



TRADE & INDUSTRIAL POLICY STRATEGIES

INDUSTRY STUDY

INTERNATIONAL TRENDS IN THE STEEL INDUSTRY

JANUARY 2025

TIPS industry studies aim to provide a comprehensive overview of key trends in leading industries in South Africa. For each industry covered, working papers will be published on basic economic trends, including value added, employment, investment and market structure; trade by major product and country; impact on the environment as well as threats and opportunities arising from the climate crisis; and the implications of emerging technologies. The studies aim to provide background for policymakers and researchers, and to strengthen our understanding of current challenges and opportunities in each industry as a basis for a more strategic response.

This study analyses trends in global exports and imports of steel and related products; and examines trends in South African imports and exports of steel and related goods. The study also analyses trends in foreign investment and dominant foreign exporters in steel and related products.

Author: Seutame Maimele, TIPS Economist: Sustainable Development

CONTENTS

1. Introduction	3
2. Trends in Global Trade of Steel	3
2.1. Trends in global exports.....	4
2.2. Trends in global imports	5
3. Trends in South African Trade of Steel	7
3.1. Steel share in South African trade	7
3.2. Trends in South African exports.....	8
3.3. Trends in South African exports to Africa	9
3.4. Trends in South African imports	11
4. Foreign investment and exporters.....	13
4.1. Trends in foreign investment.....	13
4.2. Dominant foreign exporters	14
5. Conclusion.....	15
References	16

GRAPHS AND TABLES

Graph 1: Global steel exports by country and share of global exports, 2004-2023.....	4
Graph 2: Global steel exports by product, 2004-2023.	5
Graph 3: Global steel imports by country and share of global exports, 2004-2023.	6
Graph 4: Global steel imports by product, 2004-2023	6
Graph 5: Share of South African steel trade to manufacturing and South African trade, 2001-2023.	7
Graph 6: South African exports of steel by major partner, 2001-2023.....	8
Graph 7: Share of South African basic iron and steel exports by products and related products - 2001-2023 (Categorised by HS code – Regrouped for readability	8
Graph 8: Share of South African basic iron and steel exports by industry and related industries, 1993-2023 (Categorised by SIC code)	9
Graph 9: South African steel exports to Africa by region, 1993-2023.....	10
Graph 10: South African steel exports to Africa by products, 1993-2023 (Categorised by HS code – Regrouped for readability)	10
Graph 11: South African imports of steel by major partner, 2001-2023	11

Graph 12: Share of South African basic iron and steel imports by products and related products, 2001-2023 (Categorised by HS code – Regrouped for readability).....12

Graph 13: Share of South African basic iron and steel imports by industry and related industries, 1993-2023 (Categorised by SIC code)12

Table 1: Steel FDI projects in South Africa 2018-2024Q1..... 14

Disclaimer

To the fullest extent permitted by law, TIPS and its employees, directors, contractors and consultants shall not be liable or responsible for any error or omission in any of its research, publications, articles and reports (collectively referred to as reports). We make no representation or warranty of any kind, express or implied, regarding the accuracy or completeness of any information in our reports.

Our reports are made available free of charge and are prepared in good faith. Users are requested to acknowledge and correctly reference the source should they decide to use or make reference to any of our reports or any information in our reports.

TIPS and its employees, directors, contractors and consultants shall not be liable or responsible for any use, collection, processing or transfer of any of our reports or any information in our reports.

TIPS and its employees, directors, contractors and consultants shall not be liable for any damages, losses or costs suffered arising out of its reports or any information in its reports.

1. INTRODUCTION

Trading of steel is changing internationally and domestically. While the international trade of steel has improved post-COVID, with the recovery above the 2008 peak, the market has changed intensely. Germany, which used to be the dominant player, especially with exports, has lost its dominance to the Chinese and South Korean markets. Other dominant players such as Japan and Italy also have not managed to grow their share in the global trade of steel. Domestically, trade of steel and its contribution to overall South African trade has been substantial, but this share continues to decline.

Globally, there is a need to move towards cleaner technologies, such as the production and trading of green steel. The South African steel industry is finding it difficult to adjust to these international pressures. Locally, the industry is facing many issues affecting the trade of steel. A continued decline, increased imports from China combined with rising tariffs in the Global North, the rising price of electricity and constraints on rail and ports are primary issues constraining trade of steel.

In recent years, South Africa's foreign investment in the steel industry has primarily focused on reviving closed steel plants and investing in technological change. The [TIPS FDI Tracker](#) from 2018 to 2024Q1, reported six projects in the steel industry, mainly in upgrading of steel mills.

In terms of competitiveness and competitive advantage, the South African steel industry is battling to find the balance between supporting the downstream and saving the upstream (South African steel giant ArcelorMittal South Africa - AMSA) for exports. In the upstream – issues of energy, logistics and higher inputs costs, such as higher iron ore and coal prices linked to global prices, are affecting the performance and the competitiveness of primary steel production and exports. In the downstream, constrained domestic demand, energy and logistic issues are also putting pressure on production, which mainly goes to the domestic market.

This study focuses on analysing international trends in the steel industry. It first starts with trends in the global trade of steel, then highlights trends in the South African trade of steel, and lastly highlights foreign investment and dominant exporters in the industry – mainly focusing on competitive advantage.

2. TRENDS IN GLOBAL TRADE OF STEEL

In this section, trends in global exports and imports of steel products are analysed. These are analysed by country as well as by products. The analysis shows that while international steel trade has surpassed the 2008 peak post-COVID, market dynamics have shifted. Germany has lost its leading position to China and South Korea, and other key players like Japan and Italy have failed to grow their global share.

The entrance of China and South Korea in the global trade of steel has made a huge dent – mainly because of China. In the case of Germany, its exports have decreased while imports have increased in the last two decades. In the same period, China and South Korea have managed to increase their share of global exports and reduce their global share of steel imports. In 2004, the share of exports of China and South Korea was around 10%, and in 2023 their share had increased to above 25%. In the same period, they have managed to decrease their imports share of global steel from 11% in 2004 to 5.6% in 2023. China, mainly, has disrupted the global trade of steel in the last two decades, becoming the dominant exporter of steel globally, thereby, reducing the dominance of Germany, Japan, and Italy. The steel products mostly traded include flat steel and articles of iron and steel. These steel products are mostly used in the automotive industry for components manufacturing, as well as in the capital and electrical equipment sectors.

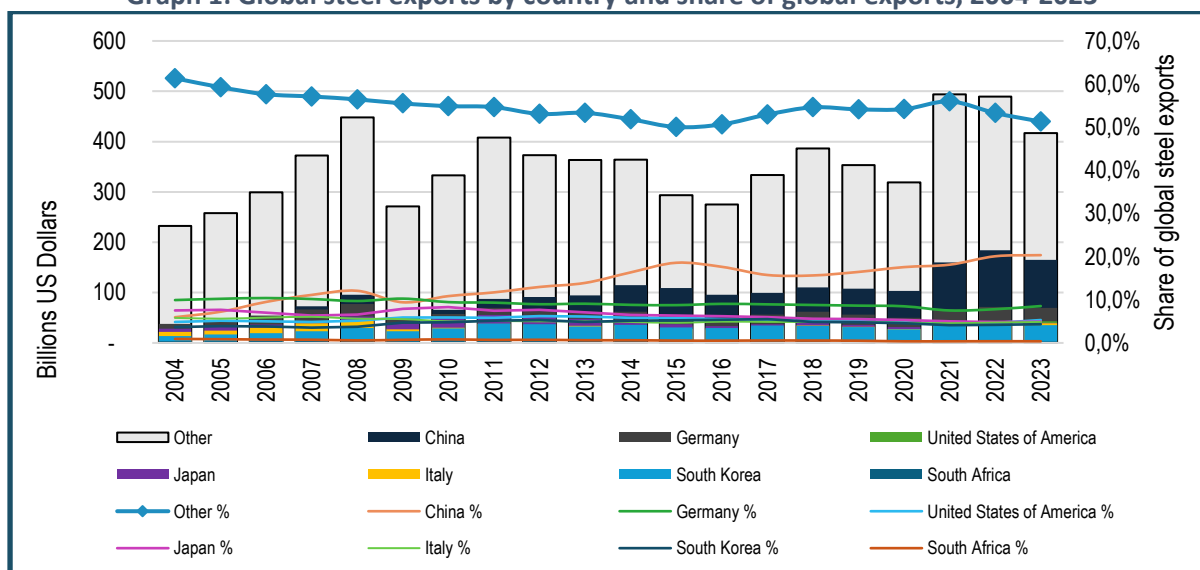
2.1. Trends in global exports

Global steel exports have improved post-COVID-19, reaching a peak in 2022 of US\$917 billion, before declining by 12% in 2023, amounting to US\$812 billion. The post-COVID-19 recovery of global steel exports has been positive. Global exports of steel post-COVID have also been above the 2008 peak. Dominant players in the exports of steel include China, Germany, the United States (US), Japan, Italy, and South Korea, representing 49% of total global steel exports in 2023.

