



Steel Manufacturing Industries in SA

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1. Executive Summary

Since the global financial crisis in 2009, where the manufacturing sector's contribution to GDP in constant 2010 prices contracted by 11% to R353 billion, the sector only recovered back to the 2008 levels by 2013 and from there showed virtually no growth.

The entire steel production, steel manufacturing and engineering industries are facing a significant price cost squeeze since the 2009 financial crisis and in most cases, haven't been able to recover lost ground. For this reason, it is essential for the stakeholders of the industry (private sector, labour and government) to understand the challenges facing the industry as well as the possible remedies available to increase internal demand, localise beneficiation and establish exports of value added goods as the value creator for the South African economy.

This research assignment provides recommendations regarding possible restructuring in the different industries, based on extensive industry consultation and primary research.

Many of the proposed interventions in this report are beyond the sphere of influence of COSM, even though the study was commissioned by Committee of Secondary Manufacturers (COSM). This report should, therefore, be read as a holistic solution.

The recommendations can broadly be categorised between industry, steel mills and government interventions to achieve the desired result of **increased manufacturing levels**, which will inevitably lead to job creation and skills development. This, in turn, will have many positive effects for the steel manufacturing industry, government and labour.

Improved internal and external communication between the stakeholders is a key aspect highlighted in this report, as there is continued distrust between the roleplayers in this industry. The Department of Trade and Industry (DTI) and competitions authorities are seen to drive agendas which are not conducive to building the industry, hence the notion that government is far removed from the realities of the industry. Through positive interaction, the relationship can be restored and this will result in vibrant economic growth that will benefit the entire country.

The thrust towards developmental pricing has mostly destroyed the industry structure without creating alternatives or where roleplayers failed to fill the gaps caused by these changes. Related issues such as availability of input material, lead times to fulfill the orders and quality standards are in most cases created by the changes in the pricing structures.

Transformation in the downstream steel manufacturing industry has not progressed to the levels which government expects from the industry, leaving some roleplayers out in the dark, failing to see growth as an outcome to fulfill these targets.

Misalignment of the duty structures for the primary steel industry and that for the secondary steel industry caused an influx of final manufactured goods into the country, due to low prices and an attempt to differentiate. The subsequent application for safeguard duties by the primary steel producers is therefore opposed by the steel manufacturing industries.

The bigger role Chinese imports are playing in the South African economy and the competitive issues local businesses have, necessitate the creation of a “South African Plan” to regain a preference for locally manufactured final steel products.

The establishment of a “Team South Africa” with an expansionistic long-term strategy for the steel industry in totality with sub-strategies per downstream manufacturing industry, based on the government’s National Development Plan (NDP) and the various implementation plans thereof, including the buy-in of all roleplayers, could build the future we are looking for. This will also entail the consistent allocation and awarding of projects (infrastructure and others) by the government to local manufacturers. Together with this localisation drive, the optimisation of manufacturing capacities and expansion into sustainable export markets must be decluttered and made “hassle free”, at least from the South African perspective.

The recommendations in this report, aimed at all stakeholders, should set the scene to create an environment conducive to fair trade, open communication channels and enable growth in the steel sector.

2. Background to the Project

The South African primary and secondary steel industries (the steel industry) play a critical role in mineral beneficiation, quadruple the economic value of South Africa's iron ore and is a key enabler of important parts of the economy such as the automotive, mining, construction, energy and infrastructure sectors. The steel industry is also a key priority for government and the broader labour movement due to its capacity to generate and multiply job opportunities, as well as export revenue.

However, over several years, the steel industry has experienced extreme difficulties to maintain manufacturing and export levels, competitiveness and ultimately profitability. This is largely due to a slack global and domestic economic environment, as well as apparent structural issues evolving, such as global manufacturing overcapacity and steel imports.

From a government, industry and labour perspective it becomes imperative that the current reality in which the South African steel industry finds itself is well understood, while initiatives are identified to stimulate steel's domestic and export growth potential in downstream industries.

Considering the above, the South African Iron and Steel Institute (SAISI), through the COSM Trust, has initiated this study, with the assistance of CD Research and JHJ Associates.

a) Specific objectives

The specific objectives of the study include an introductory overview of the global and Sub-Saharan steel markets, regional and South African macroeconomic performances, global and South African primary steel price dynamics, as well as apparent regional and South African steel import protection.

The latter will be followed by acquiring a deeper understanding of the South African downstream steel industry. In this regard, a quantitative gap analysis of downstream steel exports as well as downstream steel imports for the period 2000 to 2016, will be conducted. The study will include research into why apparent losses in market share and export volumes have occurred over the indicated period. Of additional importance would be a high-level understanding of sub-sectoral industry realities such as capacities, performance and ultimately competitiveness in the automotive and automotive parts, construction, mining components, tube and pipe, as well as other steel manufacturing industries. This understanding will be captured during interviews with identified parties in the steel industry.

Based upon the above reality, growth opportunities were highlighted in the South African downstream steel industry's traditional as well as potential new markets. A high-level identification of opportunities in the SADC and SACU regions, including trade block and FDI potential, will outline further opportunities available to the industry.

b) Scope of the research

High level roleplayer interviews (approximately 50), based upon a qualitative questionnaire, were held to understand and interpret the information acquired during the quantitative gap analysis with the following parties:

- SAISI
- COSM
- Industry associations;
- Government departments: The DTI, International Trade Administration Commission (ITAC) and the Industrial Development Corporation (IDC)
- Primary steel producers
- Downstream industry
- Benchmarking with related industries, i.e. stainless steel

An important objective of the gap analysis and interviews is the identification of focus areas in the different sub-industries; with follow-up, deep-dive studies in identified and specified sub-industries. An additional critical objective is recommendations on how this process should be managed and the role COSM should play.

c) Approach and methodology

As indicated above, quantitative gap analysis for the period 2000 to 2016 was conducted, followed by high-level industry personal interviews with identified parties. The midterm review is of specific importance to verify the findings during the first part of the study with key stakeholders and to initiate amendments if necessary.

d) Important guiding principles and values

The project was conducted in an objective and transparent manner with the interest of the downstream steel manufacturing industry, the primary steel industry and the country at heart. If for obvious reasons specific information or sources of information should be kept confidential, such adherence will be applied to.

e) Professional qualifications and experience

CD Research

Charles Dednam served for more than 35 years in the primary steel industry which took him through the periods of “state-owned enterprise” and “price-regulated industry” to heading the Steel Marketing Division of ArcelorMittal Ltd, a public listed global company. The key aspects throughout the transition were competitiveness and profitability, which he managed to establish quite successfully through the designing of strategies, policies, programmes as well as short- and long-term objectives to control product marketing, sales and related services to meet established profit targets, sales objectives and support the company’s overall growth.

Charles is a seasoned business and marketing strategist who serves as Principal Consultant of the CD Research and Strategy Consulting Unit, which he established after leaving the corporate environment in 2011. The unit is a strategy consultancy, involved in strategy research and strategy teaching, backed by his passion for improving organisational performance. The external focus, understanding the outside world and the operations of the business make Charles one of few experts in the South African context, capable of developing multi-year plans for businesses in Southern Africa that excel in establishing new business opportunities, aligned to clients’ corporate objectives. He is also a firm believer in developing the strategic thinking process throughout the business, recognising real growth and pursuing competitive opportunities.

During his collegiate career, Charles earned a Bachelor of Commerce (Honours) degree in Economics from North-West University. He did the Executive Programme in Business Marketing Strategy at the Kellogg School of Management in Illinois, USA.

He is a member of the ArcelorMittal Alumni, Past Chairperson of the SA Institute of Steel Construction, Chairperson of the Downstream Development Committee, Chairperson of the Economics and Statistics Committee, Chairperson of the SA Iron and Steel Institute, Member of the Economics Committee as well as Member of the World Steel Organisation in Brussels.

JHJ Associates

Johnny Venter qualified as a Chartered Accountant and completed his articles at PriceWaterhouseCoopers in 1993. He also completed a Management Advancement Programme at the Darden School of Business at Darden University in Virginia. He has over 22 years’ experience in the primary steel industry, mostly in sales and marketing, as well as business development environments. During this time, he acquired detailed knowledge and understanding of the Southern African downstream steel industry and has travelled the African steel market extensively. He also gained detailed knowledge and

understanding of global and regional market drivers of the primary as well as downstream steel industries.

He served as Board Member on the Boards of the South African Wire Association, the Downstream Development Committee as well as the Southern African Institute of Steel Construction, where he was the Chairperson for two years.

Since 2015 Johnny has been consulting in the downstream and primary steel industries, focusing on business and market development in the Southern African region.

Dr Hennie Brummer has over 35 years' experience in the steel, steel manufacturing, mining and energy industries. Since March 2015, Hennie has been involved in independent consultancy projects in the global and domestic mining and energy industries. During the period 2000 to 2015, he held various positions, among others, Head: Business Intelligence and Head: Marketing Assessment and Strategy in the global mining companies. In this role, his main field of responsibility was heading the marketing research, marketing and competitive intelligence, mineral economics and marketing strategy functions. During this period and under his leadership, a deep strategic understanding and insight were developed into primary steel producers in China, South Korea, Japan, India, Western Europe, as well as a number of Association of Southeast Asian Nations (ASEAN) countries. Much focus was also given to the development of competitive and strategic insight into global mining companies, as well as mining opportunities and risk assessment in Africa.

Prior to his involvement in the global mining industry, Hennie held various positions in the South African steel industry, with a specific marketing research and market development focus into the domestic steel manufacturing industry.

From an academic perspective, Hennie obtained an MCom degree in Business Management, focusing on Industrial Marketing Research, as well as a DCom degree in Business Management, with a specific focus on Competitive Analysis.

Jaco Oosthuizen has over 35 years' experience in the primary and secondary steel industry, mostly in the sales and marketing environment. Jaco started his career as Marketing Trainee at Iscor and he held various positions in the Sales and Marketing Departments. During this time, he acquired detailed knowledge and understanding of the Southern African steel market.

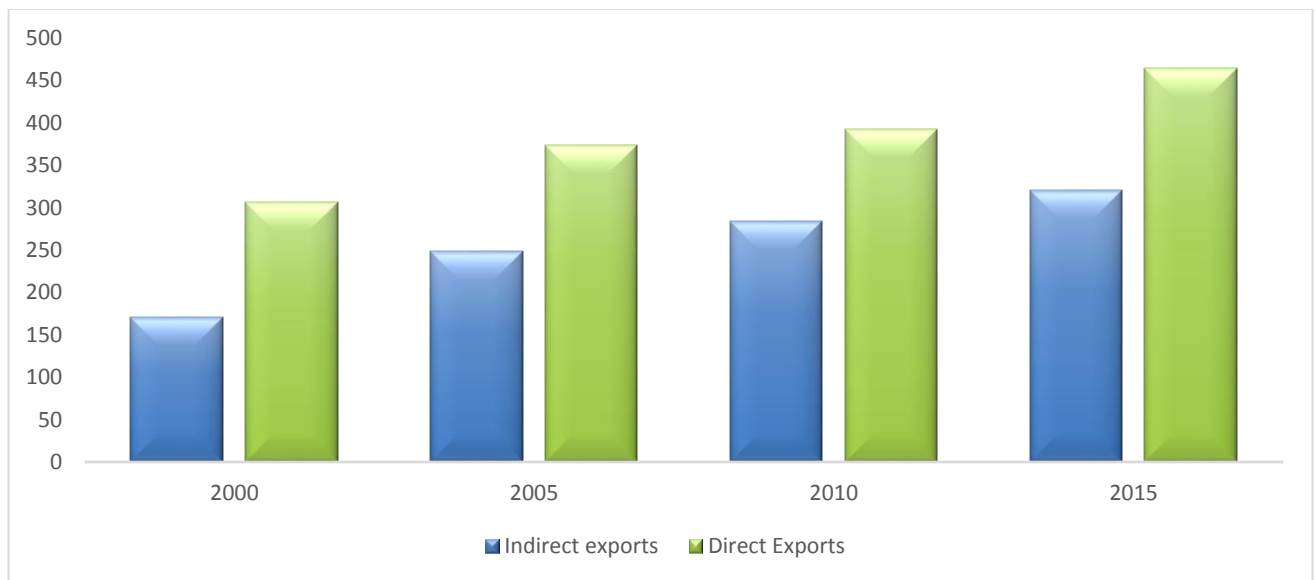
Since 1998, Jaco has been doing consultancy work in the downstream steel industry, specialising in the export of value added steel products.

From an academic perspective, Jaco obtained a BCom degree and an MBA.

3. Outlook for the Global Steel Markets

a. Global Steel Overview

Globalisation and the specialisation of manufacturing have had a significant impact on indirect steel trade, which grew by more than 80% worldwide in the period 2000 to 2015, while direct trade increased by 30%. The volume of indirect trade in steel was equivalent in size to 21% of apparent steel use and equivalent in size to 69% of direct exports in 2015 (Figure 1).



Write Exports with capital E in first little blue block above

Figure 1: World direct and indirect exports of steel¹, million tonnes (Mt), 2000, 2005, 2010 and 2015

Source: Worldsteel Organisation

From the above it is also clearly visible that value adding as part of total steel exports increased globally, which sort into the following applications:

- Buildings and infrastructure

More than half of the steel produced worldwide goes into steel buildings and infrastructure. The population will increase by another 2.7 billion people by 2050 and this will be accompanied by rapid urbanisation. The need for buildings and infrastructure will continue to grow worldwide in years to come. Steelmakers around the world are increasingly providing construction solutions that enable energy-efficient and low-carbon-neutral buildings. These solutions are highly material-efficient and recyclable.

- Transport

Mobility is essential to our modern way of life. The efficient transport of goods has become key to our ever more globalised economy. Freight has almost doubled over the past 30 years. Nearly 15% of the steel produced worldwide is used to meet society's transport needs. It is also essential to the related infrastructure: roads, bridges, ports, stations and airports.

- Automotive

Advanced High-Strength Steels (AHSS) are now used for nearly every new vehicle design. New grades of AHSS enable carmakers to reduce vehicle weight by 25 to 39%, compared to conventional steel. When applied to a typical five-passenger family car, the overall weight of the vehicle is reduced by 170 to 270 kg, which corresponds to a lifetime saving of 3 to 4.5 tonnes of greenhouse gases over the vehicle's total life cycle. This saving in emissions represents more than the total amount of CO₂ emitted during the production of all the steel in the vehicle.

- Steel in energy production and distribution

Energy is essential for the development of society and steel is critical for supplying the world with energy. Whether based on fossil fuels, nuclear technology or renewables, steel is indispensable in the recovery, production, distribution and storage of energy. Steel also has an important role to play in improving the efficiency of these energy sources.

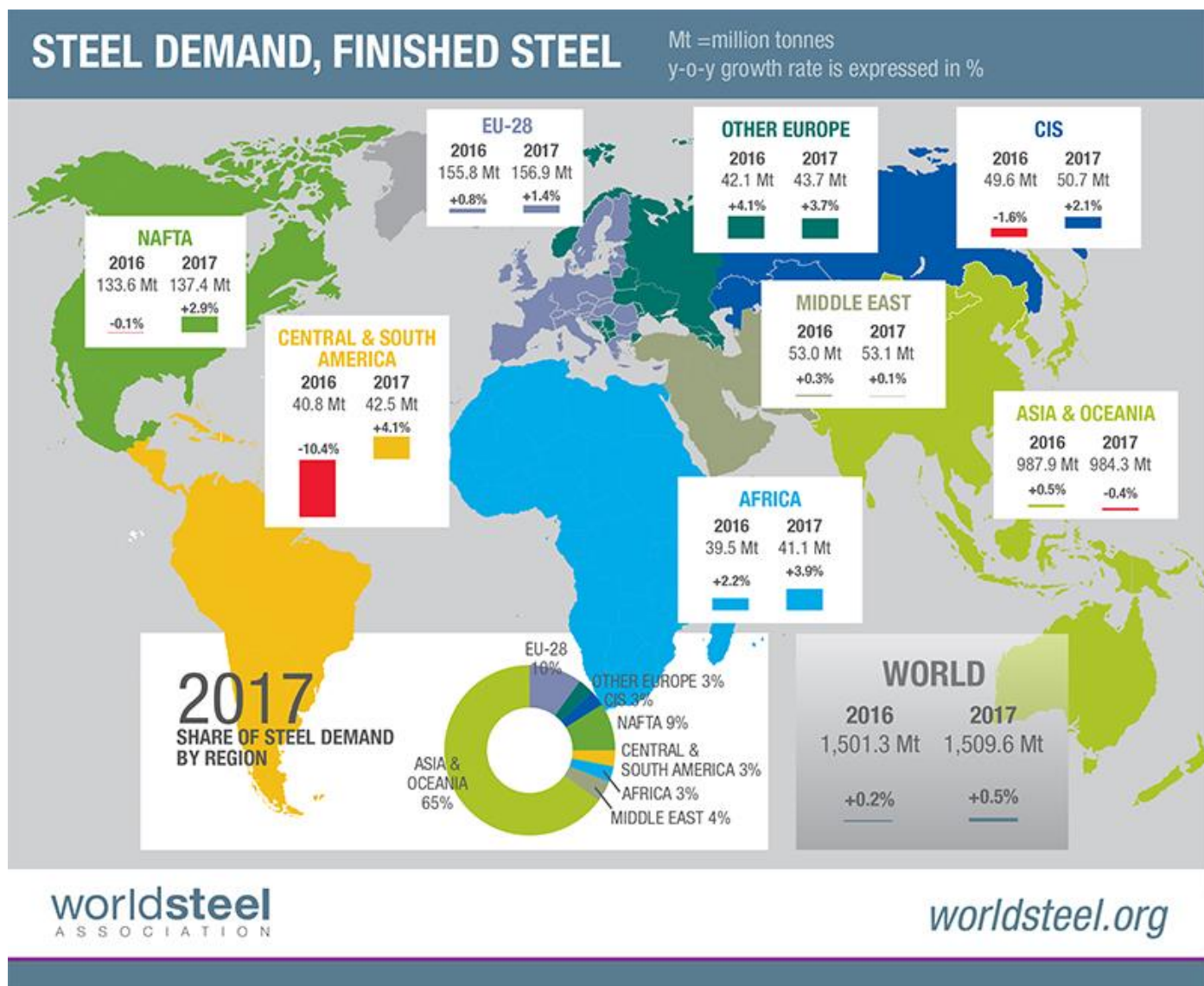
- Food and water

Steel is needed for growing, storing and delivering our food. It is also needed in water collection, storage, purification and distribution. Almost 200 billion cans of food are produced each year. Compared to other food preservation methods, steel cans save energy because refrigeration and freezing are not needed. Steel cans are 100% recyclable and have an average global recycling rate of 68%. There is also potential to make steel cans reusable and lighter by altering designs and canning processes.

- Tools and machinery

If a product is not made of steel, the chances are that it will be made from a machine made of steel. Steel is all around us; your car, your phone, your fridge - even the plastic and glass bottles you have in your fridge - are all made either of steel or manufactured using steel tools. Plastic car parts, glasses and computer chassis are all manufactured in moulds made of steel. Steel is essential in our modern world.

b. Steel Demand and Supply Dynamics



Notwithstanding the moderate growth outlook for steel consumption on the African continent, the outlook for South Africa's steel consumption remains negative. The growth in steel consumption in Africa is predominantly underpinned by infrastructure investment, albeit at a much slower rate compared to the 2010 to 2015 period.

Steel Demand Outlook

Region	Million Tonnes			y-o-y growth rates (%)		
	2015	2016(f)	2017(f)	2015	2016(f)	2017(f)
European Union (28)	153.3	155.4	158.1	2.8	1.4	1.7
Other European Countries	40.1	41.3	42.6	8.1	3.0	3.0
CIS	50.0	46.3	48.4	-10.8	-7.4	4.6
NAFTA	134.5	138.8	142.3	-8.4	3.2	2.6
Central and South America	45.4	42.6	44.0	-7.3	-6.0	3.2
Africa	39.0	39.5	41.1	4.3	3.8	6.5
Middle East	53.0	54.3	56.4	-1.0	2.4	4.0
Asia and Oceania	984.8	968.5	958.7	-3.3	-1.7	-1.0
World	1 500.1	1 487.7	1 493.6	-3.0	-0.8	0.4
Developed Economies	399.1	405.9	410.4	-4.0	1.7	1.1
Emerging and Developing Economies	1 101.0	1 081.8	1 083.2	-2.7	-1.7	0.1
China	672.3	645.4	626.1	-5.4	-4.0	-3.0
MENA	72.1	74.4	78.0	-0.6	3.1	4.9
Em. and Dev. Economies, excl. China	428.6	436.3	457.1	2.0	1.8	4.8
World, excl. China	827.7	842.2	867.6	-1.0	1.8	3.0

Source: Worldsteel SRO 2016/17

Weakness in investment globally continues to hold back a stronger steel demand recovery. However, a better than expected forecast for China, along with continued growth in emerging economies, will help the global steel industry to move back to a positive growth path for 2016 and onwards. The slight growth momentum is expected to remain weak for the time being, due to the continued rebalancing in China and weak recovery in the developed economies.

