-0.22		
Paper and publishing	0.77	13.7	-21.3%	-14.1%	-0.21	-2.26		
Chemicals, rubber, plastic	3.68	65.3	-6.6%	1.6%	-0.26	1.05		
Glass and non-metallic mineral	0.24	4.2	-6.4%	1.8%	-0.02	0.07		
products								
Metals and metal products	1.34	23.7	-14.0%	-6.0%	-0.22	-1.52		
Machinery and appliances	6.76	119.9	9.0%	18.8%	0.56	18.97		
Transport equipment	4.88	86.7	23.0%	34.2%	0.91	22.08		

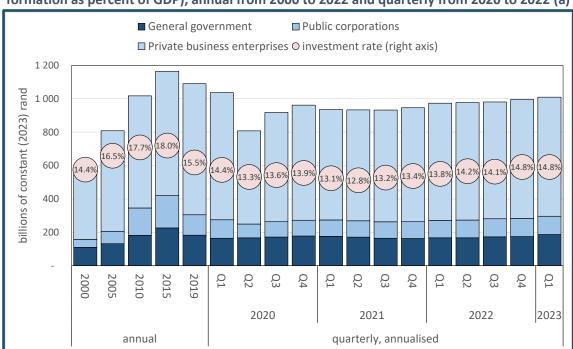
Source: South African Revenue Service monthly data.

Investment and profitability

Investment increased by 1.4% in the first quarter of 2023, driven primarily by an extraordinary 7% jump in government investment for the quarter. The private sector was far more cautious, with investment climbing just 0.2% for the quarter, compared to 1.8% in the fourth quarter of 2022. The investment rate stabilised at 14.8% of the GDP, down from a high of 22% in 2008 and unchanged from the previous quarter.

As Gra[h 20 shows, investment has recovered steadily, albeit slowly, from the start of 2021 in constant rand terms. Still, in constant rand, it remains 3% below pre-pandemic levels, and 20% below its peak in 2013. Government investment is down around a third from its highest value, in 2016, and investment by state-owned companies is half its peak in the mid-2020s. As a result, the state-owned companies now account for just over a tenth of total investment, compared to almost 20% a decade ago.

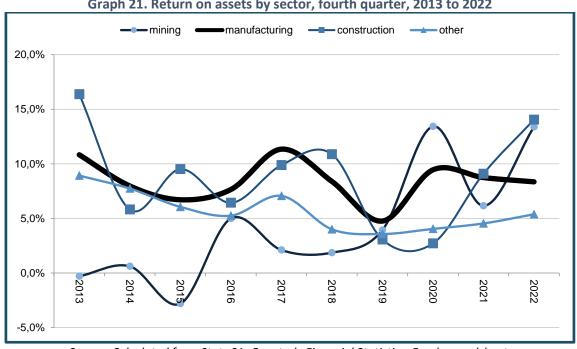
Private investment fell slightly in constant rand in the first quarter of 2023. It peaked in September 2019, just before the pandemic, and is now 15% lower. Still, overall it has climbed 8% since March 2021.



Graph 20. Investment by type of investor and the investment rate (gross fixed capital formation as percent of GDP), annual from 2000 to 2022 and quarterly from 2020 to 2022 (a)

Note: (a) Reflated with implicit deflator rebased to March 2023. Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2023Q1. Excel spreadsheet.

As measured by return on assets, mining and construction profitability increased sharply in the year to the fourth quarter of 2022 (the latest available data). The figure rose from 6.2% to 13.4% for mining and from 9.1% to 14% for construction. In contrast, manufacturing profitability declined slightly, from 8.7% to 8.4%.



Graph 21. Return on assets by sector, fourth quarter, 2013 to 2022

Source: Calculated from Stats SA, Quarterly Financial Statistics. Excel spreadsheet.

In real terms, mining profits more than doubled in the year to the fourth quarter of 2022, from R36 billion to R75 billion, while manufacturing profits declined by 2% to R48 billion in the same period. Overall, profits across mining and manufacturing were on a downward trend through 2022, reaching their lowest point in the final quarter of the year.

of constant 2022 rand (a), 2013 to 2022 ■ Mining □ Manufacturing 130 120 110 billions of constant (2022Q4) rand 100 90 80 70 60 50 40 30 20 10 2017 2019 - 10 - 20 - 30

Graph 22. Quarterly profits in manufacturing and mining in billions of constant 2022 rand (a). 2013 to 2022

Note: (a) Deflated with CPI. Source: Source: Calculated from Stats SA, Quarterly Financial Statistics.