China is the only dominant player that has shown a consistent increase in share of global steel exports, moving from 6% in 2004 to over 20% in 2023. South Korea and the US have also increased their share in global steel exports from 2004, but their increase is not that substantial compared to China. South Korea's share increased from 3.6% in 2004 to 4.3% in 2023, while the United States increased from 4.8% in 2004 to 5.3% in 2023. Other dominant players, such as Germany, Japan and Italy, have slightly declined their share in global steel exports. Germany, the largest second steel exporter globally (in 2023 after losing its number one position between the years 2004 and 2010), decreased its share in steel exports globally, from 9.9% in 2004 to 8.5% in 2023. Japan and Italy also saw a decline in their share of global steel exports in the same period. Japan's share declined from 7.5% in 2004 to 4.9% in 2023, while Italy also declined from 5.8% in 2004 to 4.9% in 2023.

South Africa's share of global steel exports is minimal (not even visible in Graph 1). South Africa contributes less than 1% to global steel exports. In 2004, South Africa's share of global steel exports was 0.9%, and this dipped to 0.4% in 2023.

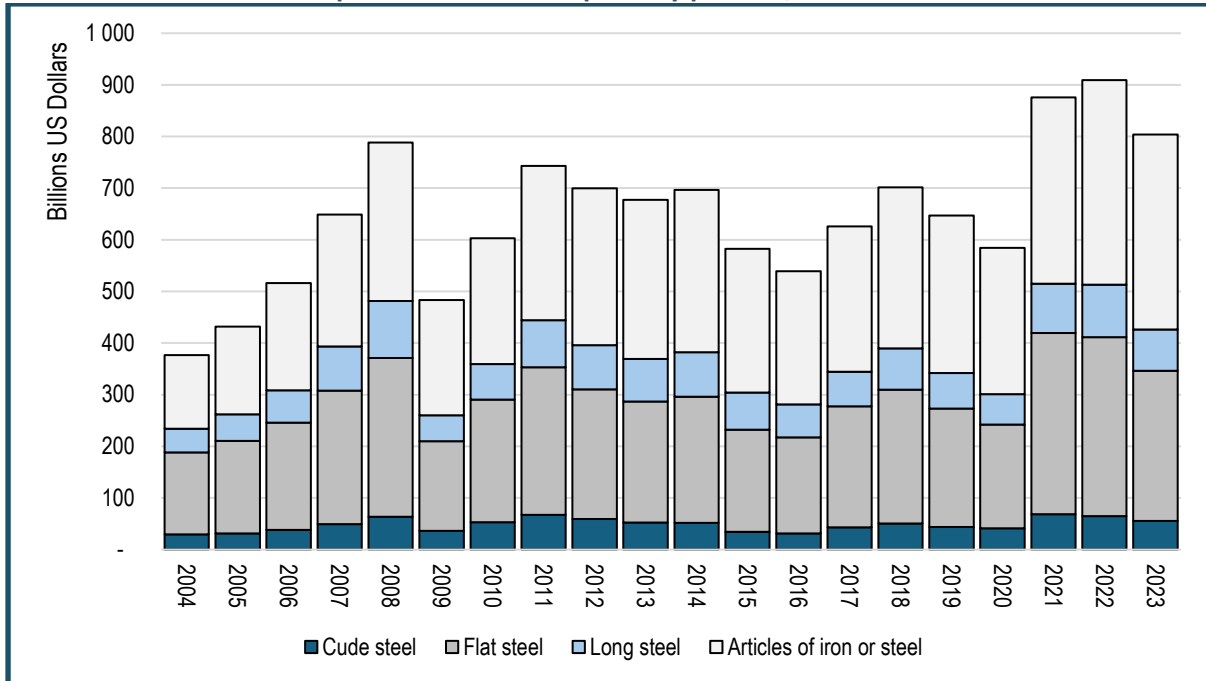
Graph 1: Global steel exports by country and share of global exports, 2004-2023



Source: Calculated from ITC Trade Map (2024). Data downloaded from <https://www.trademap.org>.
 Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys – 7202) and articles of iron and steel (CN Code 73).

The main steel products exported globally are articles of iron and steel and flat steel. These two groups of steel represented 83% of total steel products exported in 2023. Flat-rolled products of iron or non-alloy steel, hot or cold-rolled and flat-rolled products of stainless steel, including other than stainless with a width of equal or above 600mm dominate the exports of flat steel. Articles of iron or steel excluding cast articles; structures and parts of structures for example, bridges and bridge-sections, lock-gates, towers; screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter pins and washers; and tubes, pipes and profiles dominate the export basket of articles of iron and steel (see Graph 2).

Graph 2: Global steel exports by product, 2004-2023



Source: Calculated from ITC Trade Map (2024). Data downloaded from <https://www.trademap.org>.

Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys – 7202) and articles of iron and steel (CN Code 73). The data in the graph is categorised by HS code and regrouped for readability by flat, crude, long and articles of iron and steel products.

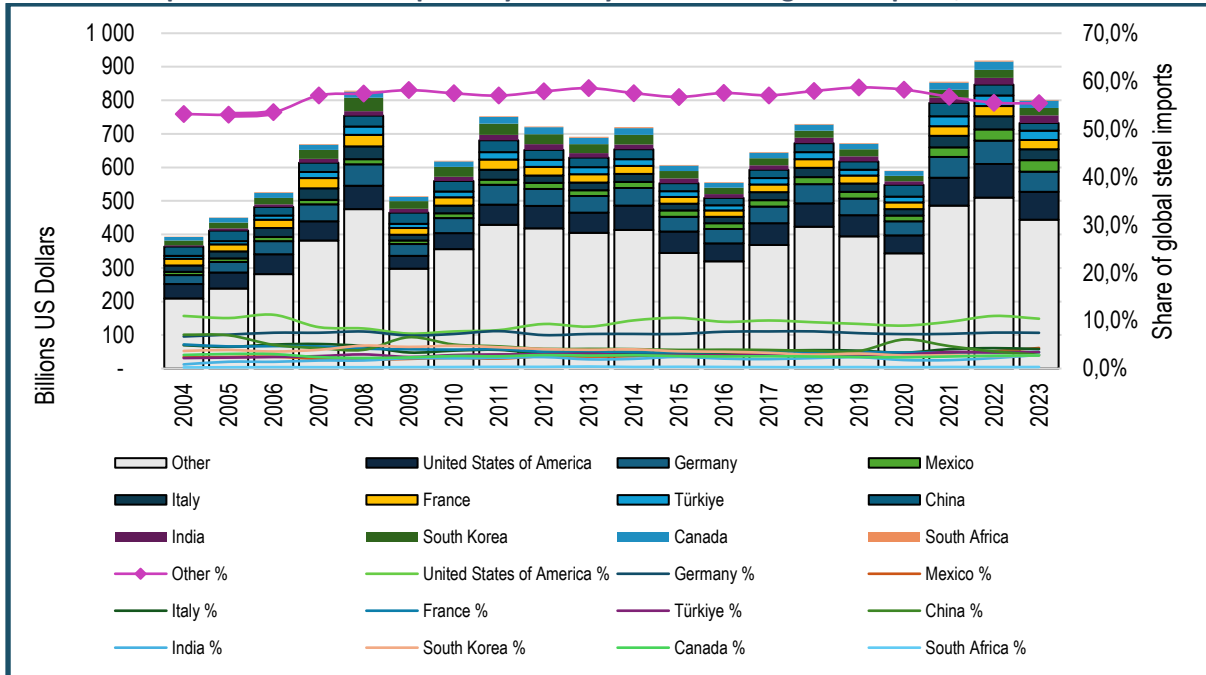
2.2. Trends in global imports

The global steel imports market is fragmented across many different players globally. However, a similar trend is observed to the global steel exports. Global steel imports have improved post-COVID-19, reaching a peak in 2022 of US\$918 billion, before declining by 13% in 2023, amounting to US\$801 billion. The post-COVID-19 recovery of global steel imports have been positive.