Downside risks to this outlook come from the high corporate debt and real estate market situation in China, Brexit uncertainties and possible further escalation of instability in some regions. On a positive note, steel demand in the emerging and developing economies, excluding China, is expected to accelerate to show a 4% growth in 2017, thanks to the resilient emerging Asian countries and stabilisation of commodity prices.

Steel Use Per Country *(Source: Worldsteel Organisation Steel Statistical Tables 2016)*

Million Tonnes Finished Steel Products							
	2009	2010	2011	2012	2013	2014	2015
Austria	3.2	3.6	3.9	3.6	3.5	3.6	3.6
Belgium-Luxembourg	4.1	4.6	5.0	4.5	4.4	4.5	4.5
Czech Republic	4.5	5.5	6.1	5.9	5.9	6.2	6.6
France	11.0	13.1	14.0	12.6	12.6	12.5	12.5
Germany	28.2	36.2	40.7	37.5	38.0	39.6	39.0
Italy	20.1	25.7	26.6	21.5	22.0	22.0	23.9
Netherlands	2.9	3.2	3.8	3.5	3.5	3.4	3.6
Poland	8.2	10.0	11.0	10.4	10.4	12.3	12.5
Romania	2.6	3.3	3.8	3.3	3.3	3.8	3.9
Spain	11.9	13.1	13.1	10.4	10.7	11.6	12.7
Sweden	2.6	3.6	3.9	3.5	3.6	3.4	3.4
United Kingdom	7.9	9.9	10.2	9.7	9.6	10.7	10.5
Other European Union (28)	14.1	14.7	14.6	13.9	14.6	15.5	16.6
European Union (28)	121.2	146.4	156.7	140.3	142.0	149.1	153.3
Turkey	18.0	23.6	26.9	28.5	31.3	30.8	34.4
Others	5.1	5.3	5.8	5.6	5.6	6.3	5.7
Other European countries	23.2	28.8	32.7	34.1	36.9	37.1	40.1
Russia	24.8	36.7	41.5	42.8	43.3	43.0	39.4
Ukraine	3.9	5.5	6.3	6.3	5.6	4.3	3.3
Other CIS	7.2	7.2	7.5	8.6	9.8	8.8	7.3
CIS	35.9	49.5	55.3	57.7	58.7	56.0	50.0
Canada	9.5	14.1	14.2	15.6	14.1	16.9	14.5
Mexico	15.2	17.8	19.8	20.9	20.1	22.9	24.2
United States	59.2	79.9	89.2	96.2	95.7	107.0	95.7
NAFTA	83.9	111.7	123.2	132.7	129.9	146.7	134.5
Argentina	3.2	4.6	5.3	4.9	5.1	5.0	5.3
Brazil	18.6	26.7	26.1	26.6	28.0	25.6	21.3
Venezuela	2.7	2.3	2.6	3.0	2.9	2.0	1.8
Others	8.8	11.7	13.0	14.2	15.4	16.3	17.0
Central and South America	33.3	45.2	47.1	48.7	51.3	48.9	45.4
Egypt	11.1	9.3	7.8	9.5	9.2	10.2	10.9
South Africa	4.5	5.0	5.3	5.3	5.7	5.1	5.4
Other African Countries	16.4	14.1	16.3	18.2	21.5	22.1	22.8
Africa	31.9	28.4	29.4	32.9	36.4	37.4	39.0
Iran	17.5	19.7	21.1	19.0	18.8	18.9	18.7
Other Middle Eastern Countries	28.5	29.0	30.1	31.8	32.9	34.6	34.3
Middle East	46.0	48.7	51.3	50.7	51.7	53.5	53.0
China	551.4	587.6	641.2	660.1	735.1	710.8	672.3
India	57.9	64.9	69.8	72.4	73.7	76.1	79.5
Japan	52.8	63.6	64.1	64.0	65.2	67.7	62.9
South Korea	45.4	52.4	56.4	54.1	51.8	55.5	56.0
Taiwan, China	11.3	17.8	18.1	17.8	18.6	19.6	17.5
Other Asian Countries	51.5	57.6	63.3	71.0	76.2	81.0	89.2
Asia	770.3	843.9	912.8	939.3	1,020.6	1,010.6	977.5
Oceania	6.0	7.8	6.9	7.3	6.7	7.4	7.3
World	1,151.7	1,310.5	1,415.4	1,443.7	1,534.2	1,546.9	1,500.1

Interesting to note is the per capita use of steel. South Korea has become a major manufacturing force despite its relatively small population of around 50 million – or about 4% the size of China at 1.351 billion people. It is further clear that relatively high per capita steel consumption is at the heart of a healthy economy with the power to export efficiently. It is, therefore, no surprise that the value-added steel industry is a global market that is highly complex with many kinds of incentives and protectionist measures. It is particularly incentives and support programmes in Asia which are affecting global value added steel manufacturers and this trend is also true for South Africa.

Average Steel Use Per Capita

	2009	2010	2011	2012	2013	2014	2015
European Union (28)	242.1	291.6	311.6	278.5	281.6	295.5	303.5
Turkey	253.0	325.9	366.3	380.3	410.6	396.9	436.8
Others	163.3	167.4	183.7	177.0	175.6	197.1	178.8
Other European Countries	225.5	277.8	311.4	319.8	341.3	338.6	362.0
Russia	173.5	256.7	289.7	298.7	302.1	299.8	274.6
Ukraine	84.6	119.9	139.2	138.7	123.6	94.8	74.7
other CIS	102.7	102.0	104.1	118.8	133.4	118.5	97.0
CIS	138.6	190.4	212.3	220.9	224.1	213.5	190.0
NAFTA	183.3	241.6	263.6	281.3	272.9	305.4	277.4
Central and South America	73.1	98.3	101.1	103.5	107.9	101.8	93.5
Egypt	137.4	113.7	92.9	110.5	105.1	113.7	118.7
South Africa	87.4	96.9	102.1	99.7	106.5	94.7	98.5
Other Africa	18.6	15.6	17.6	19.1	22.0	22.0	22.0
Africa	31.5	27.4	27.6	30.1	32.5	32.5	33.1
Middle East	221.1	228.3	235.2	228.2	228.1	232.0	225.4
China	413.4	438.2	475.6	487.0	539.5	519.0	488.6
India	47.7	52.8	55.9	57.3	57.6	58.7	60.6
Japan	414.6	499.3	503.7	503.0	513.8	533.9	497.3
South Korea	930.5	1,067.2	1,142.5	1,089.9	1,038.4	1,108.	1,113.
Taiwan, China	487.7	766.8	778.0	762.8	795.8	837.2	750.6
Other Asia	54.8	60.6	65.7	72.7	77.1	80.8	87.9
Asia	209.0	226.7	242.9	247.5	266.4	261.3	250.5
Oceania	168.2	215.4	185.2	194.9	174.2	191.5	185.1
World	171.4	192.8	205.7	207.4	217.8	217.1	208.2

Source: Worldsteel Organisation Steel Statistical Tables 2016

To survive and thrive in a sector in constant transition, the steel industry needs to transform itself. Globalisation is no longer a matter of choice; steel businesses' long-term success depends on it. The businesses that ride the next wave of growth will be those that understand the trends and refine their strategies, business models and portfolios per a truly global mindset. The steel producers must find the right balance between globalisation and customisation.

The core of the steel industry's problems lies within the over-capacity glut

While the Chinese steel sector turns introspective over the next decade to deal with its excess capacity, pollution, low market concentration and lack of profitability; now is the time to gain a competitive advantage before supersized, more efficient Chinese steelmakers emerge in the global market.

Steel companies that embrace globalisation (in their strategy, supply chains, knowledge and information, processes, talent and financial flows) while balancing customisation (of their products, marketing and stakeholder relationships) will emerge as sector leaders in the long-term.

Below are some of the key drivers of globalisation that are increasingly pressurising the steel sector. Pressure to globalise will drive the need for stronger global policy coordination among nations and resilient supply chains for companies operating in this environment.

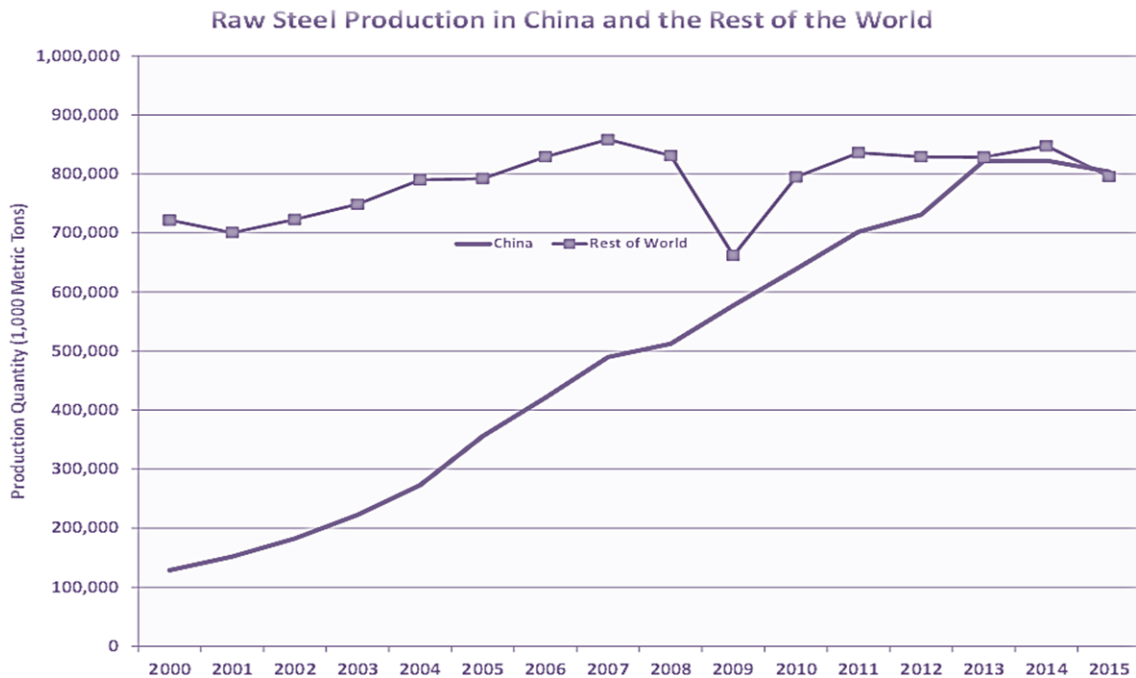


Source: EY Global Steel 2015/16

In April 2016 Wiley Rein presented a report to the Organisation for Economic Cooperation and Development (OECD) regarding the "Unsustainable Government Intervention and Overcapacity in the Global Steel Industry". They found that:

- a) The global steel industry is confronted with an unprecedented level of **overcapacity**.

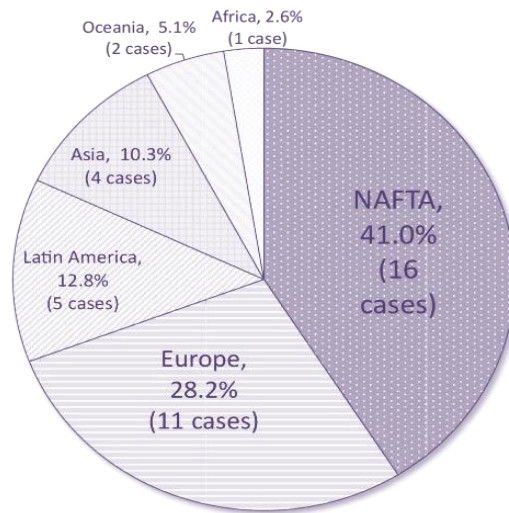
- b) The overcapacity largely results from increasing levels of government ownership and intervention in the steel industry, especially in **China, which is home to nearly two-thirds of world steel overcapacity.**
- c) The growth in steel capacity since 2000 is reflected in increased production, most notably in China, as shown in the chart below.
- d) The OECD has concluded that “The growing gap between global steelmaking capacity and demand has led to a deterioration in the financial situation of steelmakers, and has raised concerns about the longer-term economic viability and efficiency of the industry.”



Source: World Steel Association.

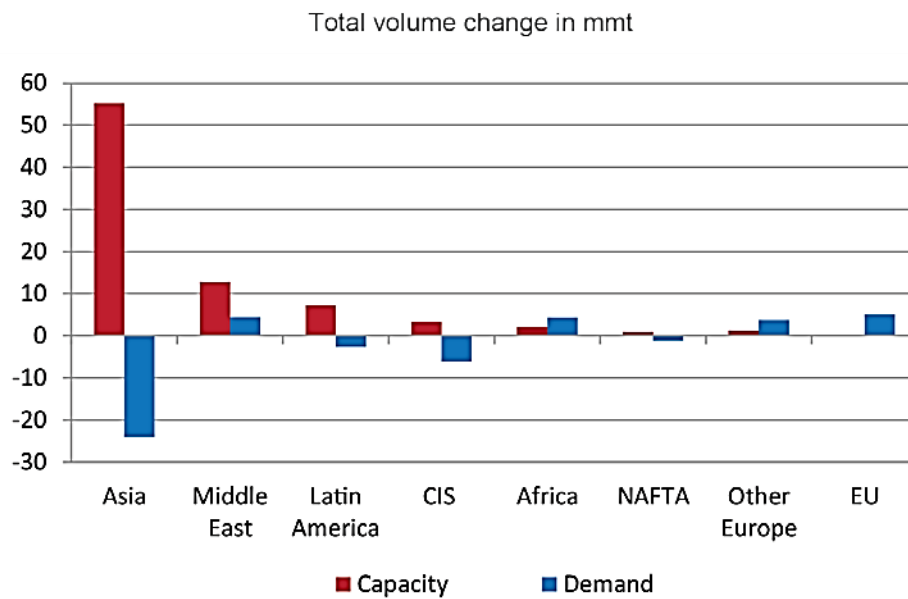
Source: Worldsteel

- e) Those most responsible for the overcapacity glut are exporting its adverse effects, to the detriment of market-based producers globally. From September 2015 through February 2016, a full 41% of announced closures, production cutbacks and layoffs in the global steel industry occurred in the NAFTA countries, with another 28% in Europe. As shown in the chart below, only ten percent of closures, cutbacks and layoffs occurred in Asia which, due to China, has the clear majority of the world's steel capacity.



- f) Despite the significant excess capacity currently overhanging the steel industry worldwide, many steelmakers plan additional capacity increases in the coming years. Thus, global steel capacity is projected to expand even further. With ongoing and planned capacity increases, capacity will grow by about 103 million tonnes worldwide from 2016 to 2018. Capacity growth will continue to outpace demand, and once again, China leads in terms of planned capacity increases. While the Chinese government recently announced plans to reduce the country's steel capacity by 100 to 150 million tonnes, this reduction would be inadequate, and there is significant doubt as to whether such capacity closures will even be accomplished.
- g) The overcapacity crisis plaguing the global steel industry is largely a result of non-market forces.
- h) Growth in global steel capacity has not tracked demand in the market, resulting in the overcapacity crisis facing the industry today. The first decade of this century saw global steel demand grow by approximately five percent per year. By contrast, the rate of growth in global demand has slowed significantly over the past few years.

Steelmaking capacity and steel consumption changes by region in 2015 and 2016



Source: OECD calculations.

- i) Rather than market-based growth, capacity continues to grow largely because of intervention by governments, many of which have significantly subsidised their steel industries, through low- interest loans, grants and/or the provision of low-priced inputs.
- j) China provides the most striking example of government intervention in the steel industry. The unprecedented growth in Chinese capacity is largely a result of massive government ownership and control, which has come at the expense of market-oriented steel producers around the globe. Turkey is another prime example of a steel industry built with government support. The Turkish steel industry has grown rapidly, jumping from the 17th largest crude steel-producing country in the world in 2000 to the ninth largest last year. Similarly, the Indian government has fostered the rapid expansion of its steel industry through intervention and subsidies. There, the government owns 86% of the Steel Authority of India Ltd. (SAIL), India's largest steel producer.
- k) China must continue to be treated as a non-market economy for trade remedy purposes, given the Chinese government's continued, substantial and disruptive intervention in its steel industry and the overall economy.

Global infrastructure spending will remain the largest driver of steel demand across the globe and even in developed countries the importance of continued infrastructure investment is continually re-iterated.

The World Economic Forum estimates that the current global investment gap for infrastructure is \$1tr per annum against an annual global investment demand of \$3.7tr. Between now and 2030 the world is facing a vast \$14tr shortfall.

Expected Infrastructure Investment (2010-2030)

Region	Investment (2010-2030)
North America	\$6.5 trillion
Europe	\$8-10 trillion
Asia/Oceania	\$15-20 trillion
Latin America	\$17 trillion
Africa/Middle East	\$3.5 trillion
China	\$7 trillion
India	\$3.5 trillion

Source: World Bank

Globally the established trends in infrastructure spending are expected to continue for at least the next two decades with reduced spending in telecoms but increased spending on power infrastructure.

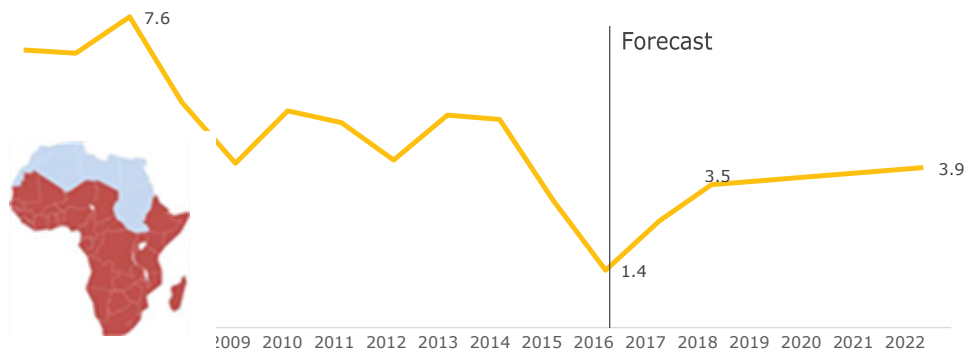
4. Sub-Saharan Africa

a. Regional overview

In their Global Economic Outlook Report, the International Monetary Fund (IMF) lowered Sub-Saharan Africa's growth substantially. Despite headwinds, growth is projected to pick up to 3.9% by 2022, lifted by infrastructure investment, increased agricultural production and buoyant services. The outlook is subject to downside risks arising from violent insurgencies, lower commodity prices and volatile global financial conditions. Policy priorities include a need for budget restraint for some countries in the region and a shift of spending to increasingly productive ends, as infrastructure constraints are acute. Project selection and management could be improved with greater transparency and accountability in the use of public resources.

Regional economic growth forecast for Sub-Saharan Africa edging up

Sub-Saharan Africa's (SSA's) 2016 growth was the slowest in 20 years. Recovery will be gradual.



GDP at market prices and expenditure components are measured in constant 2010 US dollars.

Source: IMF World Economic, April 2017

Low growth was largely driven by external factors, particularly oil prices, which meant two of the largest three economies in SSA, i.e. Nigeria and Angola, had to accept lower receipts for their exports. As a result, both economies fell into recession, with Nigeria hit particularly hard, as the nation dealt not only with reduced terms of trade but with lower production levels as a result of domestic insurgency.