Excel spreadsheet.

Foreign direct investment projects

The TIPS Foreign Direct Investment Tracker monitors FDI projects on a quarterly basis, using published information. Eleven projects were captured at different stages of development in the first quarter of 2023, with most as greenfield investments. The published investment value for the quarter amounted to about R47.8 billion from three projects across manufacturing, utilities, services, transport, mining and agriculture. There were further changes to the status of 18 projects previously captured in the Tracker. These were updated accordingly.

	Announced	Explorati on	Project preparation	Construction/ Implementati on	Completed
Number of projects	3	1	2	3	2
Value (R billions)	Not reported	Not reported	12.7	35.1	Not reported
Industries	2 Manufacturing 1 Utilities	Mining	2 Utilities	1 Agriculture1 Manufacturing1 Utilities	1 Manufacturing1 Services1 Utilities

Table 1. FDI projects captured in the first quarter of 2023

	Announced	Explorati on	Project preparation	Construction/ Implementati on	Completed
Туре	2 Greenfield 1 Expansion	1 Greenfield	1 Greenfield 1 Brownfield	3 Greenfield	1 Brownfield 2 Greenfield
Company	Torsa Global Stellantis DPA Southern Africa	Southern Palladium	Climate Finance Managers/ Bio2Watt Energy Holdings Enel/ TotalEnergies – Mulilo	Terragrn Paratus Giyani Metals Corp.	EvansWerks Ducat Trading

Source: TIPS FDI Tracker database

New and existing projects

Agriculture

Terragrn is a United Kingdom company that transforms degraded and underutilised land into biodiverse agroforests. The company is developing an agroforest in Mpumalanga for US\$2 billion (R35.1 billion) to be completed by 2030. A third of the 200-thousand-hectare agroforest will comprise non-invasive varieties of bamboo plant, while the rest of the area will include fruit trees, cereal and indigenous crops, and trees. Terragrn further plans to undertake create sustainable green energy solutions with the bamboo as a raw material.

Utilities

Sasol and Air Liquide have signed four power purchase agreements (PPAs) in their effort to jointly procure 900MW of renewable-energy capacity from independent power producers (IPPs) by 2030. So far, two PPAs were signed with Enel Green Power to supply 220MW of renewable power which will be sourced from wind projects in the Eastern Cape. TotalEnergies and partner Mulilo also signed two PPAs to supply 260MW from a 140 MW wind project and 120 MW solar project in the Northern Cape. The estimated value of the investment is R12 billion.

Climate Fund Managers (CFM) is a Dutch investment manager that provides financing solutions for sustainable development infrastructure projects across emerging markets. CFM has committed to invest US\$38.5 million (R656 million) in construction equity funding to acquire and subsequently expand the 4.8 megawatt (MW) waste-to-energy Bronkhorstspruit Biogas Project (BBP) to a 9.8MW plant. Bio2Watt Energy Holdings developed and operates BBP.

Distributed Power Africa South Africa (DPA SA) is a joint venture between Cassava Technologies subsidiary Distributed Power Africa and French renewables developer EDF. DPA SA will supply Africa Data Centres (also a Cassava subsidiary) 12MW of renewable solar energy under a 20-year PPA, to all the latter's data centres in the country. DPA is developing a solar farm in the Free State to deliver the power required for the data centres. The value of the investment was not reported.

Manufacturing

Torsa is a Spanish mining technology company that specialises in the design and manufacture of high-tech solutions for heavy industries and the logistics industry. The company is establishing a regional hub in Gauteng which will serve and support activity in sub-Saharan Africa. The firm's market entry is in line with a presidential Memorandum of Understanding (MoU) signed at the end of 2022 by the Spanish Prime Minister and President of South Africa for co-operation in the field of Industry 4.0.

Stellantis is a Dutch vehicle manufacturer with 14 car brands internationally. Brands marketed in South Africa include Alfa Romeo, Opel and Fiat. Stellantis signed a MOU with the Department of Trade, Industry and Competition and the Industrial Development Corporation to establish a manufacturing plant in a Special Economic Zone that is yet to be named. The value of the investment was not reported.