The global imports of steel post-COVID have also been above the 2008 peak, however, the 2023 values are below the 2008 peak. Despite the market being fragmented, dominant players in the top 10 importers of steel include the US, Germany, Mexico, Italy, France, Türkiye, China, India, South Korea, and Canada, representing 45% of total global steel imports in 2023 (see Graph 3).

In terms of the trend, the US dominates the imports of steel. The share of global imports for the US has always been above 10% since 2004. This has not changed much since. This is true for Germany as well. The share of Germany’s global imports of steel has always been around 7.5%, and the range remains in that region. China, France, and South Korea’s share of global steel imports have decreased. In the case of China, the share of steel imports has declined by more than half, decreasing from 7.1% in 2004 to 2.9% in 2023, while South Korea’s share of global steel imports decreased from 3.7% in 2004 to 2.7% in 2023, and France’s share of global steel imports has decreased from 5% in 2004 to 3.5% in 2023.

Graph 3: Global steel imports by country and share of global exports, 2004-2023

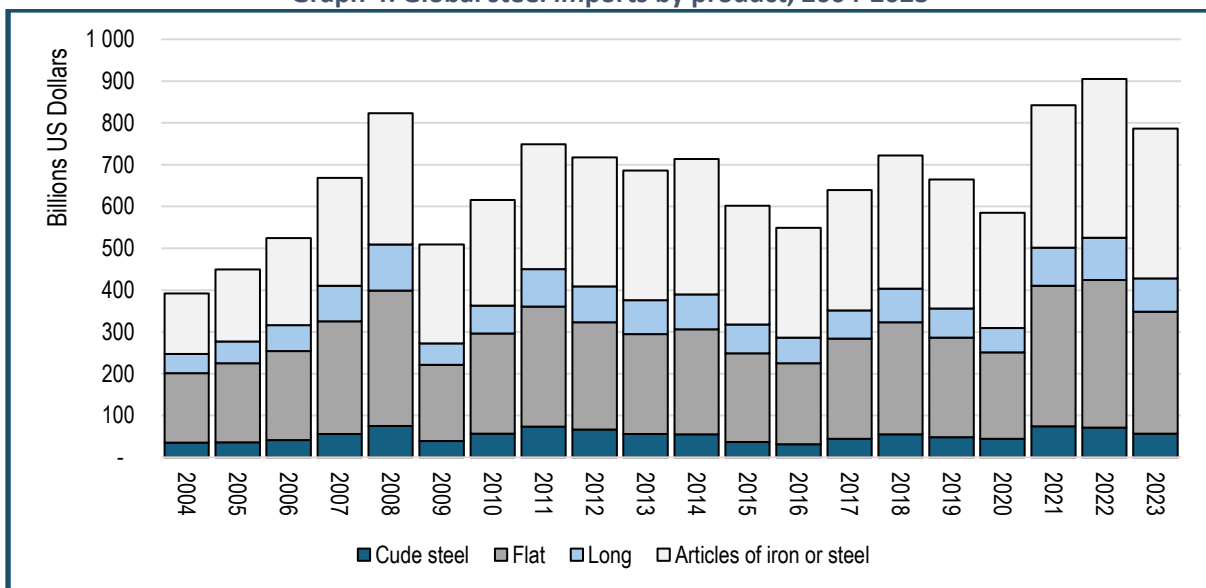


Source: Calculated from ITC Trade Map (2024). Data downloaded from <https://www.trademap.org>.

Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys - 7202) and articles of iron and steel (CN Code 73).

For Mexico, Türkiye and India, their share of global steel imports increased from 2004 to 2023. Mexico’s share of global steel imports increased from 2.4% in 2004 to 4.3% in 2023. Türkiye’s share of global steel imports increased from 2.2% in 2004 to 3.4% in 2023, and India’s share of global steel imports increased from 0.9% in 2004 to 2.8% in 2024, as illustrated by Graph 3. South Africa’s share of global steel imports is also minimal. South Africa contributes less than 0.5% to global steel imports, averaging 0.3% between 2004 and 2023.

Graph 4: Global steel imports by product, 2004-2023



Source: Calculated from ITC Trade Map (2024). Data downloaded from <https://www.trademap.org>.

Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys – 7202) and articles of iron and steel (CN Code 73). The data in the graph is categorised by HS code and regrouped for readability by flat, crude, long and articles of iron and steel products.

In terms of steel products imported globally, articles of iron and steel and flat steel are mainly imported (Graph 4). These two-product grouping of steel represented 83% of total steel products imported in 2023. Regarding flat steel, flat-rolled products of iron or non-alloy steel, hot or cold-rolled and flat-rolled products of stainless steel, including other than stainless with a width of equal or above 600mm dominate the imports of flat steel. In terms of article of iron and steel products, articles of iron or steel excluding cast articles; structures and parts of structures for example, bridges and bridge-sections, lock-gates, towers; and screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter pins and washers dominate the import basket of article of iron and steel.

3. TRENDS IN SOUTH AFRICAN TRADE OF STEEL

This section outlines the trends in the South African trade of steel. It starts by analysing the share of the South African steel trade in manufacturing and total South African trade, then it analyses the trends in South African exports, diving deep into the African context as most of the steel products go to Africa. The last sub-section focuses on an analysis of the South African imports trends.

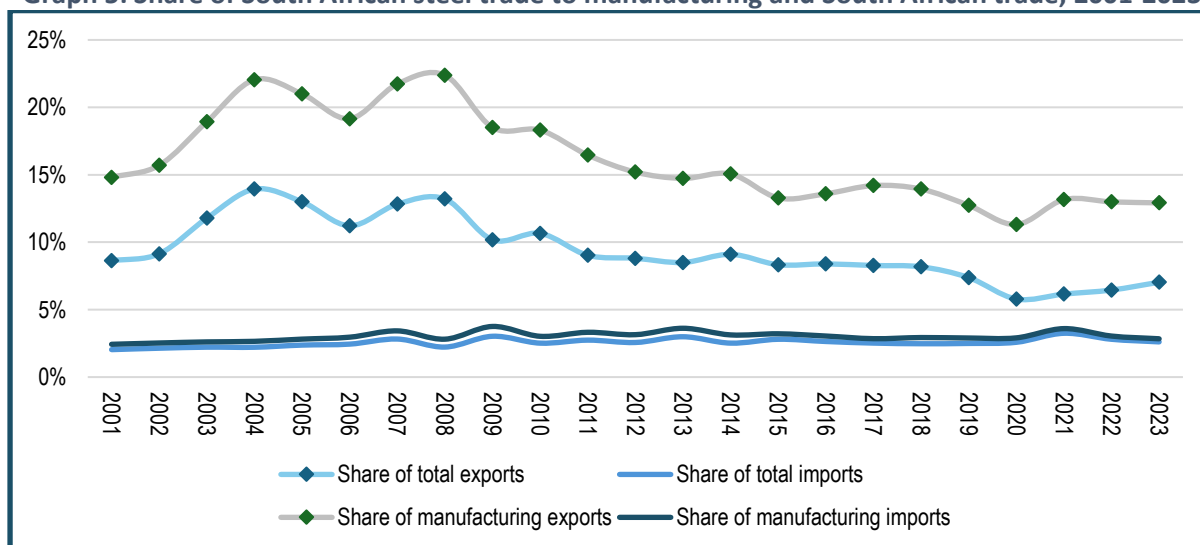
3.1. Steel share in South African trade

The steel industry share of both manufacturing and South African trade has been substantial, but their share continues to decline. Graph 5 portrays the share of the steel industry for over two decades – from 2001 to 2023 in South African and manufacturing trade.