South Africa's growth in 2016 was only marginally positive (0.3%), while Angola's growth for the year is likely to be flat. All three of these economies are expected to grow more

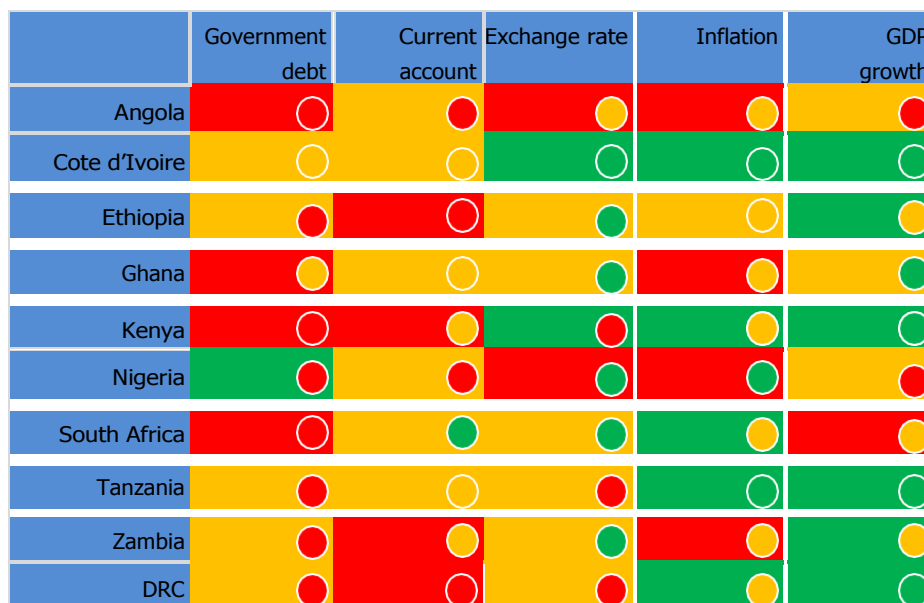
strongly in 2017, although each one is dependent on a combination of global commodity price recovery and structural economic reform.

At the other end of the spectrum, Cote d'Ivoire remains one of the fastest growing countries globally, although once again, highly dependent on commodity (cocoa) prices and its ability to manage internal conflict. Staying in West Africa, Ghana's prospects are also looking increasingly promising, with a newly elected administration, promising to manage the public purse more prudently.

East Africa remains the most buoyant of all, with the four key economies (Kenya, Ethiopia, Tanzania and Uganda) all poised for growth of 6% and above for the decade.

The 'heatmap' below provides a snapshot of macroeconomic resilience across some of the key SSA economies and illustrates just how variable economic performance is across different parts of the continent. The colour of each block represents the longer-term position for that metric – green being positive and red negative. The colour of the circle in the block represents the current trend.

There are signs that the worst of the economic downturn across the continent may be over, and that growth will recover, albeit gradually. For one, there has been some recovery in commodity prices, and the forecast is for a continued gradual rise in prices. Currencies have been less volatile in many instances (except for Nigeria - for very specific reasons). That, in turn, has helped contain inflation, which is either slowing or at the very least, holding steady at current levels. This allows for monetary easing, which is supportive of rising consumer spending, and that is critical to the continent's longer-term growth prospects.



Source: Exchange rates; Oanda.com; GDP growth; IMF inflation; Current account, Government debt — all from tradingeconomics.com

- The colour of the individual block represents the long-term position for that metric on a scale from green being more positive, to red being more negative.
- The colour of the circle in the block represents the current trend.

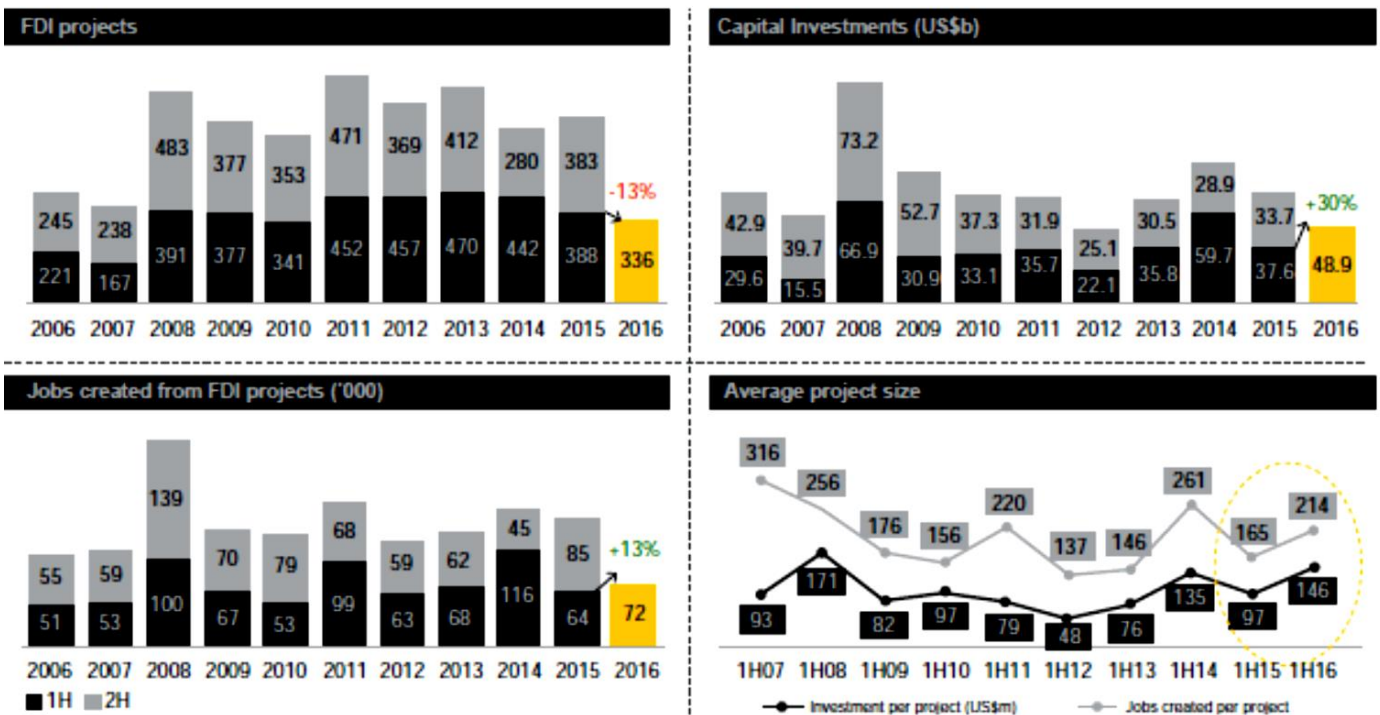
Foreign Direct Investment (FDI): The most important factor to drive future steel demand

While progress has been made in many African countries, there is clearly a need to accelerate the process of structural transformation to drive sustainable and more inclusive growth. Although the commodities boom has not been the only engine of Africa's economic growth, many countries remain heavily dependent on revenues from natural resources and are vulnerable to external upsets. Other strategic sectors, such as manufacturing, construction and agriculture, need to be prioritised and more fully developed. This will not only further lessen dependence on commodities, but also expand the private sector, increase productivity and, most importantly, create employment and broader economic opportunities.

In the first six months of 2016 (1H16), greenfield FDI projects in Africa **were down 13.4% on 1H15 levels**. However, the capital value of total investments across the continent rose 30%, with the average capital investment per project increasing from US\$97m to US\$145m in 1H15. Similarly, job creation in Africa resulting from FDI projects was also up, rising 12.6% from 1H15 levels. This means that an FDI project in Africa on average created 214 jobs in 1H16, compared to 165 jobs during the same period in 2015. These capital and job-intensive projects were largely directed toward two sectors:

1. Transport and logistics, real estate and hospitality; and
2. Construction (RHC).

Fewer but larger project (both by capital and jobs created) in Africa in 1H16



Source: FDI Markets

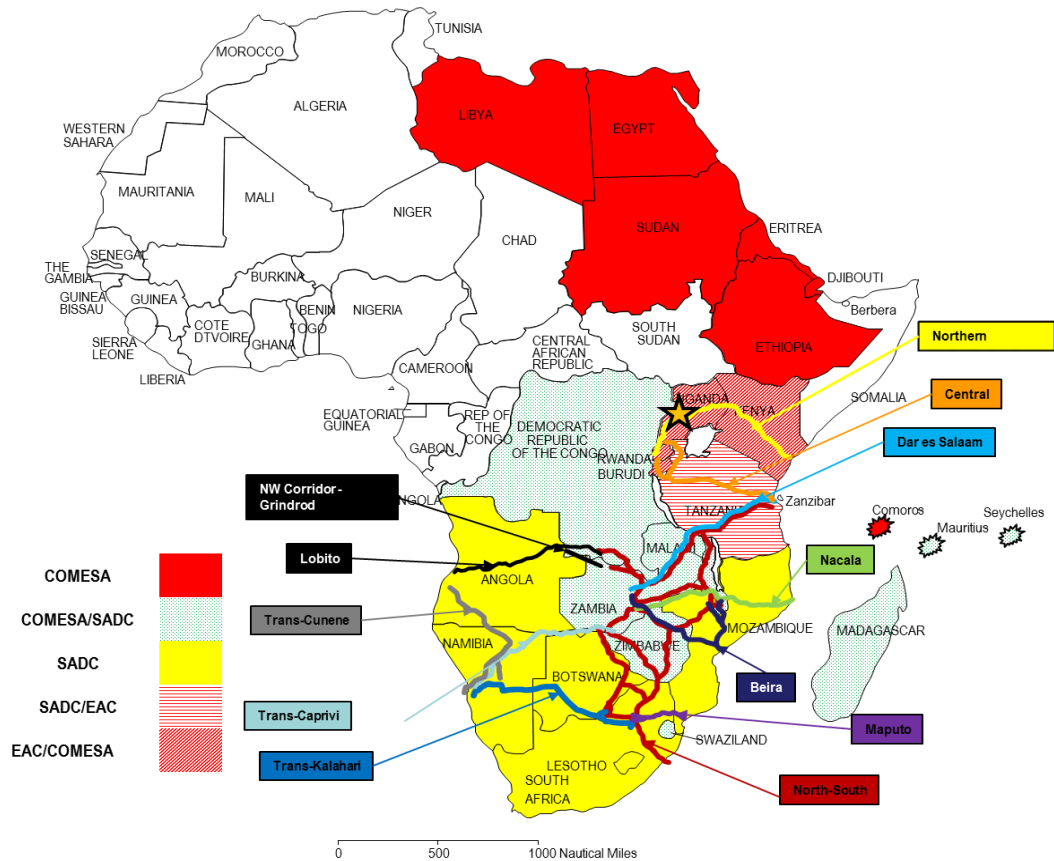
The African Free Trade Zone (AFTZ) is a free trade zone announced at the EAC-SADC-COMESA Summit on 22 October 2008 by the heads of the Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC). The African Free Trade Zone is also referred to as the African Free Trade Area in some official documents and press releases.

In May 2012, the idea was extended to also include ECOWAS, ECCAS and AMU. In June 2015, at the African Union Summit in South Africa, negotiations were launched to create a Continental Free Trade Area (CFTA) with all 54 African Union states by 2017.

The Southern African Development Community's (SADC's) trade block overlaps largely with the Common Market for Eastern and Southern Africa (COMESA) and East African Community (EAC) (See the map below). In June 2011, the heads of state of the member countries of COMESA, SADC and the EAC signed a declaration for a COMESA-EAC-SADC Free Trade Area. The COMESA-EAC-SADC Free Trade Area comprises 26 countries, with a total population of 600 million and combined Gross Domestic Product (GDP) of over US\$1 trillion. The objective is the economic integration and regional coordination of the countries of Eastern and Southern Africa through harmonisation of trade, customs and infrastructure development. Eager to push ahead, Malawi, Mozambique, Zambia, Madagascar, Mauritius and the Seychelles go beyond the COMESA-EAC-SADC tripartite arrangements to fast track regional economic integration through trade policy harmonisation through the Accelerated Programme for Economic Integration (APEI).

This initiative has been slated for the first round of implementation in 2015/16 and will allow SADC exporters preferential access to the crucial EAC block, especially Kenyan and Ugandan markets for those countries that do not have the access. Many of the corridors pass through multiple trade blocks, which could open up good potential for development. This combined trade block constitutes more than 80% of the continent's steel demand.

Free Trade Zones and Corridor Developments in Africa



<u>Eastern Corridors</u>	<u>Southern Corridors</u>	<u>Western Corridors</u>	<u>North South Corridor</u> Durban-Lubumbashi
<ol style="list-style-type: none"> 1. Limpopo 2. Beira 3. Nacala 4. Mtwara 5. Dar es Salaam 	<ol style="list-style-type: none"> 1. Durban-Manzini 2. Durban-Maseru 3. Durban-Phalaborwa 4. Maputo 	<ol style="list-style-type: none"> 1. Trans Orange 2. Trans Kalahari 3. Walvis Bay-Ndola-Lubumbashi (Trans Caprivi) 4. Trans Cunene 5. Namibe 6. Lobito (Benguela) 7. Mulanje 8. Bas Congo 	

b. African Steel Supply/Demand dynamics

The total crude steel production in Africa is 13.7 million tonnes, coming from a high of 18.7 million tonnes in 2006.

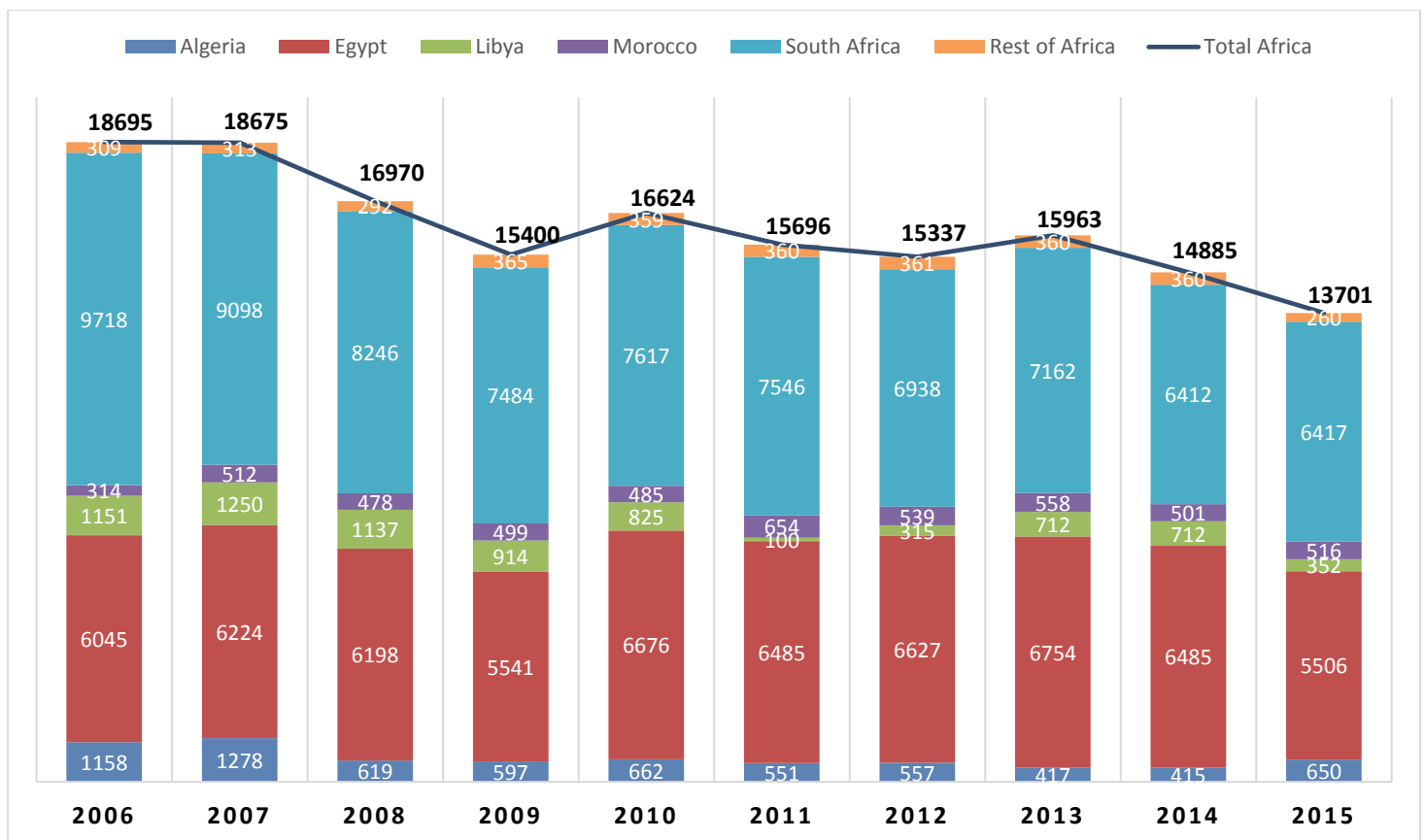
Although the capacity utilisation rate dropped to about 76% in 2009, less efficient capacities were removed since then. A total of 1.6 million tonnes EAF capacity was mothballed at the ArcelorMittal plant and at the Cape Town Iron and Steel Works (CISCO). At the Zimbabwe Iron and Steel Company (ZISCO) plant, 0.5 million tonnes at the ZISCO

plant in Zimbabwe was decommissioned. EVRAZ Highveld Steel & Vanadium has stopped production, however micro-mills with induction furnaces are popping-up all over the continent, supplying popular steel products at reduced steel prices.

The composition of the 13.7 million tonnes crude steel production in Africa is:

- Egypt – 5.5 mt
- Algeria – 0.5 mt
- South Africa - 6.4 mt
- Other (Uganda, Kenya, Zambia, Tunisia, Morocco) – 1.3 mt

Graph: African Crude Steel Production

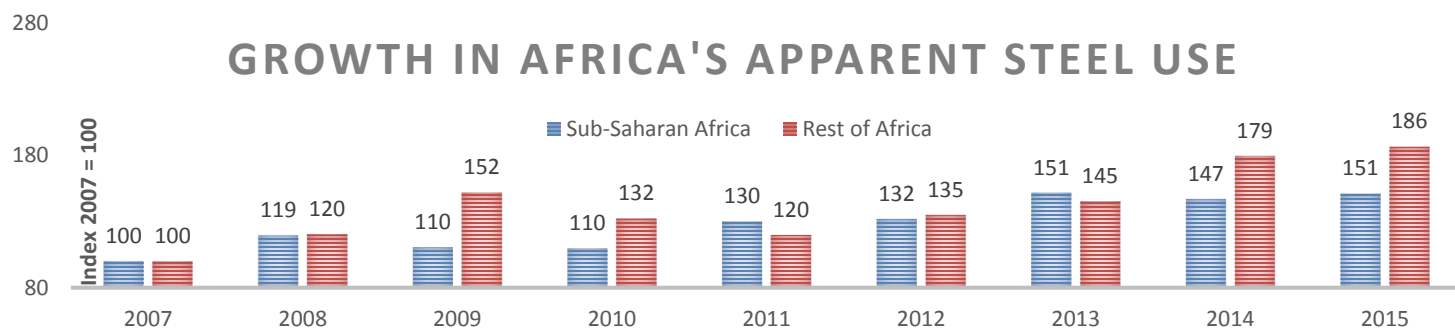


Source: World Steel Organisation - World Steel in figures 2016

AFRICAN STEEL DEMAND

Although growth in Africa's steel demand is gaining momentum, supported by relative better economic growth as part of the emerging economies, Sub-Saharan Africa's Steel use stagnated over the last three years with zero growth, while that of South Africa shrunk by about 10% since 2007.