EvansWerks Creative Labs has opened a contract additive and advanced manufacturing services factory. It was established by two United States investors. They provide machine services that include 3D printing designs — utilising materials such as resin and metals — that can be further developed into prototypes and refined to production quality. The Lab also provides various consulting services. While EvansWerks has offices in other countries, this is the company's only manufacturing plant, completed for a sum not yet disclosed.

Giyani Metals is a mineral resource company based in Canada, focused on producing low-carbon high-purity manganese sulphate monohydrate (HPMSM) — also known as battery grade manganese — materials directly from manganese oxide ore, targeting battery manufacturers in the electric vehicle market. Giyani's manganese assets are in Botswana. The company is constructing a demonstration plant that will produce up to 600kg a day of HPMSM crystals in Gauteng.

Mining

Southern Palladium is developing a Platinum Group Metals mining operation in the Eastern Limb of the Bushveld Complex. A scoping has been completed to determine the optimal mining scenario. Drilling is ongoing at the site, with Phase 1 complete. Next steps for the development included a prefeasibility study and submission of a mining right application. The Australian mine developer has not yet disclosed the value of project.

Services

Paratus is a Namibian ICT infrastructure company. The firm is developing a satellite teleport facility for an undisclosed sum. It will provide satellite connectivity to local business and consumers. The facility will be the group's largest teleport, capable of hosting equipment from other providers and customers including antennas and satellite hubs. The facility will further be able to provide services and connectivity during load-shedding.

Transport

Ducat is a global integrated logistics and infrastructure company based in Switzerland. The firm has established a head office in Cape Town, the outcome of four years of planning for its operations in South Africa, Ducat Trading. Local operational focus will include downstream energy distribution and logistics, among other activities and partnerships with local companies.

Updates

At the 2022 investment Conference, Teraco announced that it would invest R1.1 billion towards the construction of a data centre in Gauteng and power generation for facilities across the country. Teraco commenced the construction of JB5 at the end of 2022, the company's new hyperscale datacentre facility set for completion in 2024. In January 2023 Teraco announced that it would be constructing two 100MW solar projects in the Free State to power facilities in Ekurhuleni. The power will be supplied through a wheeling agreement with Eskom.

The third of EDF's wind energy projects – Coleskop – under the Renewable Independent Power Producer Programme (REIPPPP) Bid Window 5 has reached commercial and financial close. Construction has commenced on all three projects including the San Kraal and Phezukomoya Wind Energy facilities with completion set for 2025. The facilities will each have a capacity of 140MW and will be developed for a combined R11.5 billion.

Ardagh Glass Packaging (previously Consol) will be expanding the Nigel production facility further with a third furnace (N3), after commissioning of the second furnace (N2) in 2022. The latest development will increase the manufacturing plants capacity to deliver sustainable glass packaging. They expect to commission new the plant in 2023.

Juwi South Africa and Red Rocket's wolf wind project has reached financial close, and construction of the facility has commenced in the Eastern Cape. They expect to complete construction of the 84MW facility and connect to the grid by the first half of 2024. The project was initially developed by Juwi and successfully bid by Red Rocket in Round 5 the REIPPPP programme.

Rainbow Rare Earths has commenced work towards a definitive feasibility study for the Phalaborwa rare earths project. In the second quarter of 2023, it plan to commission a pilot plant, with work already underway to design and set up the facility. The project aims to develop long-term sources of rare earth elements used in the manufacture of large batteries for electric vehicles and magnets used in the construction of wind farms. Onsite initial work began in 2021, and production is expected to start in 2026.

Karpowership was selected as a preferred bidder in the Risk Mitigation Independent Power Producer Procurement Programme (RMIPPP) 2020. Since then, the Department of Forestry, Fisheries and the Environment has suspended the company's application for the port of Saldanha Bay – pending an investigation – rejected the Coega application and denied the environmental authorisation for a Port of Ngqura project.

As of the end of 2022, the R3.6 billion Sishen Ultrahigh dense media separation (UHDMS) project is under review. Commission of the project was slated for 2023, and pending the outcome of the review, implementation time frames adjusted. The delay is a result of complications from working

on an operating plant. The existing DMS facility is being converted into a UHDMS plant to extend the life-of-mine of Kumba's Sishen iron ore mine to 2039.

The final environmental-impact assessment application for the Musina-Makhado Special Economic Zone (MMSEZ) was approved in mid-2022, and basic construction is underway. The SEZ will further collaborate with USAID on a renewable energy strategy. A consortium led by the Hong Kong Mining Exchange will invest more than R40 billion in the metallurgical SEZ. MMSEZ is facing legal action with civil society organisations asserting the industrial sites will impact the environment negatively.