In terms of exports, South African steel’s share of South African manufacturing and total exports has been decreasing since 2008, but post-COVID-19 the industry showed signs of recovery before stagnating. The share of South African steel on total manufacturing exports decreased from 22% in 2008 to 13% in 2023. Also, the share of steel exports in total South African exports decreased from 13% in 2008 to 7% in 2023 (see Graph 5).

In terms of imports, the share of South African steel in both manufacturing of steel and total imports have been substantially small, each contributing an average share of 3%. This share has been constant since 2001, with an uptick in 2009 and 2021, showing an effect of global recovery from the 2008 global financial crisis and the COVID-19 pandemic in 2019-2020.

Graph 5: Share of South African steel trade to manufacturing and South African trade, 2001-2023



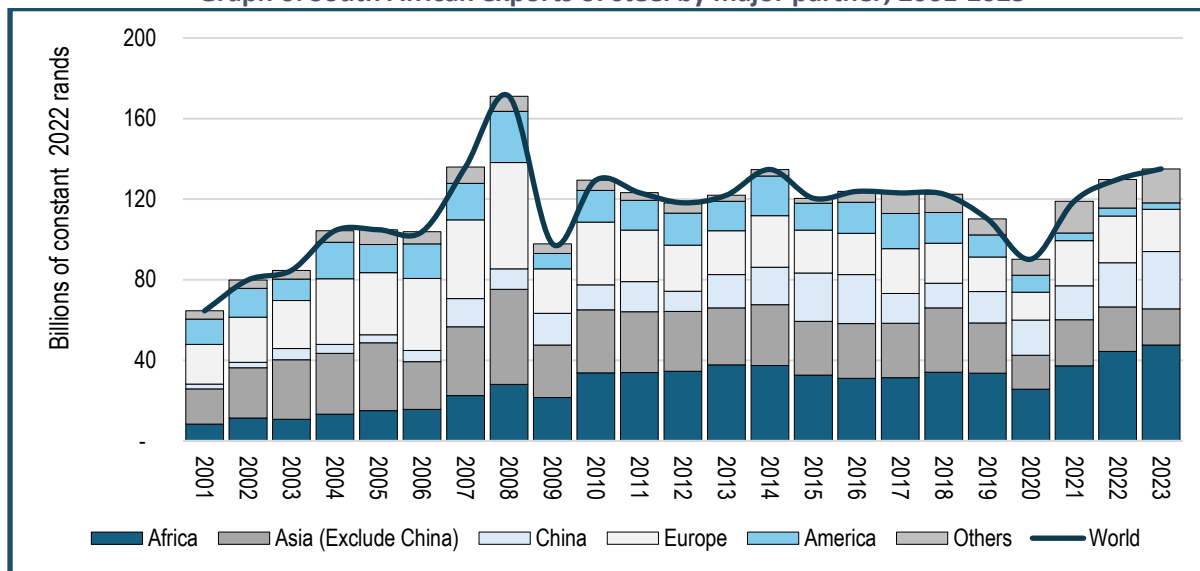
Source: Calculated using Quantec and ITC Trade Map data. Accessed at www.quantec.co.za and <https://www.trademap.org> in November 2024. Prices are rebased to 2022 using Stats SA’s CPI data, 2001 to 2022. Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys – 7202) and articles of iron and steel (CN Code 73).

3.2. Trends in South African exports

This section focuses on the trends of South African exports. The section analyses major export market for South African steel, and outlines what products are being traded.

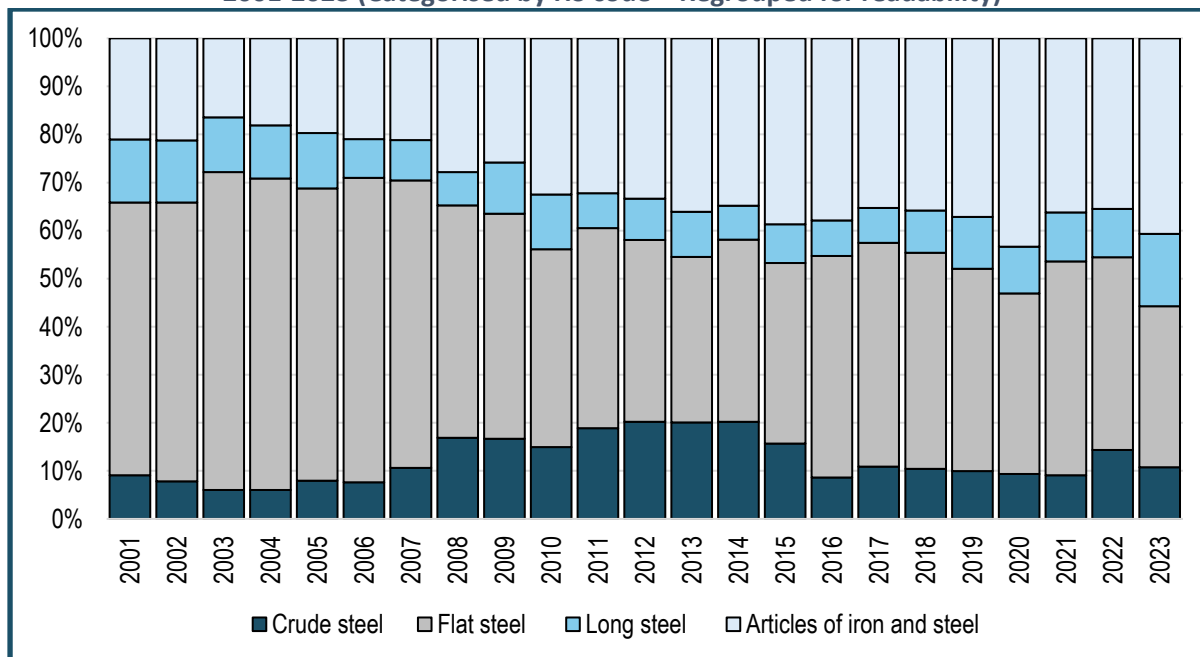
The major export markets of steel for South Africa have been steady over the years, with increased share in the African market (more on this in section 3.3). The key markets for South African steel exports include Africa, China, Europe, and Asia excluding China. Post-COVID-19, there has been a rise in exports to the African and Chinese market, while the European market has started to see a decline.

Graph 6: South African exports of steel by major partner, 2001-2023



Source: Calculated from ITC Trade Map (2024). Data downloaded from <https://www.trademap.org>. Prices are rebased to 2022 using Stats SA’s CPI data, 2001 to 2023. Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys – 7202) and articles of iron and steel (CN Code 73).