Africa's Apparent Steel Use



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria (1)	3 103	2 909	3 697	4 277	3 063	3 787	4 644	5 641	6 173	5 990
Angola	477	24	984	944	632	786	1 038	1 018	1 034	779
Benin	66	114	99	146	112	136	166	118	137	129
Cameroon	149	149	153	169	159	155	233	232	269	269
Congo	87	121	111	107	76	113	143	238	276	150
Dem. Rep. of the Congo	60	60	86	80	80	103	109	127	160	136
Djibouti	95	90	133	135	136	146	200	119	159	585
Egypt (1)	4 663	5 465	7 460	11 054	9 332	7 780	9 468	9 207	10 182	10 862
Equatorial Guinea	61	61	67	78	110	105	129	128	107	77
Ethiopia	208	409	293	506	310	457	695	803	835	1 038
Gabon	66	91	92	73	99	123	135	140	151	94
Ghana	264	264	474	436	501	801	738	721	791	911
Guinea	70	43	60	61	66	99	80	114	111	142
Ivory Coast	127	127	176	168	207	191	205	266	301	345
Kenya	585	583	617	832	808	1 218	960	1 316	1 342	1 715
Libya (1)	857	1 151	1 081	1 880	1 408	65	898	1 531	1 627	1 385
Madagascar	41	61	166	82	71	81	83	96	109	111
Mauritania	...	49	43	54	62	100	107	122	149	106
Mauritius	82	107	112	98	122	96	85	92	87	113
Morocco (1)	1 499	1 420	1 876	1 727	1 633	2 799	2 600	2 773	2 535	2 700
Mozambique	136	174	148	170	187	194	269	358	397	366
Nigeria	1 264	1 259	1 718	1 864	1 433	1 850	1 840	2 282	2 025	1 760
Senegal	206	206	195	267	338	402	368	313	386	419
South Africa (1)	5 868	5 807	6 126	4 456	5 001	5 332	5 266	5 514	4 949	5 080
Sudan (1)	410	387	326	393	337	295	334	264	300	320
Tanzania	209	209	252	320	331	441	410	725	601	665
Tunisia (1)	711	741	983	715	891	772	765	754	781	800
Togo	81	87	54	77	139	113	174	154	185	190
Uganda	...	95	112	114	188	152	73	123	151	145
Zambia	90	125	123	110	116	168	148	195	159	169
Zimbabwe	...	72	39	42	74	106	112	118	127	148
Other Africa	290	314	350	462	412	478	453	641	632	768
Africa	21 825	22 774	28 207	31 895	28 434	29 443	32 927	36 417	37 387	38 680

(1) Include total Southern African Customs Union - South Africa, Botswana, Namibia, Swaziland and Lesotho

Source: World Steel Statistical Yearbook, 2016

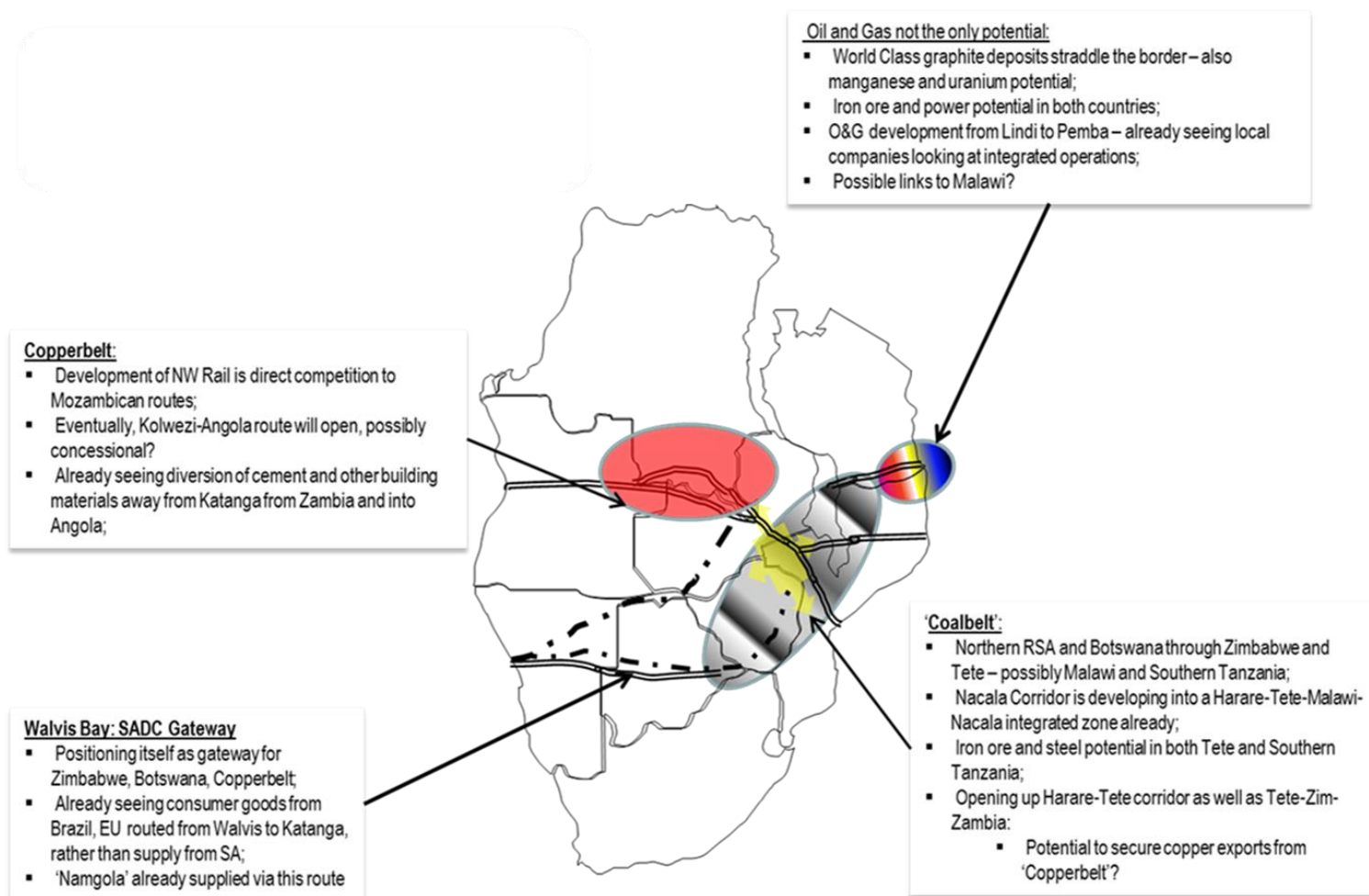
c. SADC Steel market and investment patterns

The Sub-Saharan Africa region includes most of the SADC trade block countries (Botswana, DRC, Kenya, Madagascar, Malawi, Mozambique, Namibia, South Africa, Tanzania, Uganda, Zambia and Zimbabwe) and the trade block will increase as the economic communities of SADC, COMESA and the EAC merge.

Key drivers for future primary steel and final steel product demand

Developing Economic Belts (Gas, Coal and Copper)

The market around South Africa will also cover the three major growth areas in the region, i.e. the oil and gas development in Northern Mozambique/Tanzania; the “Coalbelt” in central Mozambique and Zimbabwe and the “Copperbelt” in the Southern DRC and Zambia. This area attracts the lion share of fixed capital investment in the SADC.



Source: Build Environment Professions Export Council (BEPEC)

SADC Trade Corridor Development Initiative

There are 208 projects identified on the corridor development initiative with a total value of more than \$35 billion, taking only projects into consideration for which information are available.

Only 99 strategic development projects are mapped:

- 18 Border Post Projects (12 mapped)
- 61 Road Projects (21 mapped)
- 26 Rail Projects (14 mapped)
- 17 Aviation Projects (nine mapped)
- 60 Ports and Water Transport Projects (43 mapped)
- 26 Policy/Regulatory/Institutional Projects (0 mapped)

The following projects are identified in South Africa's neighbouring countries:

1. Transport Corridors and Ports

Developing road and rail transport networks, linking the region's huge coal reserves to the main corridors, is a key focus area. Another area of focus is the expansion of port facilities. The Brazil-based mining company, Vale is investing US\$4.4b in upgrading the Nacala port and building a 912km railway line to establish a link to its mines in the Moatize basin in Tete.

There are several ongoing road infrastructure projects valued at US\$7.37 billion in total.

By 2027, the following road projects are anticipated to be in operation:

- Dar-es-Salaam – Chalinze toll road
- Kazungula bridge
- Nata – Kazungula road upgrading
- Beitbridge – Chirundu road upgrading
- Tete toll bridge
- Western Corridor road in Zambia
- The development of an intra-regional road asset management system

There are three rail corridors, 4,957 km in total length, which complement the roads network.

Current investment into the port sector will be used to expand the freight ports and the coal terminals in Beira and Maputo, as well as the construction of a new coal terminal in Nacala.

Coal terminals will see the largest investment, accounting for 63% of total investment in the sector. The investment into the Macuse coal terminal is still unknown.

Future projects in the port sector include the development of the new deep-water port at Matutuine and will be one of the largest projects to be undertaken by CFM.

2. Power Generation Projects

Power generation projects are planned to increase generation from the current 5,600 MW and surpass the projected demand of 9,600 MW by 2027. The estimated investment cost of all planned electricity generation projects is US\$62 billion for the short-term (2012 – 2017), US\$39 billion for the medium-term (2017 – 2022) and US\$72 billion for the long-term (2022 – 2027), totalling US\$173 billion.

3. Liquid Natural Gas (LNG) Projects

In May 2015, Anadarko Petroleum Corp. awarded a contract to CB&I, Chiyoda Corp. and Saipem SPA—together forming the CCS joint venture—for the initial development of an LNG project in Mozambique. The scope of work includes two LNG trains, each with a capacity of six million tpa, an increase of 1 million tpa for each train over the original plan. The scope also includes two 180,000-cu-m LNG storage tanks, condensate storage, a multi-berth marine jetty, as well as associated utilities and infrastructure.

4. Africa Product Analysis

Since the downstream manufacturing capabilities of the other Southern African countries are not well developed, the region holds significant potential for South African exporters of manufactured products. In particular, the countries in Southern Africa where oil and gas reserves as well as mining activity are on the increase, hold significant opportunity for value added exporters. Over the last four years the Compounded Annual Growth Rate (CAGR) for fastener products amounted to 8.4%, while tube and pipe export's CAGR was 6.9%. Over the same period structures increased by three percent per annum and wire products by 2.3%. Other products' CAGR was 4.4% (CAGR).

Key countries that will invest significantly in new infrastructure, oil and gas capability as well as energy projects are Mozambique, Tanzania, Zambia, Kenya, Uganda, Namibia, the DRC, Ghana and Ethiopia. These are the countries that South African value added steel companies target for export of South African products. Opportunities will be available across the various product types, but it is within the structures, as well as tube and pipe markets that significant opportunity resides.

Volume Exports to Sub-Saharan Africa by Product Group (2013-2016)

	2013	2014	2015	2016
Steel Tubes, Seamless	511 672	578 875	351 123	197 541
Steel Tubes, Welded	875 902	709 200	736 901	492 128
Steel Tube Fittings	61 720	60 310	56 498	49 908
Wire	154 634	175 438	172 617	171 797
Wire Products	114 720	124 533	108 958	107 322
Forgings	9 454	12 539	8 201	6 658
Forged Grinding Balls	73 039	92 485	92 901	102 508
Steel Castings	18 043	20 368	17 857	14 346
Steel Structures	896 762	1 112 110	1 000 116	816 572
Steel Containers & Tanks	143 306	152 932	147 609	132 606
Steel Fasteners	277 212	302 627	315 616	274 229
Other Steel Products	482 114	505 877	459 996	420 512
Total	3 618 578	3 847 294	3 468 393	2 786 127

Source: ISSB

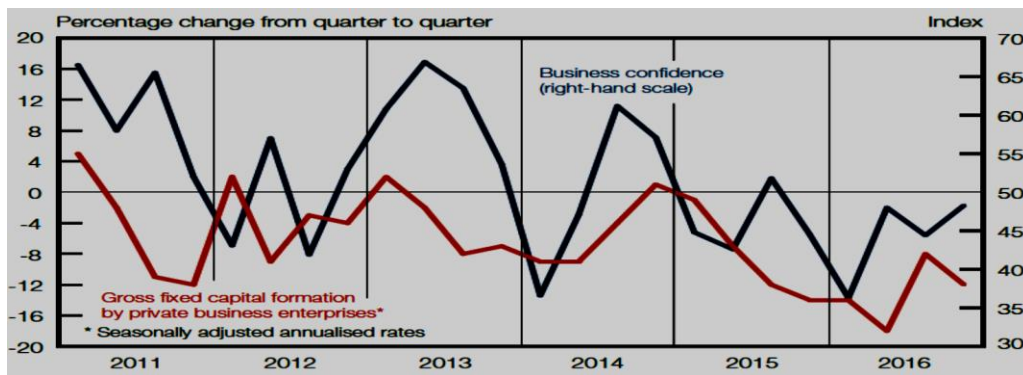
It is expected that the demand for tube and pipe products as well as structures will continue to grow, but strong supply competition is expected from the Far East. Mining projects will drive the demand for fasteners, tube and pipe as well as structures, while agricultural and security improvements will be the largest drivers of wire products.

5. Key Demand Analysis of the South African Steel Industry

a. General overview

The South African economic growth remained subdued for the second consecutive year, mainly attributed to the weak activity in the manufacturing, mining and construction sectors, which are the main market segments of the steel industry. The country's steel consuming sectors' performance bear close resemblance to the Gross Fixed Capital Formation (GFCF) spent by the government and private sector. In fact, the overall business confidence is very much reliant on GFCF activity, which turned negative over the last two years.

Graph: Gross Fixed Capital Formation and Business Confidence



Source: SARB Qtr1 2017

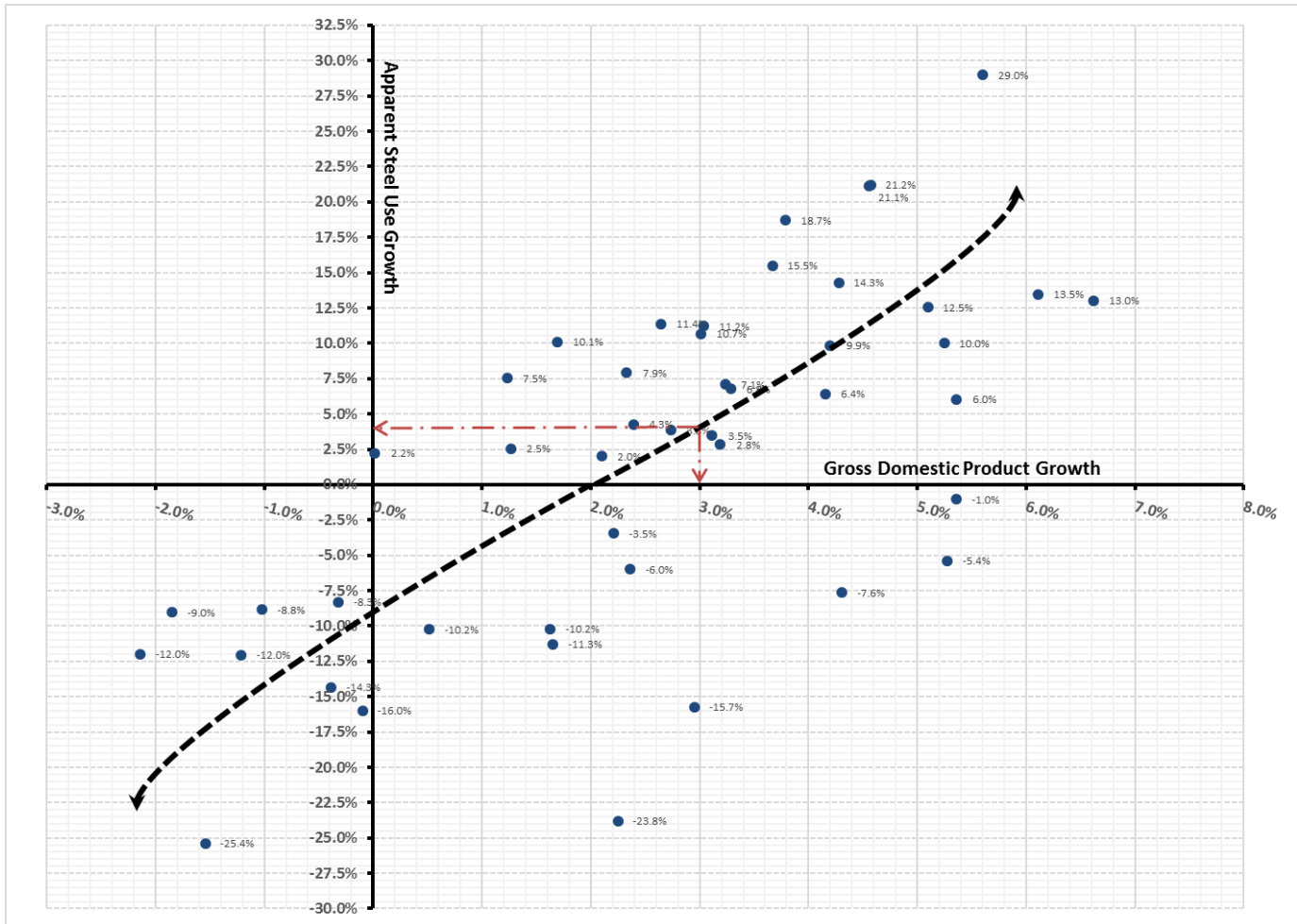
For the steel manufacturers, the steel market environment was also negatively affected by rising cheap imports and high operational costs, such as energy and labour costs, poor rail infrastructure and poor domestic steel demand due to very slow economic activity. Hence, steel industry and government continuously discuss areas of intervention which recently resulted in the implementation of import tariffs on primary steel products and to some secondary steel products. Safeguard measures on hot rolled coil imports have also been implemented recently in an effort to retain a fair share of the domestic market for the domestic steel producers.

b. Steel Demand Dynamics

The two indicators for steel demand in South Africa are Gross Domestic Product (GDP) and Gross Fixed Capital Formation (GFCF). The analysis over the last 46 years shows that

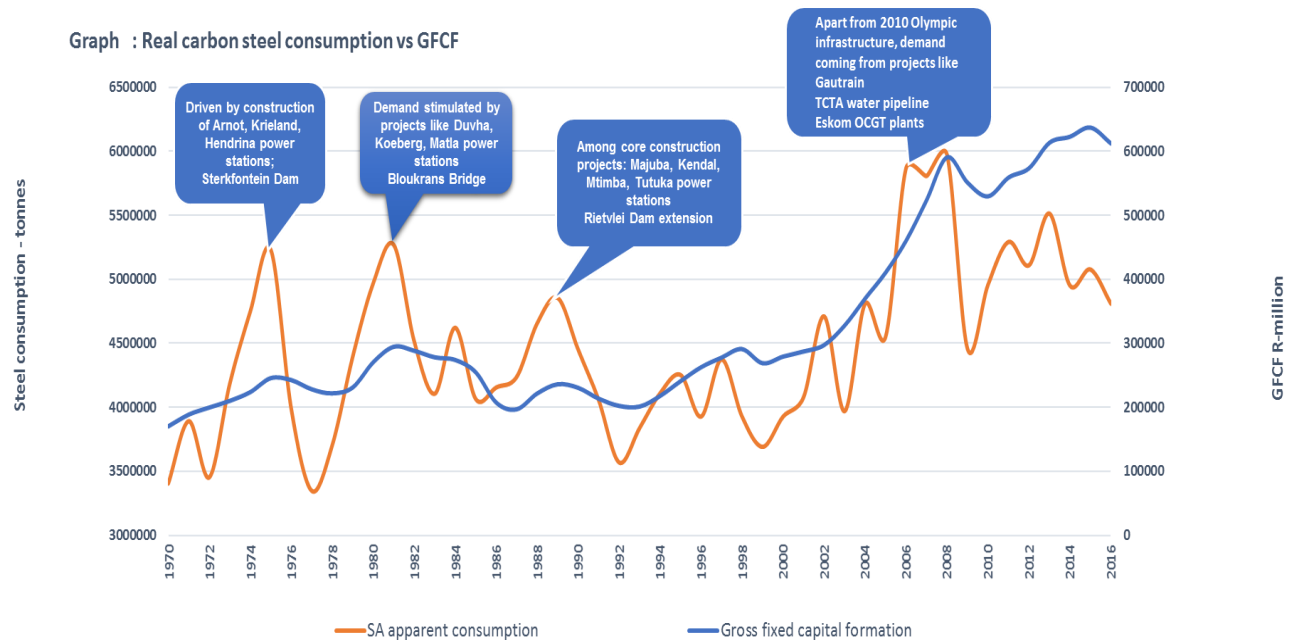
the country needs to grow at 2% pa to maintain steel consumption levels. At current GDP growth, steel consumption levels tend to shrink somewhat more than the GDP rate below the maintenance level. This is also evident in the current steel consumption for South Africa.