At the West Wits Mining Witwatersrand Basin (gold) Project first ore was extracted in early 2022 with infrastructure established at Phase 1 of the project, Qala Shallows. Peak funding for this phase is estimated US\$63 million (R1.1 billion). The company plans to start working on Phase 2 on completion the first phase with the scoping study for Phase 2 planned for 2023.

South African Breweries (SAB) completed expansion of its Prospecton Brewery in Durban in November 2022. The investment came to R825 million. SAB's expansion of the Ibhayi production plant is ongoing. The first phase has been completed and when the expansion is concluded SAB would have invested R510 million in the facility. These projects are part of the R4.5 billion SAB committed to invest in 2022.

Orion Minerals is developing the Prieska copper-zinc project and the Okiep Copper project in the Northern Cape. Orion Minerals has secured funding that will allow development of both mines to progress, including completion of feasibility studies and early production plans. The development of Prieska is estimated at R2.25 billion and Okiep at R643 million.

After completing Phase 1 of the expansion of the Krone Endora at Venetia diamond mine, Diamcor made several operational upgrades in the second of half of 2022 including expansions and improvements to the project's final recovery systems. The company further plans to install a supplementary power solution.

Menar Subsidiary Canyon Coal has started development of the first phase of the Gugulethu Colliery, previously De Wittekrans, in Mpumalanga with production expected to start in late 2023. Phase 1 will be completed for R600 million and Phase 2 – the underground section – will be a further R890 million. Canyon further aims to start the construction of Thuso Colliery (formerly Witfontein) during 2023, pending regulatory approvals.

Africa Data Centres is starting construction of the company's second data centre in Cape Town for an undisclosed sum. The 20MW facility will span 12 000 square meters in eight data halls. The facility will start operating in mid-2024.

Briefing Note 1: Why inflation targeting does not work in a highly unequal country

Saul Levin

The inflation targeting approach by the South African Reserve Bank (SARB) and its recent increase of 0.5% has seen interest rates more than double when compared to the first quarter of 2022. The interest rate is now 8.25% and it was at 4% in March 2022. In a highly unequal country these increases disproportionately affect two groups: homeowners who are in the top 10% of income earners who owe over R1 trillion in home loans, and the working poor who often get by on payroll based loans.

Why should we worry about the incomes of the top 10%? They have decent formal work, with assets including homes, savings, and pensions. The TIPS report, *Inequality in South Africa: An Overview* (2020), showed that the richest 10% of households owned well over half of household assets and, as a group, these households held R8.5 trillion in financial assets. But they owed almost R1 trillion in mortgage bonds on housing. They may well be resilient in their response to high interest rates by reducing their discretionary spending. The problem comes in the disproportionate role the top 10% of income earners in South Africa play in driving economic growth and employment creation. This top decile earns approximately half of total household incomes. A squeeze on the disposable incomes of the top 10% may well see many in this group reducing spending on luxury goods, an intended effect of high interest rates. But as the high interest rates put further pressure on these households it would likely result in cuts in spending on activities that create employment throughout the economy – eating out, entertainment and non-luxury goods. Further pressure on the disposable income of this top decile may also reduce monthly remittances to poorer family members, with a knock-on effect for these poorer households.

Further, this top decile is 50% more likely to derive income from a business than those in the 70th to 90th percentile, and three times more likely than those in the bottom 50% of income earners. Between higher financing costs and lower demand, formal businesses will borrow less and generate less employment, which will likely put downward pressure on wages. This intended effect of inflation targeting assumes employment is high, however, as shown in this bulletin employment is still lower than before 2020.

The slowing economy is further exacerbated by the second group who in addition to struggles with declining economic opportunities (especially with single income households) they are now paying more interest on their salary based loans. Yes, they may benefit from lower inflation as it will keep their monthly costs down, but with less economic opportunities their immediate decline in income brought about by lower economic opportunities and high interest on loans poses a high risk to them. Unlike other countries, the comparably poor middle class in South Africa (from 40th to 90th percentile) are less likely to have assets to withstand the economic contraction brought about by high interest rates.