Graph 7: Share of South African basic iron and steel exports by products and related products, 2001-2023 (Categorised by HS code – Regrouped for readability)

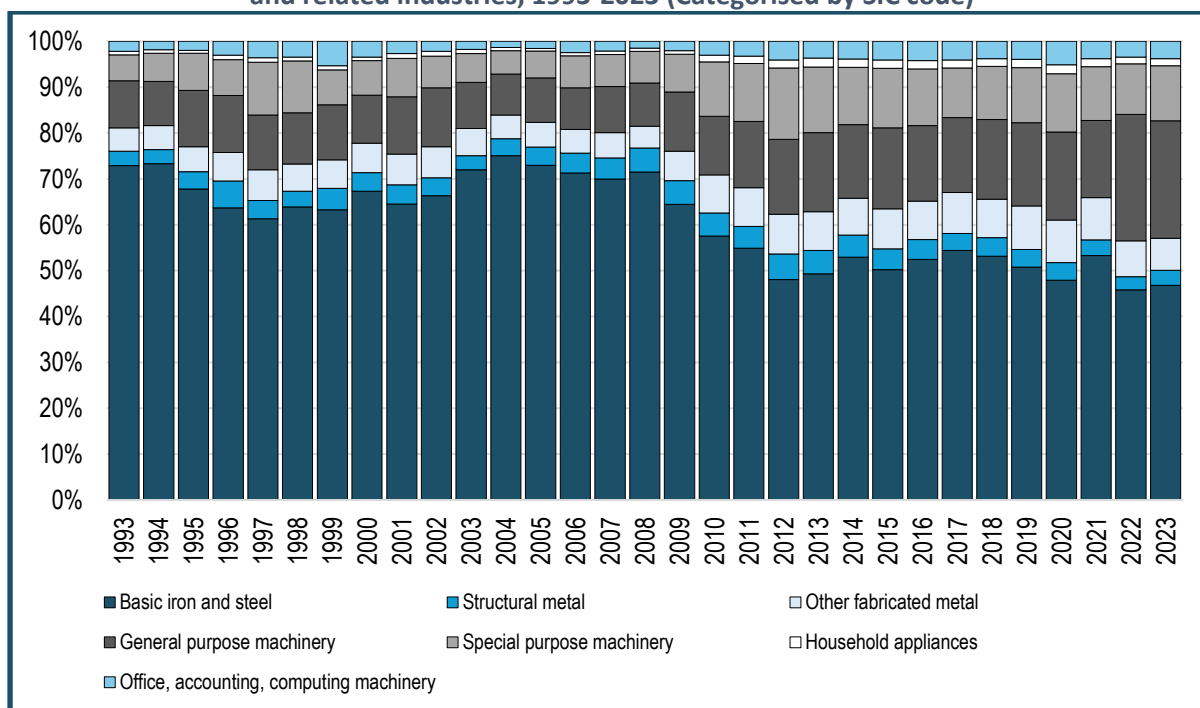


Source: Data from ITC Trade Map (2024). Downloaded from <https://www.trademap.org>. Prices are rebased to 2022 using Stats SA’s CPI data, 1993 to 2022.

In terms of key steel products exported (as reflected in Graph 7 categorising the data by HS code – regrouped for readability), South Africa exports a variety of iron and steel products. The steel export basket is dominated by non-alloyed steel (mainly flat steel) as well as articles of iron and steel. Despite flat steel showing fluctuations in the steel export market, exports of articles of iron and steel have increased. This is seen post the global financial crisis of 2008 and the 2010 soccer world cup, with articles of iron and steel exports increasing, particularly for other non-casted articles of iron and steel.

Graph 8 categorises the data in terms of SIC codes (classification by industry – which broadly looks into related steel industries – mainly looking into the downstream), the export basket shows a different picture, where basic iron and steel dominate the value chain. Basic iron and steel have been consistently decreasing since the 1990s, with recovery in the early 2000s, while the downstream products have been increasing their share. Basic iron and steel contributed over 70% to the value chain in 1993, and in 2023 basic iron and steel has decreased to an all-time low of less than 50% share in the value chain.

Graph 8: Share of South African basic iron and steel exports by industry and related industries, 1993-2023 (Categorised by SIC code)



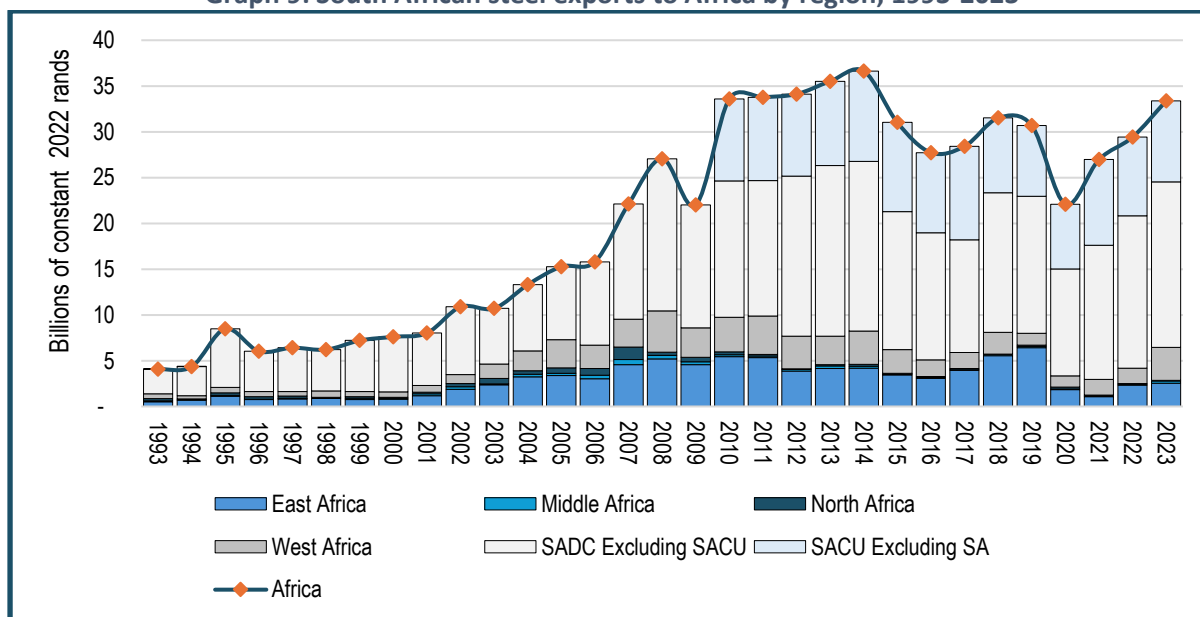
Source: Calculated from Quantec. EasyData. Interactive dataset. National trade data. Accessed at www.quantec.co.za in October 2024. Prices are rebased to 2022 using Stats SA’s CPI data, 1993 to 2022.

3.3. Trends in South African exports to Africa

This section focuses on the trends of South African exports to Africa. The section analyses the major export markets in Africa for South African steel, and outlines what products are being traded between South Africa and Africa.

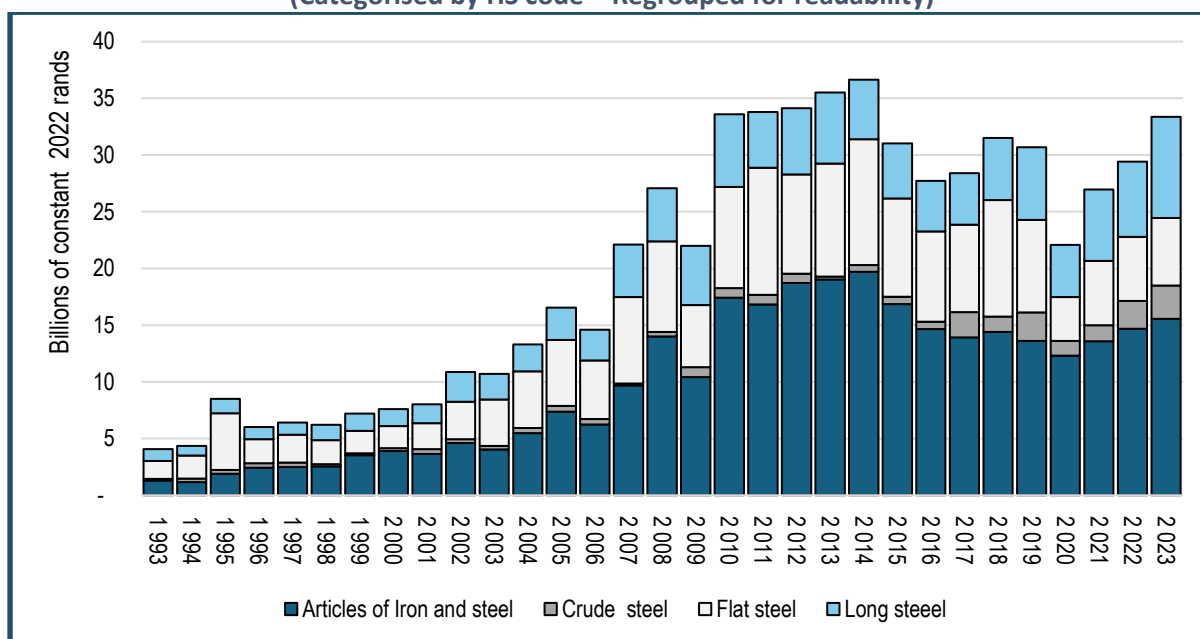
South Africa’s trade of steel with Africa has been increasing since the early 2000s, with slow-downs in 2009; and between 2015 and 2017 (as a result of closures of steel companies and plants); and during COVID-19. In 2023, exports of steel to Africa continued to recover from the pandemic, but the exports to Africa are still below the 2014 peak (Graph 9). The Southern African Development Community (SADC) remains the biggest export market for South African steel. From 2010, South African steel to the Southern African Customs Union (SACU) region started to be accounted for.