Graph: GDP vs. Apparent Steel Use 1970 to 2016



Source: SAISI, SARB, Team Analysis

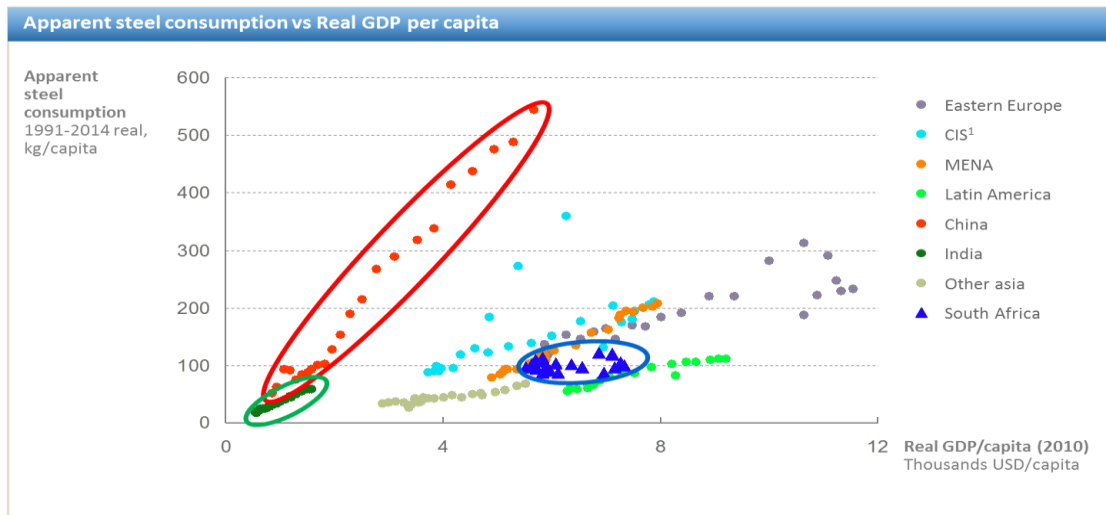
The second indicator, Gross Fixed Capital Formation (GFCF), drives the activity in the building and construction, as well as manufacturing sectors. The graph below clearly illustrates the relationship between Gross Fixed Capital Formation (GFCF) and real steel consumption in South Africa. The spending on the Capital Projects can be linked to the spikes in steel consumption, where steel consumption increased substantially with the building of the infrastructure projects, just to fall back to pre-build consumption levels when the project was completed. The long-term trend in steel consumption for South Africa shows a CAGR of less than 1% per annum since 2000.



Source: SAISI, SARB, Team Analysis

The economic growth parameters such as GDP are generally used to measure future steel consumption growth prospects.

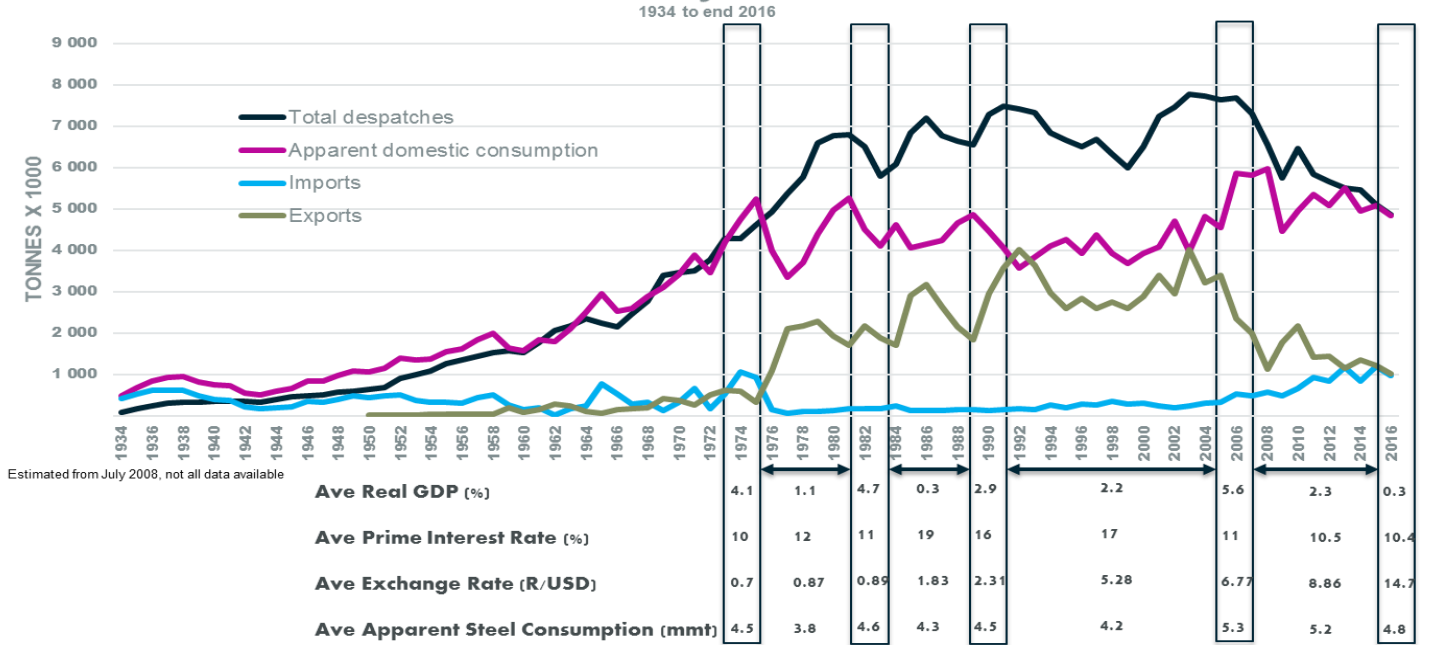
Developing countries' steel intensity generally increases with GDP



1 Commonwealth of independent states – 10 former Soviet republics
Source: Steel demand model 2014-Q4, SAISI, SA Reserve Bank

- There is a positive correlation between GDP and steel intensity for developing countries
- Developing regions such as India and China have moved up the steel intensity curve throughout their development
- South African steel demand is likely to increase with the growth of the economy, as experienced in comparable nations

South African Primary Carbon Steel Market



Source: BER (Bureau for Economic Research), SARB, SAISI

STEEL CONSUMPTION OVER THE ECONOMIC CYCLE

Steel consumption peaks are always linked to infrastructure expenditure programmes in South Africa. The South African apparent steel use stagnated over the past five years at around five million tonnes per year, except for 2013 where the number was 500kt higher. Domestic supply of all steel products by local mills on the other side, steadily dropped from 6.5 million tonnes per year in 2010 to below five million tonnes per year in 2016, on average -4.9% per year. Imports of all steel products, however, doubled from 657kt in 2010 to 1.189 million tonnes in 2015, and then dropped slightly to 975 kt in 2016.

Steel consumption by industry sector after the allocation of imports to the industry sectors

				2 012	2 013	2 014	2 015	2 016
1	Mining		Long Steel	102 059	119 211	87 751	90 503	83 031
			Flat Steel	121 328	114 013	102 550	89 505	74 846
			Flat Steel & Long Steel	223 387	233 224	190 301	180 008	157 878
2	Manufacturing							
a	Packaging		Long Steel	672	772	5 896	13 771	28 415
			Flat Steel	219 964	193 796	191 320	174 941	131 436
			Flat Steel & Long Steel	220 636	194 568	197 216	188 712	159 852
b	Structural Metal							
	(i) Tube & Pipe		Long Steel	4 302	5 272	11 063	16 675	27 756
			Flat Steel	553 214	599 211	506 260	487 528	479 270
			Flat Steel & Long Steel	557 516	604 484	517 323	504 203	507 027
	(ii) Plate & Sheet Metal Works		Long Steel	5 829	7 871	14 269	18 403	22 061
			Flat Steel	355 396	270 059	255 835	276 244	296 315
			Flat Steel & Long Steel	361 226	277 930	270 104	294 647	318 376
	(iii) Roofing & Cold Forming		Long Steel	55	72	11	0	0
			Flat Steel	218 129	298 637	233 614	280 524	261 790
			Flat Steel & Long Steel	218 184	298 709	233 625	280 524	261 790
	Sub-total Structural Metal		Long Steel	10 186	13 215	25 343	35 078	49 818
			Flat Steel	1 126 739	1 167 908	995 709	1 044 296	1 037 375
			Flat Steel & Long Steel	1 136 925	1 181 123	1 021 052	1 079 374	1 087 193
c.	Agricultural		Long Steel	53 065	94 771	89 377	87 969	61 840
			Flat Steel	14 137	23 039	18 712	28 494	34 993
			Flat Steel & Long Steel	67 203	117 809	108 089	116 463	96 833
d.	Automotive		Long Steel	45 235	44 759	44 687	43 287	32 570
			Flat Steel	681 998	772 408	677 235	724 948	597 717
			Flat Steel & Long Steel	727 233	817 166	721 923	768 235	630 287
e.	Electrical Apparatus/White Goods		Long Steel	293	519	4 128	8 466	21 688
			Flat Steel	127 899	118 844	98 096	101 014	72 027
			Flat Steel & Long Steel	128 192	119 363	102 224	109 480	93 715
f.	Cables, Wire Products & Gates		Long Steel	668 063	731 876	649 764	658 943	706 016
			Flat Steel	13 226	10 928	12 412	13 066	5 455
			Flat Steel & Long Steel	681 289	742 804	662 176	672 009	711 472
g.	Fasteners		Long Steel	65 420	73 693	86 161	97 978	131 479
			Flat Steel	329	120	378	80	178
			Flat Steel & Long Steel	65 749	73 813	86 539	98 058	131 657
h.	Other, incl. Government, Hardware, Furniture, Railroad		Long Steel	126 689	129 844	116 102	122 187	91 111
			Flat Steel	291 343	375 704	392 750	355 291	195 813
			Flat Steel & Long Steel	418 032	505 549	508 852	477 477	286 925
	Total Manufacturing		Long Steel	969 622	1 089 449	1 021 460	1 067 678	1 122 937
			Flat Steel	2 475 637	2 662 746	2 386 613	2 442 131	2 074 995
			Flat Steel & Long Steel	3 445 259	3 752 195	3 408 073	3 509 809	3 197 932
3	Building & Construction							
a.	Heavy Engineering		Long Steel	422 514	303 176	292 121	245 021	123 321
			Flat Steel	44 273	67 762	55 909	114 413	214 645
			Flat Steel & Long Steel	466 787	370 938	348 030	359 434	337 965
b.	Light Engineering		Long Steel	97 117	181 906	177 355	160 767	123 260

		Flat Steel	251 093	368 198	355 376	356 015	288 513
		Flat Steel & Long Steel	348 210	550 104	532 731	516 782	411 773
c.	Construction	Long Steel	533 017	564 163	480 921	502 343	628 858
		Flat Steel	163 440	218 122	203 220	219 715	287 428
		Flat Steel & Long Steel	696 457	782 284	684 141	722 058	916 286
Total Building & Construction		Long Steel	1 052 648	1 049 245	950 397	908 130	875 439
		Flat Steel	458 806	654 081	614 505	690 143	790 586
		Flat Steel & Long Steel	1 511 454	1 703 326	1 564 902	1 598 273	1 666 025
Apparent Steel Consumption		Flat Steel & Long Steel	5 180 100	5 688 745	5 163 275	5 288 091	5 021 835

Source: SAISI Sales to Industrial Groups 2016

c. Steel supply side dynamics in South Africa

Total steel supply from domestic producers in 2016 was 76.7% of total steel use in the country and 23.3% of steel was imported. In 2016 AMSA supplied 65% of the steel demand in the absence of Highveld Steel (currently dormant). All the other mini mills supplied about 11% of the steel market.

a) Customers purchasing directly from steel mills

The local steel mills supply more than 50% of the total flat steel sales to merchants and service centres; 4% of total flat steel sales directly to automotive Original Equipment Manufacturers (OEMs); 7% of total flat steel sales directly to the packaging industry; 5% to roofing and 15% to metal forming and light engineering. It is also the bulk buyers (predominantly the merchants, service centres, re-rollers and the roofing/cladding manufacturers) that are responsible for the majority primary steel imports.

b) Customers purchasing from merchants and service centres

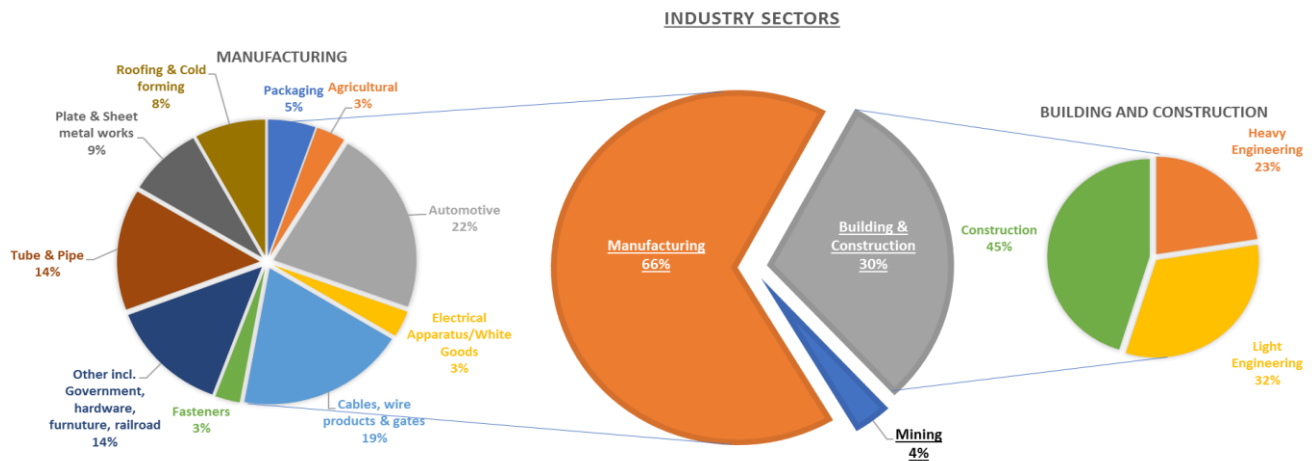
The large portion of the sales to the merchants and the service centers follows the supply chain to the end users after some value adding at the service centres. The split to industrial groups after the service centres is done by SAISI as that information is not transparent to the steel mills. Taking the supply from the mills (total domestic steel dispatches in the graph above) and the imports into consideration, merchants and service centres do well above 50% of all steel sales to second and third tier domestic customers. The value addition from the sales via the merchants and service centres is an important factor considering the inconsistency the steel producers are experiencing with availability of their products on time.

South African primary steel Industry

Company Name	Status	Plant Name	Production Process	Nominal Capacity (1000 metric tonnes/year)
Arcelormittal South Africa		Newcastle	BF/BOF	2400
Arcelormittal South Africa		Saldanha Bay	EAF	1300
Arcelormittal South Africa		Vanderbijlpark	BF/BOF	3500
Arcelormittal South Africa	Moth Balled	Vanderbijlpark	EAF	530
Arcelormittal South Africa	Moth Balled	Vanderbijlpark	EAF	530
Arcelormittal South Africa	Moth Balled	Vanderbijlpark	EAF	530
Arcelormittal South Africa	Closed	Vereeniging	EAF	320
Cape Town Iron & Steelworks	Moth Balled	Kuilsriver	EAF	220
Columbus Stainless		Middelburg	EAF	550
Davsteel		Vanderbijlpark	EAF	450
Evraz Highveld St. & Vanadium	Closed	Witbank	BF/BOF	1000
Microsteel Ltd.	Closed	Durban	IF	55
Microsteel Ltd.	Closed	Durban	IF	55
Scaw Metals		Germiston	EAF	600
Scaw Metals		Germiston	EAF	35
Unica		Babelegi	IF	100
Fortune Steel		Nigel	IF	100
Agni Steel		Coega	IF	120
SA Steelworks (Part of SA Metals)		Cape Town	IF	100
SA Steel Mills (Part of Prorooft)		Vereeniging	IF	80

Source: OECD Steel Committee; Team Analysis

The final sales to industrial groups can be divided as shown in the graphic below:



Source: SAISI Sales to Industrial Groups 2016, Team Analysis

d. Steel Pricing Dynamics and Key reasons for imports

Steel prices are rather complex, given that the steel price needs to reflect the complexity of the steel, such as mechanical strength, drawing and formability, weldability, aging, etc. to cater for various applications.

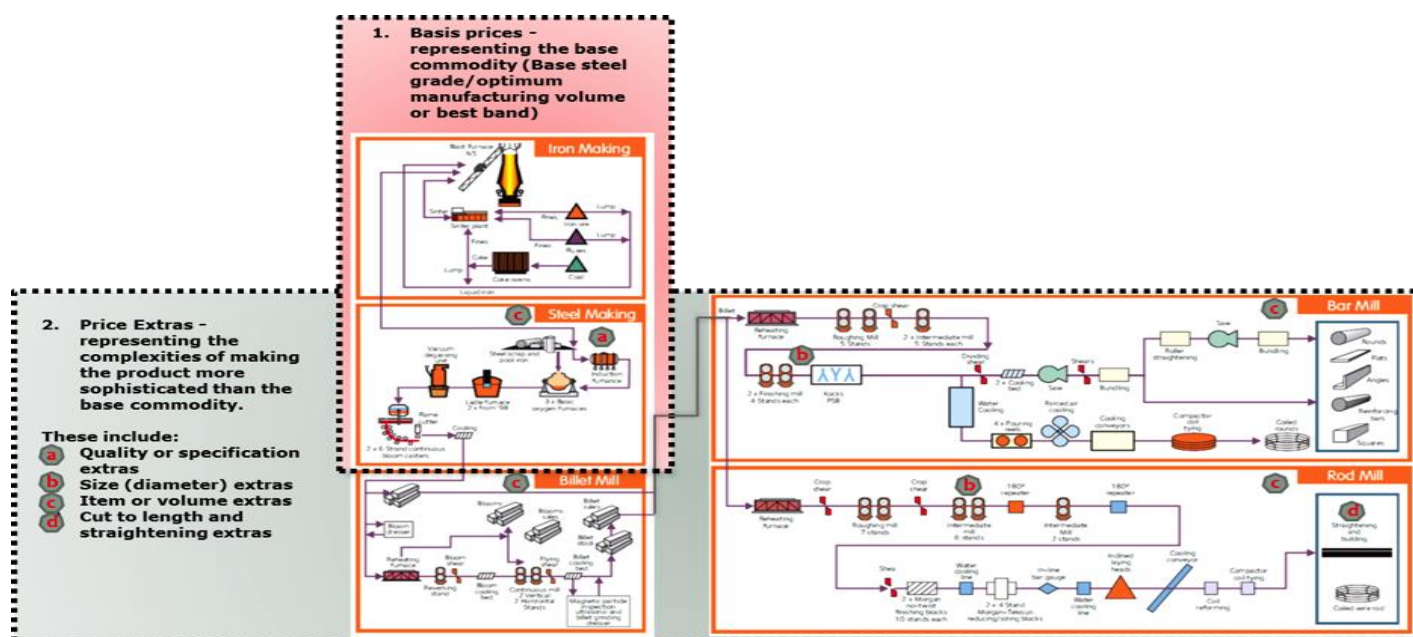
The price composition usually follows the cost build-up structure of the steel production process, where the basis product is the most basic product produced at the optimum rate and yield the mill can deliver. This is the base commodity and any derivative should be able to achieve a premium for the complexity of the product.

Unfortunately, history also shows that the steel industry is very generous in commercialising its innovations and generally passes the benefit of product and process innovation forward to customers and users of steel without benefitting from the appropriate price and thus profit. This usually happens when steel is in oversupply and sellers waive the extras to get the order.

The basis price reflects the cost for producing the steel and is in most cases the threshold where mills turn orders away when prices go below this level and the complexity costs for the specification, size, volume and surface finish. The more complexities in a product, the less price volatile it becomes. These complex steels are more often applied to niche product applications.