Not being able to access the labour market is a core driver of inequality in South Africa — this is further exacerbated by slow growth. As TIPS has noted elsewhere "addressing income inequality requires both job creation and measures to address South Africa's unusually large wage gap amongst the employed" (TIPS 2020:5). Inflation targeting is not a redistributive measure and on its own does not create an 'equilibrium' that will result in job creation. Rather because high interest rates are designed to lower inflation by slowing down the economy, they only serve to exacerbate unemployment and inequality.

The focus on interest rates assumes that the problem is excess demand. A strong case can be made that South Africa is rather experiencing supply push inflation. For instance, this bulletin shows the increasing import prices of diesel and petrol. Further supply push inflation is due to highly speculative increases in some food products due to the ongoing Russian invasion of Ukraine. Lastly, the depreciation of the rand would be an important contributor to supply push inflation. If the cause of inflation is supply rather than demand factors, then the increase in interest rates is an inappropriate remedy. Shouldn't we rather be seeking alternatives? For instance, government could do far more to promote local production of imported products, where viable. It could also shift away from petrol and diesel, including in electricity generation, as well as coming up with an electricity strategy that makes economic sense.

Including employment as part of the mandate of central banks is a common feature of central banks as it brings balance into their decisions and approach. Repeated calls for the SARB to include employment as measure should not be ignored, especially in a country with high levels of inequality and low employment.

Briefing Note 2: Carbon Border Adjustment Mechanism (CBAM) – A challenge and an opportunity for developing countries

Seutame Maimele

The European Union's Carbon Border Adjustment Mechanism (CBAM), a border tax on embedded green-house gas emissions, was finalised in May 2023 and will begin implementation in October. The CBAM aims to equalise the price of carbon between EU products and imports by ensuring importers face similar carbon costs as EU manufacturers. Ultimately, it should help Europe achieve its climate objectives.

CBAM will enter gradually into force. In the first year, importers will only have to report on the direct emissions from production of the goods purchased, but no tax will be levied. Thereafter, CBAM will gradually ramp up, reaching full force in 2034. Importers will have to purchase digital CBAM certificates for each tonne of carbon generated by the goods they import. The price of the certificates will be derived from the weekly average auction price of the EU Emission Trading System.

The African Climate Foundation estimates that full implementation of CBAM will cost the continent about US\$25 billion annually. It will have a particularly significant impact on South Africa, as one of the most carbon-intensive economies in the world for which the EU is a key

trading partner. Europe purchases around a fifth of all South African exports. Based on 2022 data, about R53 billion worth of South African exports are at risk in the short term, and the number will rise as CBAM coverage extends to more products.

CBAM will likely have a major impact on the steel and aluminium industries. Likewise, the organic chemicals and plastics industries are also exposed (although their inclusion in the CBAM is still to be confirmed after the transitional period). South Africa exports to the EU around 80% of iron and steel products, and 20% of its aluminium products that fall under CBAM. The affected exports equalled 2.2% of total South African exports in 2022.

Japan, the UK, the US and Canada, among others, are considering measures like CBAM. Except for Canada, these countries are major export destinations for South African exports.

The BRICS countries (Brazil, Russia, India, China and South Africa) have opposed CBAM and other carbon taxes on trade. They are concerned that the costs will disproportionately impact the Global South. In effect, countries that have not contributed significantly to the climate emergency, including most of Africa, will still end up with substantially narrowed export markets. Some authors also argue that the measures are inherently protectionist, despite the proclaimed aim of responding to the climate emergency.

Minimising the negative effects of CBAM while continuing to disincentivise high-emissions exports could take several pathways. They include the following:

- Reforming the World Trade Organization (WTO), to prioritise the climate emergency more fairly. In its current form, the WTO is not climate compatible, providing little policy space for countries, especially in the Global South, to shift to low carbon and climate resilient economies.
- 2. Helping South African companies to comply with the CBAM. In the short term, exporting firms are expected to have a Monitoring, Reporting and Verification system in place. This system will be piloted to report GHG emissions to the EU at the product level.
- 3. Analyse the possible pathways to decarbonise South Africa's (and Africa's) industrial value chains without disproportionately burdening working-class communities and national economies. The aim would be to ensure a just transition at both local and international level.
- 4. Explore the potential and opportunities of a regional carbon market for Africa. Such a market would enable African countries to retain revenues collected from the carbon market, rather than paying into the EU budget through the CBAM. These funds could then be leveraged for continental decarbonisation purposes. Also, the use of carbon credits can open a window to trade off the carbon credits in international carbon markets for Africa's debt.