Graph 9: South African steel exports to Africa by region, 1993-2023



Source: Calculated from Quantec. EasyData. Interactive dataset. National trade data. Accessed at www.quantec.co.za in October 2024. Prices are rebased to 2022 using Stats SA's CPI data, 1993 to 2022.

**Graph 10: South African steel exports to Africa by products, 1993-2023
(Categorised by HS code – Regrouped for readability)**



Source: Calculated from Quantec. EasyData. Interactive dataset. National trade data. Accessed at www.quantec.co.za in October 2024. Prices are rebased to 2022 using Stats SA's CPI data, 1993 to 2022.

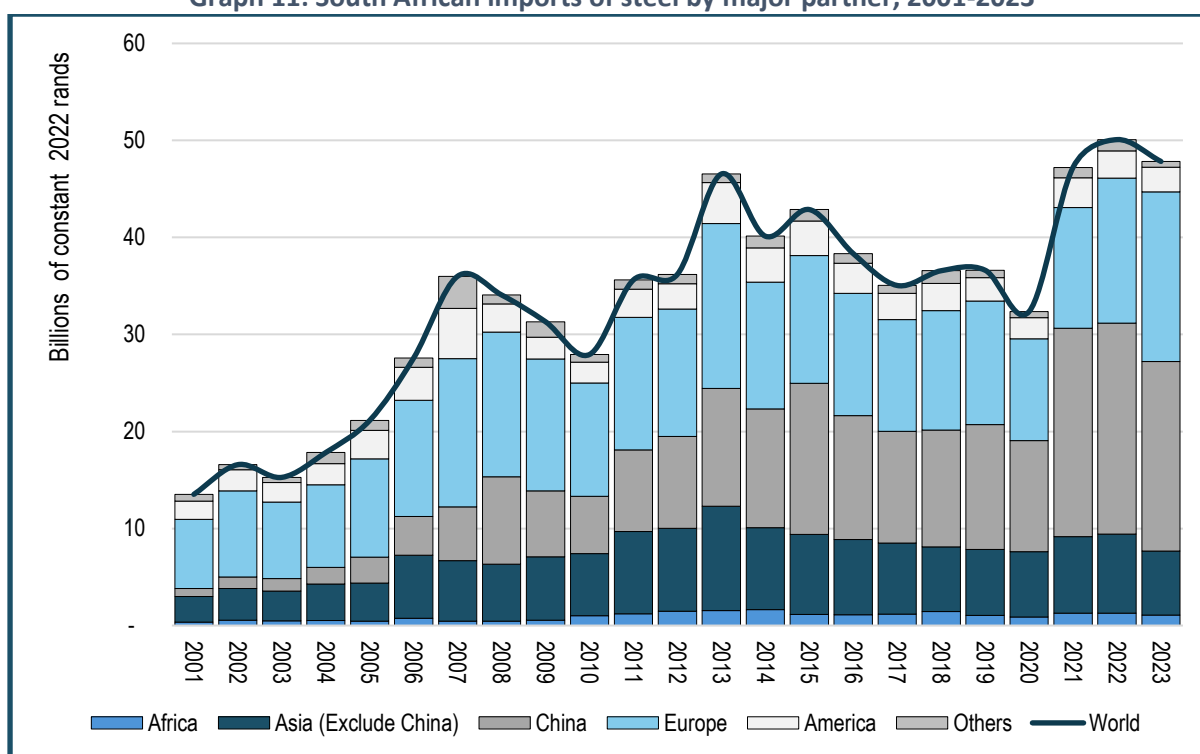
South African steel products exported to Africa are mostly articles of iron and steel, followed by long steel products – different from the flat steel that goes to other parts of the world and the most traded type of steel (see Section 3.2). In the articles of iron and steel, structures such as bridges and bridge-sections, lock-gates, towers, lattice masts, roofs, roofing frameworks, doors and windows and their frames and thresholds for doors, shutters, balustrades, pillars and columns, and screws, bolts and nuts, dominate products exported to Africa. In long steel, bars and rods as well as angles, shapes and sections of iron or non-alloy steel dominate long steel exports to Africa. These steel products going into Africa are mainly for the construction industry.

3.4. Trends in South African imports

This section focuses on the trends of South African imports. The section analyses the major import markets for South African steel, and outlines what products are being traded.

South Africa continues to import steel from China and Europe. While imports from Europe and China have been steady overtime, the Chinese and European imports have increased post-COVID-19 at an all-time high since 2001. However, Chinese imports in 2023 slowed down, but were still higher than Europe’s steel imports to South Africa. Chinese steel imports to South Africa have almost doubled from 2019 to 2022, jumping from R13 billion in 2019 to R22 billion in 2022, in constant 2022 terms. While European imports of steel continues to rise, in 2019 steel imports from Europe to South Africa were R13 billion, and in 2023 the steel imports amounted to R18 billion, in constant 2022 terms (see Graph 11).

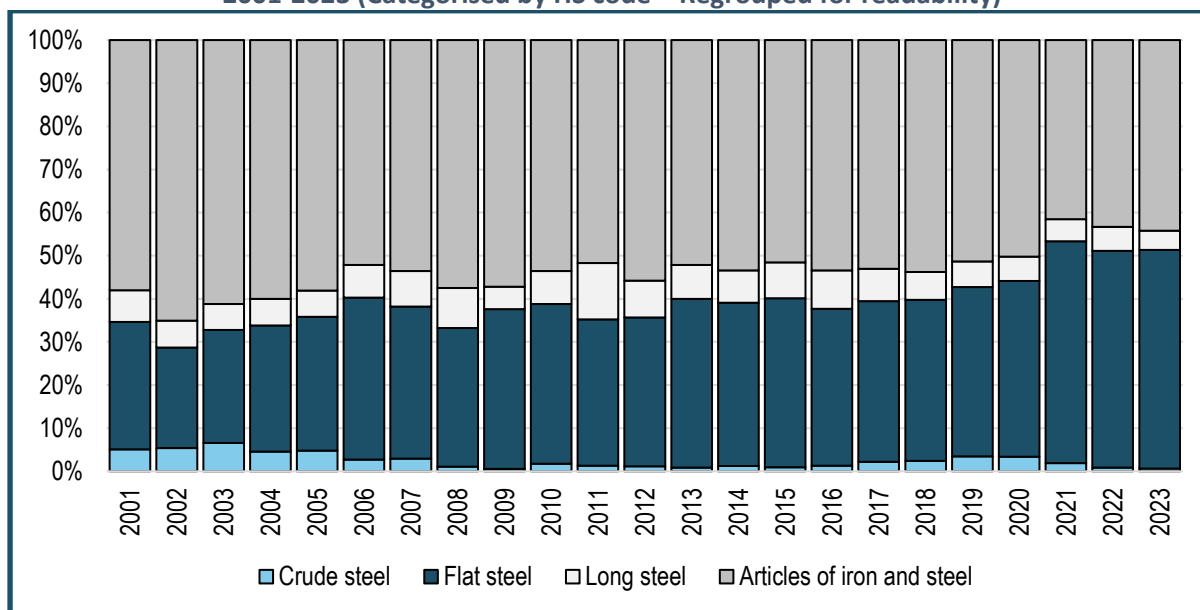
Graph 11: South African imports of steel by major partner, 2001-2023



Source: Calculated from ITC Trade Map (2024). Data downloaded from <https://www.trademap.org>. Prices are rebased to 2022 using Stats SA’s CPI data, 2001 to 2023. Note: Steel products include iron and steel (CN Code 72 and exclude ferro alloys - 7202) and articles of iron and steel (CN Code 73).