Steel Price Compilation from a Steel Manufacturing Process Perspective

(Long Steel Example)



Source: Team Analysis

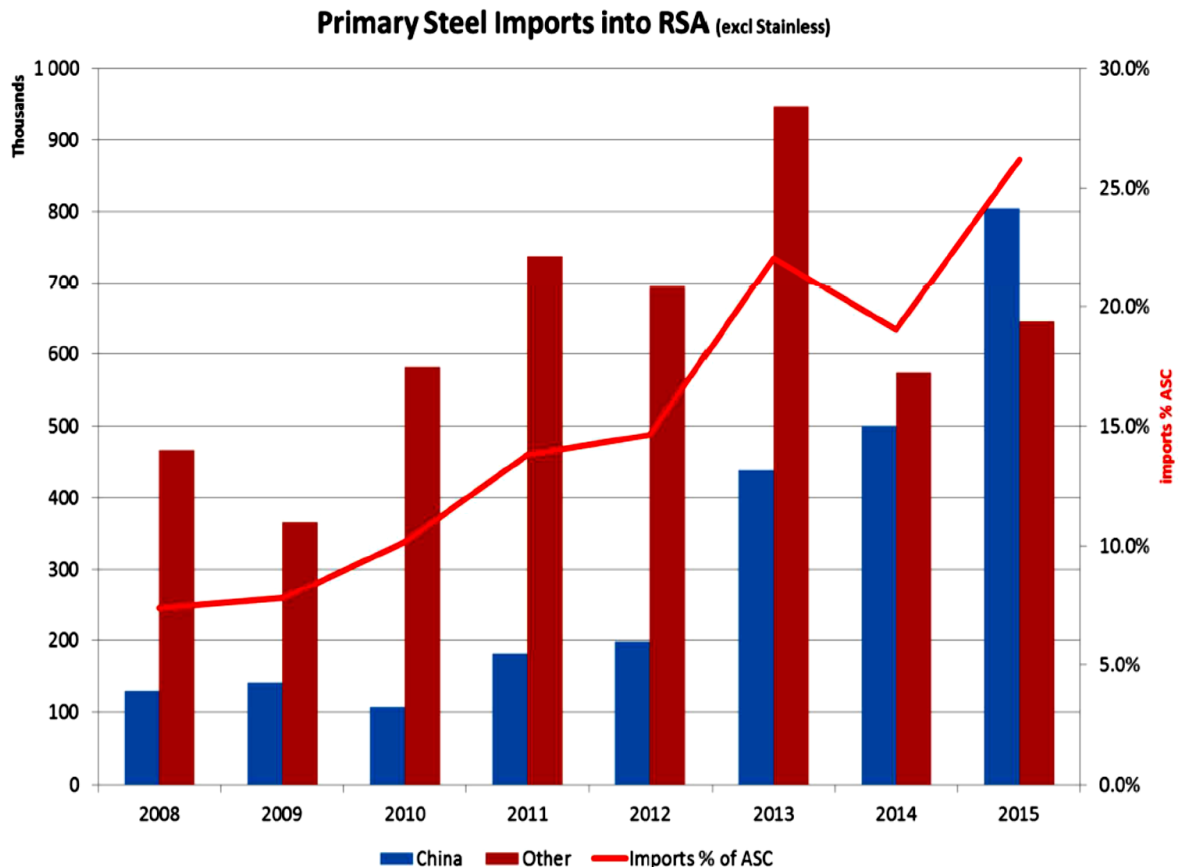
Cyclical nature of prices

Steel behaves like any other commodity and is therefore very dependent on economic activity, specifically that of manufacturing and construction. One of the leading indicators for steel consumption will therefore be “fixed capital investment”.

Historical price trends

Customers will most probably source steel from the cheapest international source as their next best alternative. Prices from China as well as from the Russian Republic via the Black Sea fall in this category. These are the two major exporters of steel due to the current surplus steel production in those regions. These two regions are also leading the downward pricing spiral when steel markets retract and are usually the source for imports as the cheapest alternative to customers.

- a) Imports of primary steel doubled in volume to about 25% of current domestic steel consumption over the last five years and trebled since 2000



What are the core drivers behind market behaviour and key reasons for imports?

Various customer surveys by upstream and downstream steel suppliers over the last five years indicated that more than 65% of customers identified product availability as the core issue, which includes on-time delivery and lead time aspects. The second most important issue was price competitiveness mentioned by 58% of the customers.

Selling prices of steel products are one element that customers regard as value.

- (i) Value is what a manufacturer gets in exchange for the price he/she pays. Raising or lowering the price does not change the set of benefits that an offering delivers to the manufacturer. Manufacturer value is a comparative concept in which customers assess the value of the offering, relative to the next best alternative available in the market.
- (ii) The primary steel producers are not regarded as price competitive.
More than 70% of customers from the survey will argue that they do not pay the best available global steel price. However, more than 10% of the manufacturers interviewed were indifferent about pricing.
- (iii) Some of the reasons why customers tolerate a price premium above the import parity price include:
 - Individual customers are too small to import economically efficient volumes. They require small quantities (average order size per item in South Africa is about 14 tonnes), while shipping vessels require large quantities (5,000 to 20,000 tonnes).
 - A building contract normally requires a range of sizes and lengths in different quantities at different time slots. In this case, a local service centre will be the preferred source to avoid stockholding and everything going with it, even at a premium price.
 - Quality and specification problems can be sorted much easier with suppliers closest to the site.
 - Lead times and on-time delivery could be much better from local suppliers than from suppliers abroad.

Notwithstanding the domestic price gaps, local mills are battling to stay afloat, with Highveld Steel stopping operations since the beginning of 2016 and Government agreed to fast track the following arrangements

- (i) Import duties – most moved to bound rate
- (ii) Safeguards – in the process of implementation (HRC and Plate announced in April 2017)
- (iii) Lifting the “deemed local” for designated sectors in the localisation drive
- (iv) The pricing arrangement for the domestic market will be based on the following principles:
 - a. Import Parity Pricing (IPP) will be removed as a basis for pricing
 - b. The pricing principles will exclude long products (unless specifically stated)
 - c. The local price for flat steel products will be based on an import weighted basket (excluding China and Russia) (see: note A), determined by the weighted average of countries we compete with in the production of fabricated metal products, machinery and equipment, vehicles and other transport equipment. This will be based on primary data from the CRU and MEPS global steel indices and:

- i. Agreed upon benchmarked “deltas” will then be added on to the hot rolled coil/plate base price to calculate base prices for other flat steel products
- ii. Agreed upon averages will be used to calculate “extras”

Note A:

-Basket countries are:

EU 50% - 50% Germany, 50% (France, UK, Italy, Spain)

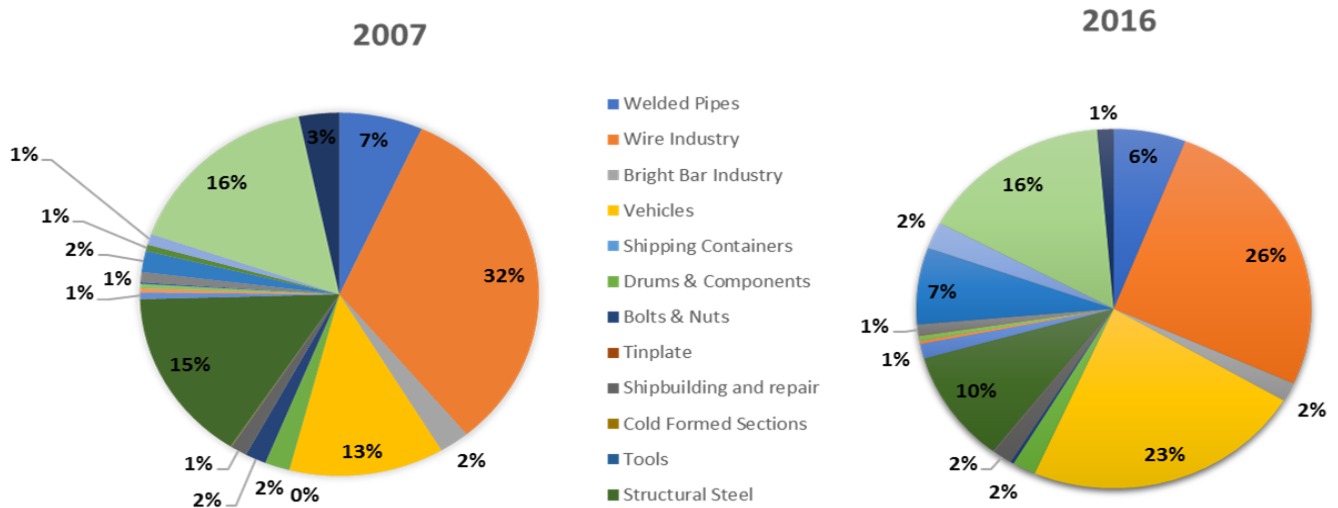
Asia 30% - 50% Japan, 40% (South Korea and India), 10% Taiwan

NAFTA plus Brazil 20% - 75% USA, 25% (Canada and Brazil)

6. The Downstream Value-Adding Steel Industry

a. Value-added exports

Value-Added Steel Products Export Comparison



While the claimants for value added steel exports through COSM by the automotive industry increased by ten percentage points over the last ten years, that of wire decreased by six percentage points and that of structural steel decreased by five percentage points.

Value-Added Exports (tonnes)

Articles of Iron or Steel		Average tonnes / month			Average tonnes / month			% growth		% of Total		
HS Code Product		2014	2015	2016	2014q4	2015q4	2016q4	2016 vs 2015	2016q4 vs 2015q4	2015	2015q4	2016q4
7217	Drawn wire - carbon steel	5 835	4 627	4 718	4 810	3 750	3 556	2.0%	-5.2%	8.0%	7.1%	7.1%
7312	Wire rope & cables	2 675	2 375	2 115	2 284	2 319	2 589	-10.9%	11.6%	4.1%	4.4%	5.1%
7326	Articles of wire, forged products & other articles	3 870	8 724	8 924	9 497	9 491	8 962	2.3%	-5.6%	15.1%	17.9%	17.8%
7315	Chains & parts	404	527	489	443	425	418	-7.2%	-1.6%	0.9%	0.8%	0.8%
7320	Springs	194	190	184	249	155	181	-3.2%	16.8%	0.3%	0.3%	0.4%
7313	Drawn wire - barbed wire	617	577	730	740	585	782	26.5%	33.7%	1.0%	1.1%	1.6%
7317	Nails, tacks & staples	274	286	289	326	363	322	1.0%	-11.3%	0.5%	0.7%	0.6%
7314	Cloth, grill, netting, expanded metal	3 865	3 912	4 209	4 070	4 183	4 338	7.6%	3.7%	6.8%	7.9%	8.6%
Wire and Wire products		17 734	21 218	21 658	22 419	21 271	21 148	2.1%	-0.6%	36.8%	40.2%	42.0%
7304	Tubes & pipes - seamless	8 461	8 088	4 287	8 633	3 990	4 835	-47.0%	21.2%	14.0%	7.5%	9.6%
7306	Tubes & pipes - welded small dia.	4 565	4 401	3 542	6 260	3 615	3 443	-19.5%	-4.8%	7.6%	6.8%	6.8%
7305	Tubes & pipes - welded large dia.	422	135	106	551	146	57	-21.5%	-61.0%	0.2%	0.3%	0.1%
7307	Tubes & pipes - fittings	1 613	1 393	1 302	1 844	1 451	1 409	-6.5%	-2.9%	2.4%	2.7%	2.8%
Tube & Pipe		15 061	14 017	9 237	17 288	9 202	9 744	-34.1%	5.9%	24.3%	17.4%	19.4%
7318	Screws, bolts & nuts	1 410	1 640	1 795	2 289	2 191	1 744	9.5%	-20.4%	2.8%	4.1%	3.5%
Fasteners		1 410	1 640	1 795	2 289	2 191	1 744	9.5%	-20.4%	2.8%	4.1%	3.5%
7308	Structures, towers, scaffolding, bridges etc.	16 353	13 846	12 750	17 596	13 950	12 286	-7.9%	-11.9%	24.0%	26.4%	24.4%
Structures		16 353	13 846	12 750	17 596	13 950	12 286	-7.9%	-11.9%	24.0%	26.4%	24.4%
7310	Tanks, drums & cans <300L	4 427	2 728	1 630	5 903	2 312	1 535	-40.2%	-33.6%	4.7%	4.4%	3.1%
7302	Railway material excl. rails	392	240	305	391	182	94	27.1%	-48.4%	0.4%	0.3%	0.2%
7302	Rails	281	419	630	662	526	301	50.4%	-42.8%	0.7%	1.0%	0.6%
7325	Cast iron products	2 260	1 406	1 269	2 215	1 523	1 603	-9.7%	5.3%	2.4%	2.9%	3.2%
7311	High pressure containers	338	412	347	291	444	366	-15.8%	-17.6%	0.7%	0.8%	0.7%
7309	Tanks & containers >300L	900	884	670	1 082	688	860	-24.2%	25.0%	1.5%	1.3%	1.7%
7323	Kitchen & household articles	599	498	431	748	488	482	-13.5%	-1.2%	0.9%	0.9%	1.0%
7324	Sanitary ware	161	326	143	234	158	139	-56.1%	-12.0%	0.6%	0.3%	0.3%
Other		9 358	6 913	5 425	11 526	6 321	5 380	-21.5%	-14.9%	12.0%	11.9%	10.7%
Total		59 916	57 634	50 865	71 118	52 935	50 302	-11.7%	-5.0%	100.0%	100.0%	100.0%

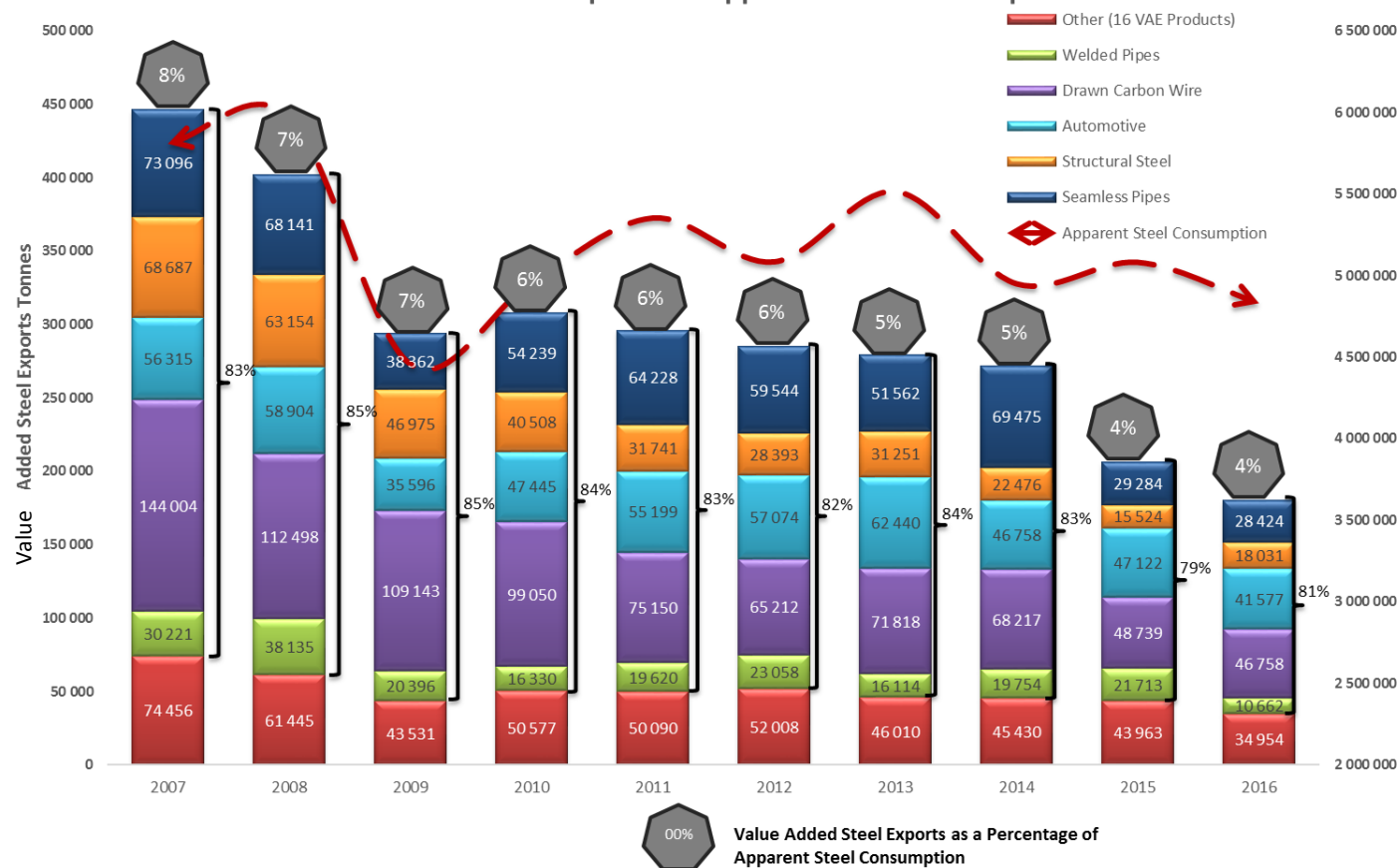
Source: Customs & Excise

Comparing value added carbon steel exports of 2016q4 to 2015q4, there was a five percent decrease to 50 302 t/m.

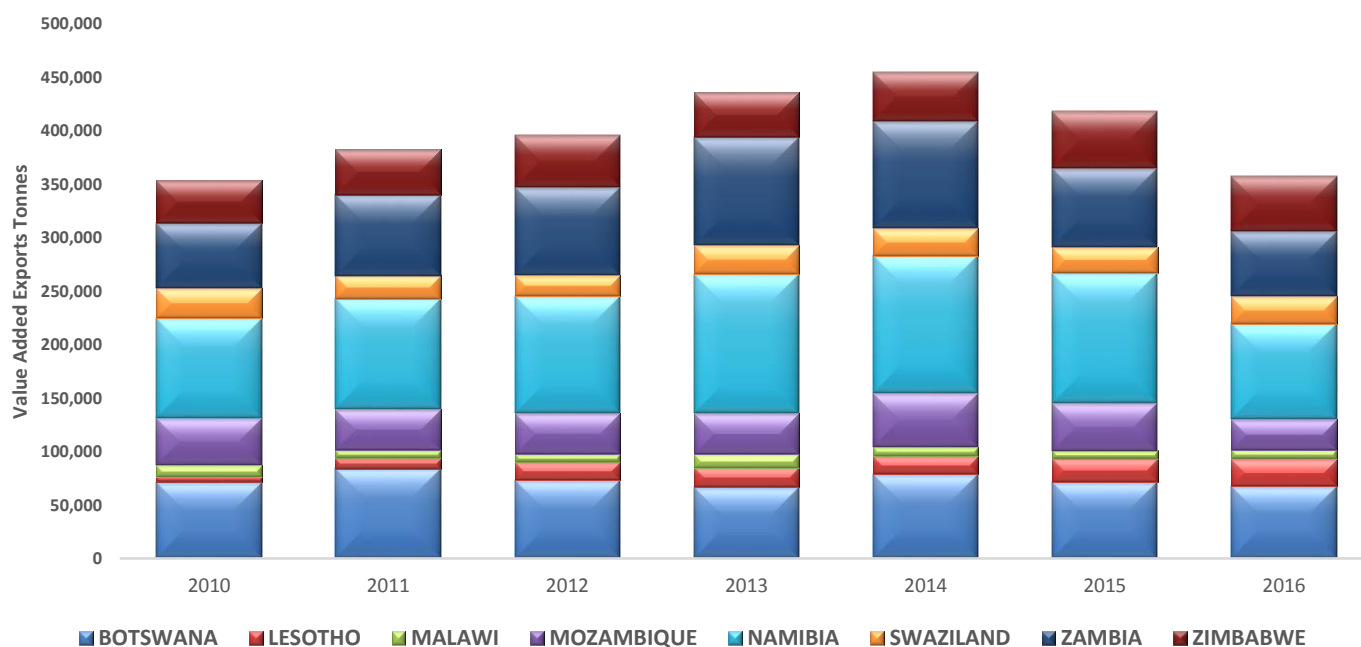
- Pipe and tube: 5.9% increase to 9 744 t/m
- Wire and wire products: 0.6% decrease to 21 148 t/m

Value added steel exports to non-Africa overland (AOL) countries as a percentage of the apparent steel use (ASU) in the country stood at eight percent in 2007. Currently only four percent of the ASU is destined for value added steel exports to non-AOL countries, half of what it used to be, while that of apparent steel use (ASU) dropped by 20%. After the financial crisis, South Africa lost its foothold in its traditional export markets. The growth in the neighboring countries has however stepped to the fore, gradually replacing lost volumes. It is the regional markets that pose the biggest opportunity to the South African downstream steel industry. Exports to these countries currently make up 56% of all exports.