Key imported steel products to South Africa include a variety of iron and steel products. The biggest portion of imports comes into South Africa as flat steel and articles of iron and steel such as screws, bolts, and nuts, which take a bigger share of all the imported articles of iron and steel. However, with flat steel, flat-rolled steel dominates the import basket (Graph 12). The importing of these products has been steadily increasing, with a bigger increase post-COVID-19.

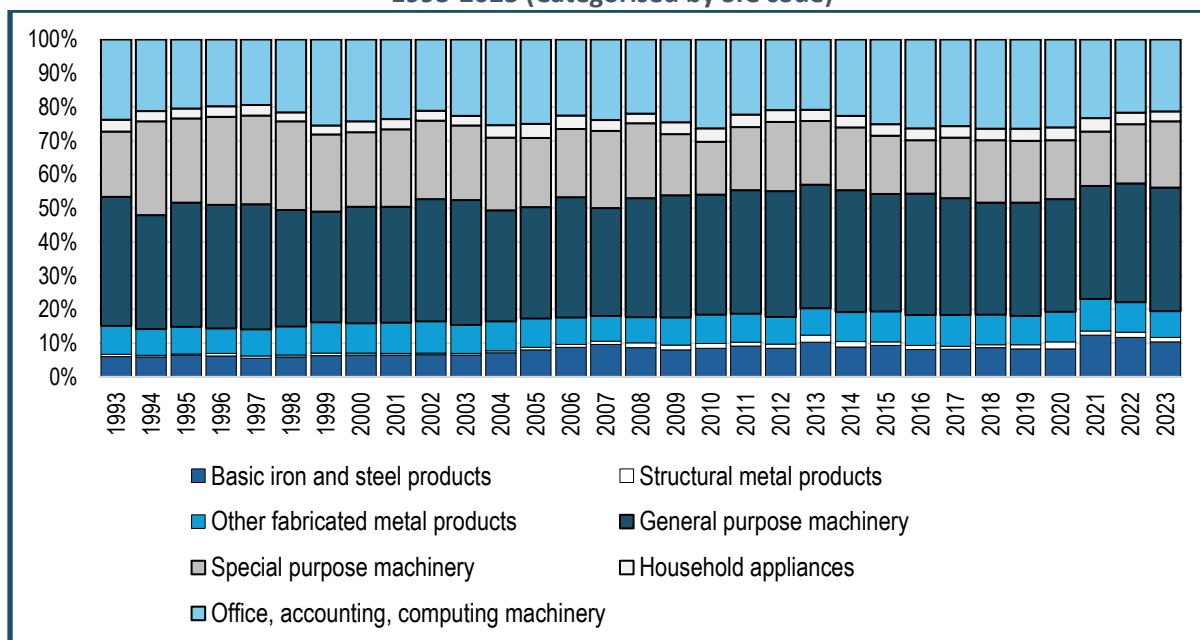
Graph 12: Share of South African basic iron and steel imports by products and related products, 2001-2023 (Categorised by HS code – Regrouped for readability)



Source: Data from ITC Trade Map (2024). Downloaded from <https://www.trademap.org>. Prices are rebased to 2022 using Stats SA’s CPI data, 1993 to 2022.

Looking at the steel industry classification and related industries, downstream industries dominate the import basket. The manufacture of general and special machinery dominates the imports of steel-related products. These include imports such as industrial machinery to manufacture engines and turbines, agriculture and forestry machinery, machine tools, machinery for metallurgy, machinery for mining, quarrying and construction, machinery for food, beverage and tobacco processing, machinery for textile, apparel and leather production, and weapons and ammunition. To some extent, appliance and computers has also dominated the import basket of steel to South Africa. (See Graph 13)

Graph 13: Share of South African basic iron and steel imports by industry and related industries, 1993-2023 (Categorised by SIC code)



Source: Calculated from Quantec. EasyData. Interactive dataset. National trade data. Accessed at www.quantec.co.za in October 2024. Prices are rebased to 2022 using Stats SA’s CPI data, 1993 to 2022.

4. FOREIGN INVESTMENT AND EXPORTERS

In recent years, the South Africa's foreign investment in the steel industry has primarily focused on reviving closed steel plants, investing in new plants, and investing in technological change. This section focuses on trends in foreign investment in the South African steel industry. It references the TIPS FDI Tracker from 2018 to 2024Q1. In this period, the tracker reported six projects, mainly in upgrading of steel mills (Table 1). This section also highlights the dominant foreign exporters, looking into the dominant steel producers that are exporting in South Africa.

4.1. Trends in foreign investment

In 2018, the TIPS FDI Tracker reported two projects, one by Cape Town Iron and Steel Works and one by Agni Steel South Africa. Cape Town Iron and Steel Works has resumed operations after shutting down in 2010 due to a crisis in the steel industry. During this period, steel production in the country declined, profitability dropped due to falling steel prices, and domestic demand remained stagnant (TIPS 2016). Previous owners Murray & Roberts sold the asset to Turkish firm DHT Holdings, which subsequently invested R550 million to renovate the facility. The factory has the capacity to process 500 000 tonnes of scrap metal a year, with the availability of scrap underpinned by the scrap price preference system, which gives local producers first choice to purchase scrap prior to export. The TIPS FDI Tracker reported that Agni Steel South Africa in 2018 invested R100 million to expand its facility at the Coega Industrial Development Zone. As reported in 2018, the project looked into adding a ladle furnace and two more induction furnaces that will double production and allow for production of 180 000 tonnes of steel billets a year.

In 2020, United Heavy Industries also announced R350 million equipment upgrades at the Mandeni steel mill which will increase production capacity from 70 000 tonnes a year to 150 000 tonnes a year. The TIPS FDI Tracker also reported that R4.5 billion is to be spent on a 1.5 million tonne a year on steel mill over two years followed by a R3.7 billion phased expansion. The balance of the investment will fund infrastructure projects and manufacturing units in the energy and aerospace industry.

The expansion of electric arc furnaces and steel mini mills in South Africa in parallel has also reflected foreign investment in this space. In 2022, two projects in this space were announced. This includes an iron/steel manufacturing plant which would include a 132-kilovolt substation and Velocity Venture made a commitment to developing an aluminium and steel plant. These projects fall within the secondary steelmaking phase of the steel value chain and entail the use of electric arc furnaces to melt recovered ferrous scrap metal, thereafter, refined in ladles including the cooling of steel and the final rolling of steel billets into different steel products. The projects use the latest steelmaking technology and cleaner production techniques.

In 2022-2023, as the move towards a sustainable development path intensified, a collaboration between Sasol and ArcelorMittal's Saldanha Steel was established to further explore the revitalisation of ArcelorMittal's Saldanha Steel Midrex facility at the Saldanha Works plant (presently under care and maintenance) to produce and export green steel which is manufactured through green hydrogen and other processes.

Table 1: Steel FDI projects in South Africa 2018-2024Q1

INVESTOR FIRM	PROJECT NAME	INVESTMENT VALUE	PROVINCES	INVESTOR COUNTRY	YEAR
Agni Steel SA	Agni-Steel SA Expansion Project	R100 million	Eastern Cape	India	2018
DHT Holding Africa	DHT Holding Africa Cape Town Iron and Steel Works (Cisco)	R550 Million	Western Cape	Türkiye	2018
United Heavy Industries	United Heavy Industries investment programme	R17 billion	Kwa Zulu Natal	India	2020
Hangda Trading	Hangda steel manufacturing facility	R300 million	Free State	China	2022
Velocity Venture	Velocity aluminium and steel manufacturing plant	R470 million	Gauteng	United Arab Emirates (UAE)	2022
ArcelorMittal/Sasol/ Mainstream Renewables	Sasol/ArcelorMittal decarbonisation initiatives: Saldanha green hydrogen	R12 billion	Gauteng	Luxembourg	2023

Source: TIPS FDI Tracker, 2018–2024Q1. Accessed at www.tips.org.za/manufacturing-data/fdi-tracker in November 2024.

4.2. Dominant foreign exporters

This section focuses on the competitiveness of the dominant steel exporters in South Africa. It highlights some key issues on why the steel industry is failing to structurally transform.

As noted in the paper, the exports of steel from South Africa have been declining in real terms. This is exacerbated by increased cheap imports mainly from China reflecting a declining trade balance. South Africa’s steel trade balance has decreased from R30 billion in 2001 to R9 billion in 2023, in constant 2022 terms, reflecting a 71% decline from 2001. This was exacerbated post-COVID-19, when there was an increase in imports of steel, which has created a lot of issues for the steel producers in the country.

In addition to the declining balance of trade, the steel industry in South Africa faced issues of stagnant steel demand for the past 30 years, caused by falling of steel intensity (the amount of steel consumed per trillion dollars of GDP) by two thirds from 1976 to 2022 (Makgetla 2024a). The steel industry in South Africa also faces issues of higher prices for iron ore, coal, electricity and freight, mainly in the upstream – production of primary steel (Makgetla 2024a). For example, AMSA, the dominant steel producer in South Africa, is in the most expensive quartile of steel producers worldwide (Makgetla 2024b). This is caused by a shift of rents in iron ore and coal mines since 2005 and a surge in input prices when international iron ore and coal markets spiked in 2022 and 2023. World prices remain at historically high levels despite some moderation from mid-2023 (Makgetla 2024a).

Despite the issues of energy, logistics and prices in the South African steel industry, dominant steel mills are still active in the export market. However, exporting of steel products remains a challenge amid the issues outlined in this report. AMSA for example exported 21% of its total production in 2023, reflecting around 514 000 tonnes exports, with more than half of the exports going to the African continent (AMSA 2023). This performance, however, is substantially worst compared to their 2010

exports. AMSA in 2010 exported 1 627 000 tonnes of steel, reflecting around 31% of all steel produced (AMSA 2010).

In the downstream, mini mills have been protected by an export tax on scrap since the mid-2010s, and in 2021 an ad valorem export tax on scrap metals was introduced. In October 2024, parliament's finance committee discussed various tax laws and the export tax on scrap was one of the taxes discussed. The export tax on scrap was proposed to be around R1 000 per tonne of scrap by National Treasury, and the proposal is also meant to replace the current premium price system that was introduced in 2013 to regulate the export of ferrous and non-ferrous scrap by not allowing the export of scrap metal unless it has first been offered to domestic consumers at a discount to the international price at the time of sale (Ensor 2024). In the downstream, mini mills also have cleaner production processes, as they mostly use electric arc furnace, which rely on scrap. This protection incentivises the production of steel by the mini mills. However, most of the production is consumed by the domestic market.

Given this context, in terms of competitiveness and competitive advantage, South African steel industry is battling to find a balance between supporting the downstream and saving the upstream (steel giant in South Africa – AMSA). In the upstream, issues of energy, logistics and higher inputs costs such as higher iron ore and coal prices linked to global prices are issues affecting the performance and the competitiveness of primary steel production and exports. In the downstream, constrained domestic demand, energy and logistic issues are also limiting, which mainly goes to the domestic market. The looming issues of border carbon adjustment measures remains another issue that will affect the competitiveness of the South African steel exports. This is mainly as a result of carbon intensive production processes and high reliance on a carbon intensive electricity grid.

5. CONCLUSION

The trading of steel globally is changing, and the increasing demand for green steel is becoming a priority forcing firms globally and locally to start thinking about investing in new technologies to produce steel in a cleaner way. The entrance of Asian countries such as China and South Korea in the space from the early 2000s, and China specifically joining the World Trade Organization in 2001, has dramatically changed trading of steel globally. The West, mainly Germany, which used to be the dominant steel trader feeding into its automotive industry has lost its dominance in the trading of steel.

Locally, South African steel faces logistical, energy and demand issues due to constrains in public infrastructure spending. This has constrained the export potential of the country, however, Africa remains the biggest steel importer from South Africa and this continues to rise. The development of the African Continental Free Trade Area (AfCFTA) remains a huge opportunity for South Africa. However, issues of AMSA and constrained supply by mini mills (which are focused on supplying the domestic market) should be addressed for the African opportunities to be realised.

In Europe, border carbon adjustment measures are being developed and introduced. South Africa exports 16% of its steel products to Europe, representing the third biggest market for South African steel exports, after Africa (35%) and China (21%). Having a position on border carbon adjustments – carbon import tariffs on steel and responding to these becomes a priority for steel firms and the South African government (Maimele 2024).

Solving domestic issues, such as energy and logistics and boosting steel demand locally, are also imperatives not to be ignored. Solving these issues will highlight the positioning of the South African steel industry in global trade of steel.

REFERENCES

AMSA. 2010. *Annual financial results for the year ended December 2010*. ArcelorMittal South Africa. Accessed at: <https://arcelormittalsa.com/Portals/0/Annual-results-for-the-year-to-December-2010.pdf> in November 2024.

AMSA. 2023. *ArcelorMittal South Africa (AMSA) Integrated Report 2023*. Accessed at: https://arcelormittalsa.com/Portals/0/ArcelorMittal%20South%20Africa%202023%20IR%20Final_1.pdf in November 2024.

Ensor, L. 2024. *ArcelorMittal SA strongly opposes export tax on scrap metal*. Business LIVE. Accessed at: <https://www.businesslive.co.za/bd/companies/industrials/2020-10-07-arcelormittal-sa-strongly-opposes-export-tax-on-scrap-metal/> in November 2024.

ITC Trade Map. 2024. South African trade data— Iron and steel & articles of iron and steel. Dataset Accessed at: <https://www.trademap.org/> in July 2024.

Maimela, S. 2024. *South Africa's Iron, Steel and Aluminium Industries Readiness to Respond to CBAM*. Trade & Industrial Policy Strategies (TIPS). Accessed at: <https://www.tips.org.za/research-archive/sustainable-growth/green-economy-2/item/4791-tips-south-africa-iron-steel-and-aluminium-industries-readiness-to-respond-to-cbam> in July 2024.

Makgetla, N. 2024a. *Options for long steel: An evaluation*. Trade & Industrial Policy Strategies (TIPS). Accessed at: <https://www.tips.org.za/research-archive/trade-and-industry/item/4867-options-for-long-steel-an-evaluation-report> in October 2024.

Makgetla, N. 2024b. *Crisis-hit Amsa cannot be allowed to win at all costs*. Business LIVE. Accessed at: <https://www.businesslive.co.za/bd/opinion/columnists/2024-11-05-neva-makgetla-crisis-hit-amsa-cannot-be-allowed-to-win-at-all-costs/t> in November 2024.

TIPS. 2016. *Summary Brief: The crisis in the steel industry*. Trade & Industrial Policy Strategies (TIPS). Accessed at: https://www.tips.org.za/images/The_Real_Economy_Bulletin_Q1_2016_Briefing_note_summary_-_Crisis_in_the_steel_industry.pdf in January 2025.

Trade & Industrial Policies Strategies (TIPS) is an independent, non-profit, economic research institution established in 1996 to support economic policy development. TIPS undertakes quantitative and qualitative research, project management, dialogue facilitation, capacity building and knowledge sharing. Its two areas of focus are trade and inclusive industrial policy; and sustainable growth.

info@tips.org.za | +27 12 433 9340 | www.tips.org.za