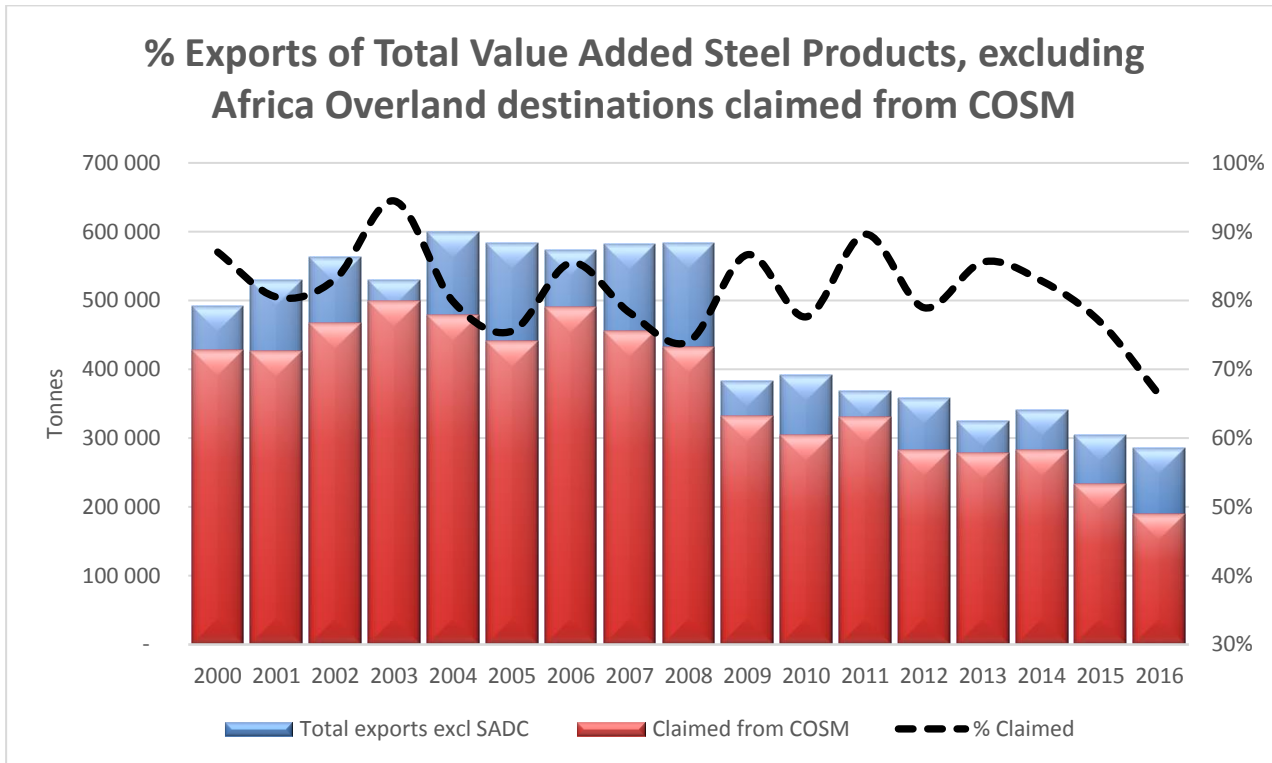
Value Added Steel Exports vs. Apparent Steel Consumption



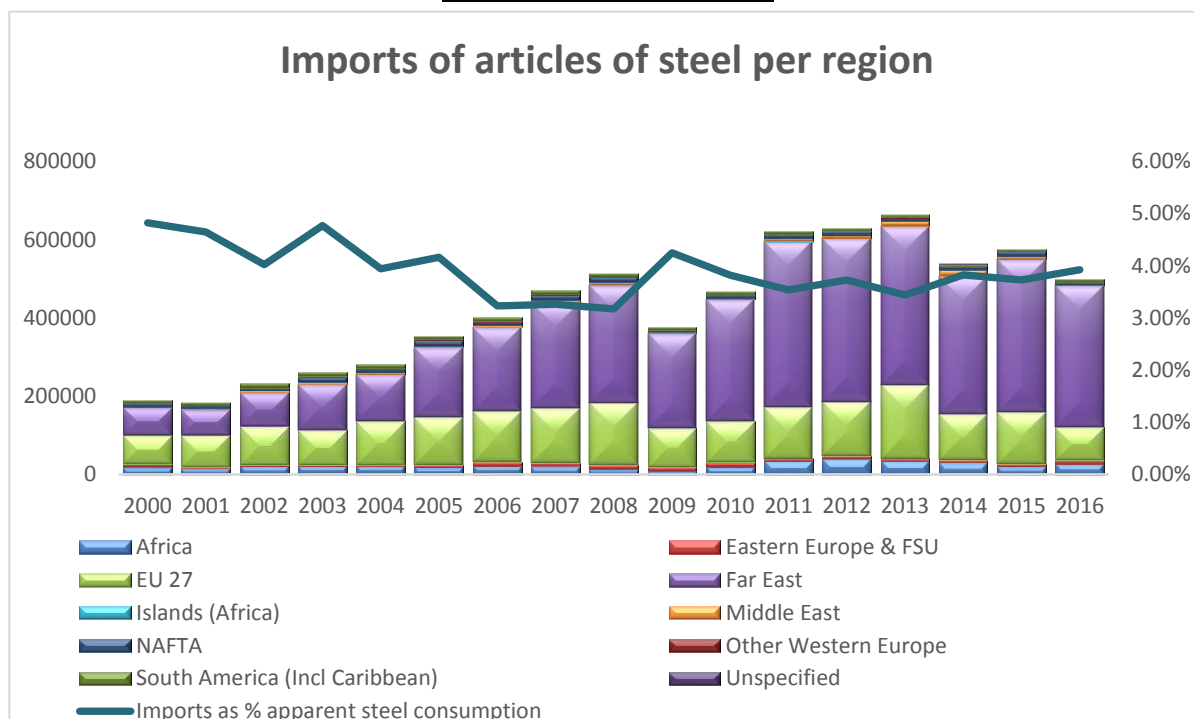
Africa overland exports of manufactured products



Not all value-added exports as reported by SARS (Customs and Excise) are claimed from COSM and therefore rebates from the steel mills are also not claimed. The graph below indicates that 68% of all exports of value added steel products do claim assistance from COSM and the steel mills. This percentage was as high as 95% in 2002 and averaged around 85% up to 2013, but gradually dropped to 68% since then.



Value-Added Imports



Imports of manufactured steel products have gone up by over 250% since 2000. China has increased its share of imports to 54% from 12% in 2000. Even though imports remain at around four percent of apparent steel consumption, it offers a huge opportunity for the downstream industry as the majority of the imports remain within the manufacturing capabilities of the industry.

Articles of Iron or Steel		Average tonnes / month			Average tonnes / month			% growth		% of Total		
HS Code Product		2014	2015	2016	2014q4	2015q4	2016q4	2016 vs 2015	2016q4 vs 2015q4	2015	2015q4	2016q4
7217	Drawn wire - carbon steel	2 060	2 553	2 022	2 383	2 038	1 875	-20.8%	-8.0%	5.4%	4.6%	4.9%
7312	Wire rope & cables	2 311	2 433	2 209	2 128	1 989	2 410	-9.2%	21.2%	5.1%	4.5%	6.3%
7326	Articles of wire, forged products & other articles	3 596	4 307	5 827	3 541	4 680	6 652	35.3%	42.1%	9.1%	10.6%	17.4%
7315	Chains & parts	847	829	710	838	797	749	-14.4%	-6.0%	1.7%	1.8%	2.0%
7320	Springs	680	926	830	638	938	798	-10.4%	-14.9%	1.9%	2.1%	2.1%
7223	Drawn wire - stainless steel	550	611	591	572	624	638	-3.3%	2.2%	1.3%	1.4%	1.7%
7229	Drawn wire - alloy steel	597	1 068	630	996	530	676	-41.0%	27.5%	2.2%	1.2%	1.8%
7317	Nails, tacks & staples	1 098	1 467	973	1 115	1 502	783	-33.7%	-47.9%	3.1%	3.4%	2.0%
7314	Cloth, grill, netting, expanded metal	617	859	840	697	672	1 118	-2.2%	66.4%	1.8%	1.5%	2.9%
Wire and Wire products		12 356	15 053	14 632	12 908	13 770	15 699	-2.8%	14.0%	31.7%	31.3%	41.0%
7304	Tubes & pipes - seamless	3 360	3 760	3 199	3 321	3 047	3 041	-14.9%	-0.2%	7.9%	6.9%	7.9%
7306	Tubes & pipes - welded small dia.	4 393	3 724	3 474	2 527	3 229	2 942	-6.7%	-8.9%	7.8%	7.3%	7.7%
7305	Tubes & pipes - welded largel dia.	1 074	540	386	543	528	293	-28.5%	-44.5%	1.1%	1.2%	0.8%
7307	Tubes & pipes - fittings	3 056	3 437	2 858	3 310	2 966	3 162	-16.8%	6.6%	7.2%	6.7%	8.3%
7303	Tubes & pipes - cast iron	725	1 045	319	768	625	405	-69.5%	-35.2%	2.2%	1.4%	1.1%
Tube & Pipe		12 608	12 506	10 236	10 469	10 395	9 843	-18.2%	-5.3%	26.3%	23.6%	25.7%
7318	Screws, bolts & nuts	4 808	5 268	4 815	4 303	4 744	4 587	-8.6%	-3.3%	11.1%	10.8%	12.0%
Fastners		4 808	5 268	4 815	4 303	4 744	4 587	-8.6%	-3.3%	11.1%	10.8%	12.0%
7308	Structures, towers, scaffolding, bridges etc.	3 593	3 374	3 066	3 423	3 213	2 895	-9.1%	-9.9%	7.1%	7.3%	7.6%
Structures		3 593	3 374	3 066	3 423	3 213	2 895	-9.1%	-9.9%	7.1%	7.3%	7.6%
7310	Tanks, drums & cans <300L	543	557	416	691	509	401	-25.3%	-21.2%	1.2%	1.2%	1.0%
7302	Railway material excl. rails	135	808	26	134	68	13	-96.8%	-80.9%	1.7%	0.2%	0.0%
7302	Rails	3 258	4 307	2 057	6 185	5 630	54	-52.2%	-99.0%	9.1%	12.8%	0.1%
7325	Cast iron products	3 076	2 920	2 878	3 141	2 878	2 112	-1.4%	-26.6%	6.1%	6.5%	5.5%
7311	High pressure containers	1 648	1 156	1 187	1 411	1 135	1 111	2.7%	-2.1%	2.4%	2.6%	2.9%
7323	Kitchen & household articles	1 572	1 587	1 537	1 756	1 640	1 591	-3.2%	-3.0%	3.3%	3.7%	4.2%
Other		10 232	11 335	8 101	13 318	11 860	5 282	-28.5%	-55.5%	23.8%	27.0%	13.8%
Total		43 597	47 536	40 850	44 421	43 982	38 306	-14.1%	-12.9%	100.0%	100.0%	100.0%

Source: SARS (Customs & Excise)

Comparing value added carbon steel imports of 2016q4 to 2015q4 indicate that there was a 12.9% decrease to 38 306 t/m.

- Pipe and Tube: 5.3% decrease to 9 843 t/m
- Wire and Wire Products: 14% increase to 15 699 t/m

b. Industry Associations and Export Councils

The role and the purpose of the steel associations in most cases have diminished over time, mainly due to a lack of funding and fear of anti-competitive behaviour.

The main shortfall with almost all the associations is the absence of a longer-term strategic planning function, aligned with government's long- and medium-term plans,

most notably that of IPAP. The result is that most of the industries are rudderless and without direction. This is for example evident from recent downstream industry duty applications that failed, since there are mixed messages from industry on the subject. Where there is longer-term planning, it is more focused on the association/institute itself, rather than on the industry. Although the DTI will attend some of the association meetings, it is more of an observer than actively tackling problems and making sure that the industry drives the country's industrial development plan over the medium/long-term. Although many of the issues identified during this investigation are being addressed by the DTI in some form or another, these initiatives are quite often not known to industry. The industry associations should be the vehicle of communication and co-ordination of these incentives. Active participation in the industry affairs by DTI officials should address this shortcoming.

In addition to the above, an industry association should be involved in the following activities:

- Generic marketing of the industry
 - Education and training
- Safeguarding the industry
 - Stats
 - Lobbying
 - Duty applications
 - Policing
- Improving the industry's profile
- Market development
 - Identify opportunities from trade statistics
 - Identify international initiatives from the International Stainless Steel Federation (ISSF), International Steel Fabricators (ISF) and Steel Tube Export Association of South Africa (STEASA)
- Export promotion
- Member engagements
- Conducting annual satisfaction surveys to members
- Conducting monthly surveys to determine the state of the industry and its outlook.
- Maintaining of good relationships with the DTI and all other stakeholders

The steel associations and export councils, directly linked to the South African steel industry, are:

SAISI – South African Iron and Steel Institute

SAISC – Southern African Institute for Steel Construction

ISF – International Steel Fabricators' Export Council

SASFA – Southern African Light Steel Frame Association

POLASA – Power Line Association of South Africa

SAMCRA – Southern African Cladding and Roofing Association

SAWA – South African Wire Drawers’ Association

ASTPM – Association of Steel Tube and Pipe Manufacturers

STEASA – Steel Tube Export Association of South Africa

SASSDA – Southern African Stainless Steel Development Association

ISSF – International Stainless Steel Fabricators

c. Import Tariffs on Steel Products

An estimated 400 million tonnes of world steel consumption crosses oceans on the way from the place of production to the place of use.

The fundamental problem for steel mills in 2015 up to 2017 is stagnating steel demand.

- **Slowdown in Chinese economic growth**
- **Flattening cost curve and cost inflation due to increased coking coal prices**

For many years, the steel industry was viewed as an assemblage of companies whose profitability was driven ultimately by the hot-rolled coil price on the world market.

This traditional approach of analysing the industry is no longer working. Hot rolled coil (HRC) price, Free on Board (FOB) the port of export, fell to, or below many of the mills’ marginal costs.

An unprecedented avalanche of trade suits and other governmental actions against the Chinese steel mills and many others.

- In the USA, the steel mills are in the process of creating a “fortress America” condition that has already permitted the domestic hot-rolled coil price to rise to \$740 per metric tonne in March, which was \$400 per tonne above the Chinese export price. Current prices are in the range of \$540/tonne.
- In Western Europe, the spread between the domestic spot price and the world export price has already widened from \$50/t to \$100/t.
- India has initiated a safeguard and minimum import price (MIP) system from the viewpoint of the foreign mills and steel buyers in the country.
- South Africa is in the process of creating similar structures. This wide-spread trend of protectionism is driving more countries to adopt an oligopolistic pricing structure for their domestic market.

No doubt, if the world export price is to remain the primary driver of steel mill profitability, and where there's no import protection, many steel mills will die.

d. Subsidies in the Chinese steel industry and the utilisation of trade remedies

The government of China guides the development of China's economy through various subsidy schemes (five-year plans) that identify sectors that will be favoured by government policies. These policies influence the supply and demand, and therefore the price of steel in China. This is supported by various international studies, including a recent study by five trade associations which included the American Iron and Steel Institute. According to these studies, the Chinese government has supported the country's steel industry primarily through cash grants, equity infusions, government-mandated mergers and acquisitions, preferential loans and directed credit, land use subsidies, subsidies for utilities, raw material price controls, tax policies and benefits, currency policies, as well as lax enforcement of environmental regulation.

"The Chinese government maintains a majority share in the top-producing Chinese steel producers. Consequently, domestic steel producers are not competing with private enterprises, but with sovereign governments that do not need to use free-market principles to operate," the report stated. In addition, the majority of senior positions in state-owned mills are held by politicians with status equivalent to ministerial level with regular transfers between the mills, as well as central and local government.

These government subsidies obviously impact dramatically on the input cost structures of the Chinese downstream industries, due to the artificially low cost of steel over and above the subsidies received by the industries directly. This is evident in the following comment made by Roger Schagrin, Executive Director of the Committee on Pipe and Tube Imports; "It is unreasonable to believe that US steel pipe and tube producers can compete in the global trade arena when a foreign government is subsidising its steel industry". The South African downstream industry is no different.

Despite the injurious impact low-priced Chinese exports has had on the South African manufacturing base; some proponents, largely influenced by political pressure, have argued that Chinese subsidies help consumers by keeping prices low. However, this benefit is temporary. According to the Harvard Business Review, their research has led them to conclude that, like other monopolies, Chinese companies will raise prices as international competition retreats.

In order to ensure the future sustainability of the downstream industry, South Africa will have no choice but to act against unfair trade, especially against China. Mastering and

using “smart protection” tools such as trade remedies are therefore crucial for South Africa if it were to develop a genuine and viable industrial policy. This includes acting against subsidies being given by the Chinese government to its steel industries, giving them an unfair advantage in the international trading arena.

Countervailing duties (CVD) are meant to level the playing field between domestic producers of a product and foreign producers of the same product, who can afford to sell it at a lower price because of the subsidy they receive from their government. Since 2013 to mid-2016 there have been 129 CVD initiations globally, 39% (65% in 2016) of which was against China. The only other country with a significant amount of CVD applications was India on 14%. Ninety-four percent of all initiations against China was from Australia, Canada, the EU and USA. Seventy-one percent of the initiations over the same period was in section XV which is Base metals and Articles. Forty-nine percent of the CVD introduced since 2013 was against China. It is, therefore, evident that CVD is a widely-used trade remedy in the steel industry with 68 initiations since 2013. The South African government has however decided to shy away from using this remedy, citing the reason that it could place future Chinese investment in South Africa at risk.

An anti-dumping duty (AD) is a trade remedy that a domestic government imposes on foreign imports that it believes are priced below fair market value (normal value). Dumping is a process where a company exports a product at a price lower than the price it normally charges on its own home market. Since 2013 there were 898 AD initiations, 29% of which was against China and no other country with a double-digit share. During this period 695 AD measures were awarded, 26% of which was against China. Thirty-nine percent of all AD initiations was from chapter XV. It is clear that AD is a widely used tool in the industry.

The anti-dumping action is the most successful and effective instrument used by steel producing countries to protect their steel industries against unfair Chinese trade. The main reason these actions are successful, is that internationally China is regarded as a non-market economy, specifically the steel industry. The fact that dumping has repeatedly been found by several countries is indicative of a consistent behavioural pattern on the part of the Chinese steel industry to dump their products.

However, this has not been the case in South Africa. The main reason is that South Africa has given China market economy status. Because Chinese government intervention depresses the costs of steel production and engenders excess capacity, applying market economy treatment to China in steel anti-dumping matters would enable China to show no dumping of steel, even when the price of Chinese steel is below the free market cost of producing steel. Therefore, the current economic development and status of the steel industry in China would make it virtually impossible to find dumping by Chinese steel producers.

There have been some successful examples, i.e. in cables and ropes. However, this was only because there were no respondents from China. This industry, as a result, is not experiencing the same pressures as the other downstream industries on the domestic market. What however happens more frequently is that AD is awarded but with exceptions, resulting in no impact on imports of goods. An example is AD duties on bolts and nuts. There have only been 12 AD initiations by South Africa since 2013 and only eight have been awarded.

Because anti-dumping and countervailing protection in South Africa has been largely ineffective, there seems to be a move to protect the steel industry through safeguard measures. Given the extraordinary nature of a safeguard measure, there must be an unforeseen rapid, sharp, sudden and significant increase in imports of the subject product to cause serious injury. However, safeguard protection is often difficult to prove and temporary in nature. Safeguards must be phased out over a period of three years. It is also imposed against all countries, not a specific country as is the case in the other two remedies and is also not aimed at combating unfair trade. Safeguards affect preferred trading partners which can lead to retaliation. Since 2013 there have only been 69 SG initiations and 35 have been awarded, 15 of which were in section XV. India and Indonesia are the biggest users of this remedy.

At the moment, the steel industry is forced to use safeguard measures as a trade remedy to protect itself against unfair competition from China. However, in the medium to long-term, this will not be successful and the recent introduction of safeguard duties on the hot-rolled coil will most probably result in increased imports of value added products, further reducing downstream production.

If the downstream steel industry is to survive and grow, it is imperative that it is able to utilise all the trade remedies to protect itself against unfair trade. The government needs to make a decision to treat the Chinese steel industry as not operating under market economy principles, based on the subsidies that are prevalent in the industry in order to allow anti-dumping actions against China.

VAT rebates and export duties

China is employing a clever system using VAT rebates and export taxes to force their industry to rather add value than to export intermediary products. The table below illustrates this. For instance, if a slab is exported there will be a 37% “penalty” involved compared to galvanised coil, which only carries a four percent penalty. If that same slab ends up in a fridge, there will be no penalty.

Flat Steel Products	Semis	Primary product		Secondary product			Intermediary product	Consumer product
	<u>Slabs</u>	<u>HRC</u>	<u>CRC</u>	<u>Galvanized coil</u>	<u>Prepainted Coil</u>	<u>Pipe and Tube</u>	<u>Steel structures</u>	<u>Fridges</u>
HS Code	7206						730810	841810
Vat rate	17%	17%	17%	17%	17%	17%	17%	17%
Vat rebate	0%	0%	13%	13%	13%	13%	9%	17%
Net VAT	17%	17%	4%	4%	4%	4%	8%	0%
Export duty	20%	0%	0%	0%	0%	0%	0%	0%
Cumulative duty/penalty	37%	17%	4%	4%	4%	4%	8%	0%
<u>Long Steel Products</u>	<u>Billets</u>	<u>Rebar</u>	<u>Wire rod</u>	<u>Drawn wire</u>	<u>Galvanized Wire</u>	<u>Cables</u>	<u>Nails</u>	
HS Code	7207	721310	721391					
Vat rate	17%	17%	17%	17%	17%	17%	17%	
Vat rebate	0%	0%	0%	0%	9%	5%	5%	
Net VAT	17%	17%	17%	17%	8%	12%	12%	
Export duty	20%	15%	15%	0%	0%	0%	0%	
Cumulative duty/penalty	37%	32%	32%	17%	8%	12%	12%	

Source: Transcustoms.com

e. Competition Authorities

In many of its industries and sectors, South Africa does not have a competitive environment that can support economic decisions by firms, investors and consumers that will aggregate to produce robust and sustainable economic growth. Anti-competitive practices are, arguably, far more prevalent than the record of cases coming before the competition authorities. This is part of the legacy on South Africa's development where the state played a significant role, both as producer and regulator. The effects of strong state intervention and participation in markets were magnified by economic sanctions that limited the participation of South African firms in the international economy.

Import substitution industrialisation was the dominant paradigm, both by design and the result of economic sanctions. Consumer choice was constrained by virtual economic independence.

Investment options were severely limited and led to investment patterns by firms which supported the development of a conglomerate structure of ownership in the South African economy. The pervasive role of the government in productive economic activities and recent experience with privatisation testifies to the government's important role in the economy. In particular, the protectionist policies, such as import

substitution and industrialisation supported by exchange controls, compounded by the effects of isolation, meant that South African businesses faced very little competition from imports, while also having limited investment opportunities outside the country.

Many firms invested in sectors and industries far removed from their core business, because they could not take advantage of investment opportunities abroad. Corporate concentration grew and the conglomerate structure of South African business was consolidated with cross-holdings that characterised ownership structures. The structure of holding companies, which grants effective control over subsidiaries with extremely low ownership stakes, is specific to South Africa and poses interesting challenges when assessing the impact of a proposed merger.

Practices in a range of sectors, from automotive to construction, have recently come under scrutiny. More often than not, the conclusion that these practices restrict competition has not come as a surprise to consumers.

Developing a competitive culture takes time and requires input from many different sources. The Competition Commission can expand its advocacy role, provided that it has adequate resources. Consumers are both promoters and beneficiaries of competition, so their role in competition enforcement cannot be underestimated. Consumer awareness and its capacity to play a role in effective enforcement, needs to be supported by government, business and civil society organisation initiatives. Consumer organisations are weak in South Africa, and consumers generally are not aware of competition law and policy, as well as how complaints may be brought to the Commission, and even the tribunal. It is exactly this weak understanding of competition law and policy that creates a lack of trust among sector participants, neglecting crucial forward planning and solving mutual business limiting issues such as logistics and customs control. The poor communication lines within industries and sectors is one of the core reasons contributing to the poor business performance in certain sectors.

There are various outstanding legacy cases in the downstream industry which are hampering growth. These cases need to be resolved in one way or another so that industry can move forward.

In the past, there had been indications from the Commission that it will progress to outcomes-based policing vs the current compliance-based policing. This will be a step in the right direction.

7. Industry support measures (COSM, Price Rebates)

Industry support measures come from the abolishment of the GEIS scheme, with the aim to maintain and grow the steel market share against steel's final product imports and optimising available steel manufacturing capacities in the country.

The assistance from the industry helping the industry self is also countervailing friendly as government is not subsidising exports.

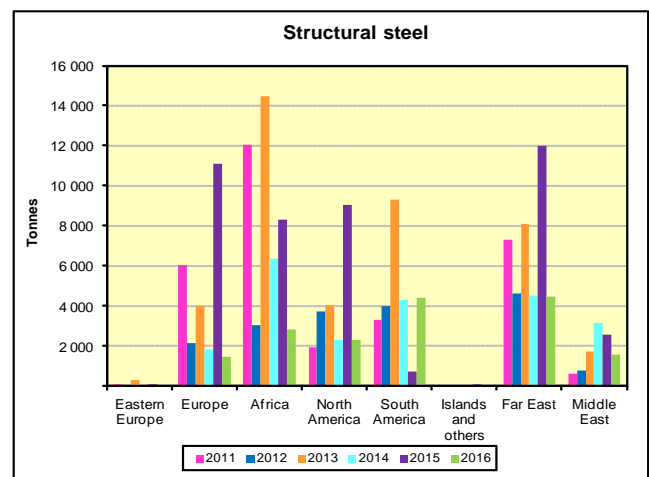
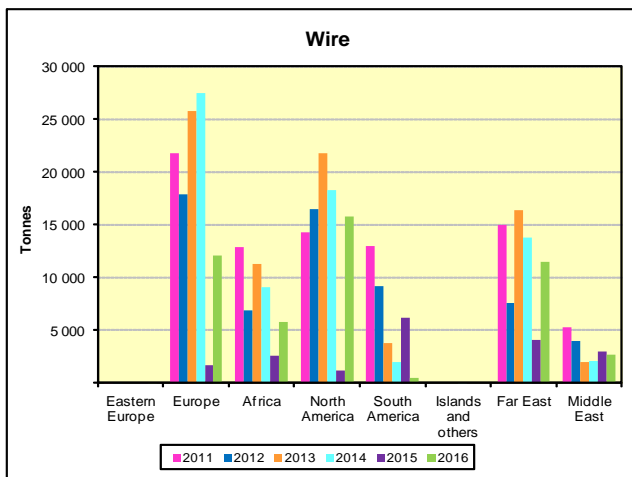
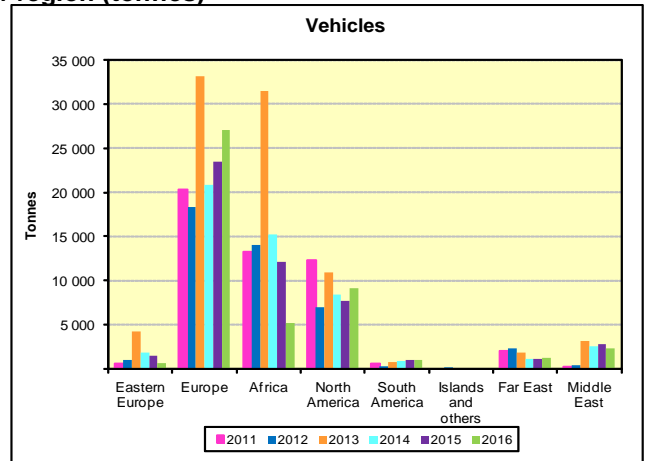
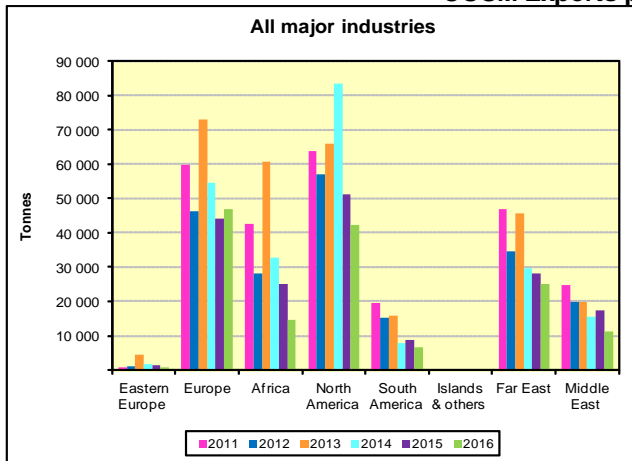
Value added export rebates		
Objectives	Type of support	Administration
<ul style="list-style-type: none"> -To enable the downstream producers in South Africa to be competitive in the international market on value added products -To channel products through the domestic market and utilise dormant and increase current capacities in the downstream industries to process and export material as a value added (further beneficiated) product versus export of the base material -Ensure economies of scale at downstream producers 	<ul style="list-style-type: none"> -Domestic prices are reduced to an EPP equivalent price for volumes of primary steel, used to produce final products for the export market -COSM - Mills contribute R20.43 per tonne on all local sales into this fund. On proof of export of value added products, the exporter claims R173 per tonne from the fund 	<ul style="list-style-type: none"> -The COSM fund is administrated through SAISI which verifies customer claims -Verified export claims are then further rebated by the steel mills through the value added secondary export rebate scheme

It makes sense to make value added rebates available to the downstream manufacturers for as long as primary producers produce steel for the export market. This is a better alternative to primary steel exports. It enables the downstream to be competitive in the international market; it utilises dormant and increases downstream capacities to process and export material as a value added (further beneficiated) product versus export of the base material; it ensures economies of scale for the downstream producers and creates jobs.

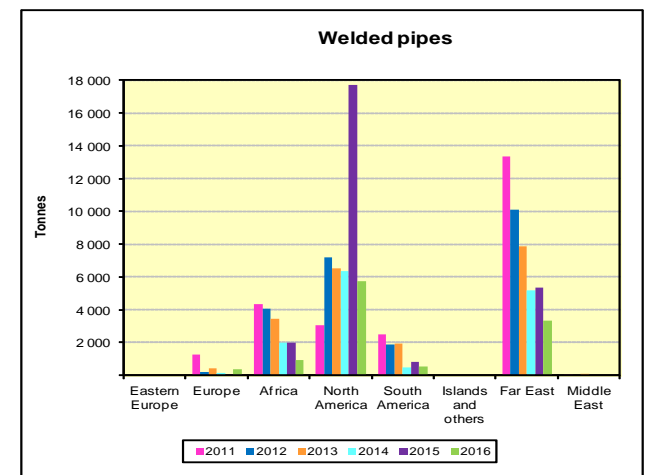
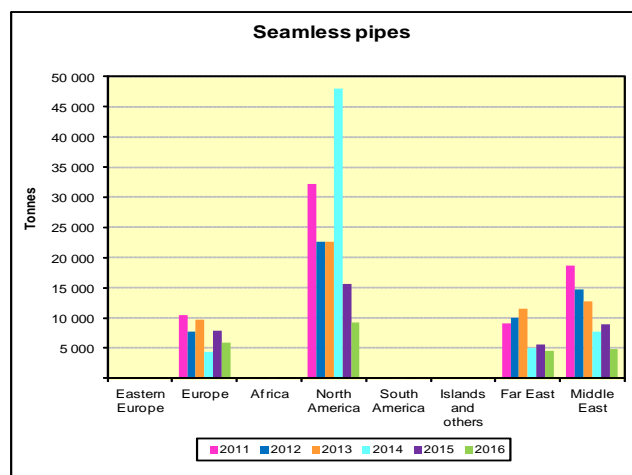
The value of the assistance from the steel mills diminished quite substantially over the last ten years, due to various reasons:

- Affordability
- Availability of material
- Availability of specific markets
- Rationalisation of products

COSM Exports per region (tonnes)



COSM Exports per region (tonnes) - continued



8. Industry Segmentation

South Africa's manufacturing sector, which has been struggling to shed the 'deindustrialisation' mantle for the past three decades despite vocal support for the sector from government, is unlikely to experience a dramatic turnaround in 2017. However, there are some signs of resilience and even pockets of recovery. In addition, there is a genuine opportunity to use the country's relatively weakened currency position as a platform to increase exports, particularly into the rest of Africa. However, the volatility of the rand makes planning extraordinarily difficult.

Overall, the sector is expected to grow by 0.5% this year and by 1.2% in 2018, according to data from economic analysis and the forecast provider, Focus Economics. Meanwhile, the manufacturing sector contributed about 12% to South Africa's 2016 GDP, slightly lower than the 2015 contribution of 13%.

The metals and engineering subsector, which constitutes 29.13% of local manufacturing, had a tough 2016, owing to low demand. The manufacturing performance of structural metal products dropped 5.5% year-on-year in 2016, those of general and special purpose machinery 8% and 5.6% respectively, while the biggest decrease of 14.1% occurred in household appliances according to the SEIFSA analysis.

Summary of Industry Interviews		INDUSTRY SEGMENTATION											Merchants and Service Centers
		Automotive and Automotive parts	Steel Structure and Construction	Mining Components	Pipe and Tube	Wire Drawing and rope manufacturing	Steel Fastners	Towers and masts	Conveyor manufacturing	Appliance	Roofing and Cladding	Hardware	
1	Financially viable in the long-term	●	●	●	●	●	●	●	●	●	●	●	●
2	Pay a fair price from local suppliers	○	●	●	●	●	○	●	●	○	○	●	●
3	Duties on primary steel affect my business	○	●	○	●	●	●	●	●	○	●	●	○
4	Product offering (product range)	○	●	○	●	○	●	●	●	○	●	●	●
5	Availability (Do I get my product when I need it?)	●	●	●	●	○	○	●	●	●	●	●	●
6	Quality (Do I get the input product quality to supply quality products ?)	○	●	●	●	●	●	●	●	○	●	●	●
7	Government is creating an environment to promote business	●	●	●	●	●	●	●	●	●	●	●	●
8	Benchmark my business against global best practises	●	●	●	●	○	○	●	●	●	○	●	●
9	My business is competitive	●	●	○	○	●	●	○	○	●	●	●	●
10	Available markets are influencing my competitiveness	●	○	●	●	●	●	○	○	●	○	●	●
11	Exchange rate fluctuations is influencing my competitiveness	○	○	○	○	○	○	○	○	○	○	○	○
12	Tariff barriers are influencing my competitiveness	○	○	○	○	○	○	○	○	○	○	○	○
13	Non-tariff barriers are influencing my competitiveness	○	○	●	○	○	○	○	○	●	○	●	○
14	Price is influencing my competitiveness	○	○	○	●	○	○	○	○	○	●	●	○
15	Regulatory requirements hampering my ability to do business	●	●	○	○	●	●	○	○	○	○	●	○
16	Team South Africa exist from a business perspective	●	●	●	●	●	●	●	●	●	●	●	●
17	COSM is effective as an export incentive	○	○	○	○	○	○	○	○	●	○	○	○
18	Mill rebates are effective as an export incentive	●	●	●	●	●	●	●	●	●	●	●	●
19	The incentives offered by government are effective to promote exports	○	○	○	●	●	●	○	○	●	○	●	○
20	Economic conditions in the domestic market influence my business performance	●	●	●	●	●	●	●	●	●	●	●	●
21	Economic conditions in the AOL market influence my business performance	●	●	●	●	●	●	●	●	●	●	●	●
22	Economic conditions in the export market influence my business performance	●	●	●	●	●	●	●	●	●	●	●	●
23	Exporting administration is too cumbersome	●	●	●	●	○	●	●	●	●	●	●	●
24	Administration to obtain COSM	●	●	●	●	●	●	●	●	○	●	●	●
25	Administration to obtain mill rebates	○	○	○	○	○	○	○	○	○	○	○	○
26	Administration to obtain government incentives	●	●	●	●	●	●	●	●	○	●	●	●

Source: Customer interviews and team analysis

- The colour of the individual block represents the long-term position for that metric on a scale of green being more positive to red being more negative.
- The colour of the circle in the block represents the current status.

a. Automotive and automotive parts

South Africa: The automotive sector is the country's largest contributor to manufacturing GDP. The South African government's auto-incentive programme (APDP) has prompted many automakers, including Toyota Motor Corp., Ford Motor Co. and BMW AG to set up operations in the country. The sector has potential to expand production to more than 900,000 vehicles annually by 2020. In August 2016, Chinese state-owned Beijing Automotive International Corp. reached agreement with the operator of an industrial development zone in Port Elizabeth, to invest US\$819m in a new plant.

The viability of the industry hinge on the strength of the aftermarket and the APDP programme, although the programme does not cater for the component manufacturers. A sound international and local demand for their products rely on the availability and the implementation of global research and development, as well as technology. Fluctuating input prices from the primary steel producers create problems and the view of the industry players is that fixed prices for a quarter or even six months would be of great benefit.

Duties on primary steel do not impact much on their business and the industry has not seen any benefit flowing from the implementation of duties on primary steel products. Local product quality is seldom a problem and in the case of forged products, even earn the company a competitive edge globally. The availability and erratic supply of products, however, cause major problems. The industry's competitive edge is based on quality products, but Chinese imports are more and more a factor to deal with.

The South African industry players are well established in the international market and their products are in demand due to their ongoing investment in research and development (R&D), as well as technology. The component manufacturers are more hesitant to do further investment as original equipment manufacturers (OEMs) are reluctant to commit their future business.

The complexity of labour in South Africa and the difficulties it creates in the business environment is of concern to these industry players. Although the industry works hard to comply to BBBEE, they have still a long way to go. The commitment of the total supply chain is needed to successfully achieve the targets.

Nobody in the component manufacturing industry believes that there is a "TEAM SOUTH AFRICA" or even an effort to achieve something similar. The automotive industry is one of the major beneficiaries from industry and government incentives provided for value added export promotion.

Automotive in Africa

Automotive revs up in Africa. Opportunities for Africa's automotive industry are looking increasingly attractive, on the back of rapid urbanization, improving infrastructure and road connectivity, as well as favourable government policies. Though historically an importer of automobiles, the continent is expanding its manufacturing base. The promising automotive markets include:

- **Morocco:** The country has positioned itself as an export base for Europe, the Middle East and Africa. In 2015, Ford Motor Co. and PSA Peugeot Citroen announced plans to expand operations in Morocco. Peugeot is planning a US\$632m assembly plant near Kenitra, with capacity to build 90,000 vehicles a year, scheduled to start production in 2019. Following Peugeot's investment announcement, Morocco expects its annual automotive exports to reach US\$10.2b by 2020.
- **Algeria:** In a bid to reduce dependence on expensive imported vehicles, the Algerian government is promoting investments and creating a pro-business climate for the automotive sector. French manufacturer Peugeot-Citroën and Italy's Iveco have already outlined plans to build new assembly factories in the country over the next few years.
- **Nigeria:** In a move designed to cut imports and reduce the economy's dependence on oil, government is offering incentives including lower import tariffs, tax holidays for producers and clamping down on vehicle smuggling. Automakers including Honda Motor Co., Nissan, Ford and Hyundai are already building capacity in Nigeria. Over the next five years, the country plans to assemble 500,000 vehicles annually.

The following initiative, which has a huge impact on the automotive industry, is missing for the other steel consuming industries and could serve as a template to roll-out similar initiatives to drive long-term strategy, aligned with the Industrial Development Plan.

The automotive industry initiated the Automotive Supply Chain Competitiveness Initiative (ASCCI) in December 2013 to coordinate supply chain developments in the South African automotive industry. The creation of ASCCI was initiated jointly by the Department of Trade and Industry (DTI), OEMs, suppliers and labour in the industry. Automotive Supply Chain Competitiveness (ASCCI) is thus a first in respect of facilitating such depth of collaboration to develop a successful and sustainable local automotive industry.

Vision, Mission and Objectives

ASCCI's vision is to establish and coordinate a strategy to enable competitiveness growth, employment creation and transformation in the South African automotive industry. This will be realised through its mission to enhance the strategy, planning and coordination of supply chain competitiveness improvement activities and initiatives. The key objectives of ASCCI include increasing supplier manufacturing value add (MVA), increasing

employment, enabling local supply chain capabilities, increasing local content and advancing transformation.

As a sector-specific initiative, ASCCI aims to respond to six critical challenges within the South African automotive industry that were identified through an intensive stakeholder engagement process:

- Uncompetitive operating efficiencies;
- Uncompetitive input costs, and in particular material costs;
- Limited investment in new process and product technology;
- Inadequate economies of scale;
- Limited economic transformation;
- Unconducive policy and regulatory environment.

ASCCI has a mandate to coordinate, initiate and implement strategic activities that will drive supplier development and competitiveness improvement throughout the industry. ASCCI thus sets the industry out on a new journey in the interests of enhancing automotive supply chain competitiveness through coordinated efforts with value chain stakeholders.

Governance

The structure of ASCCI's executive committee reflects the partnership between government, industry, as well as automotive and component manufacturing support organisations, with the involvement of labour. Well represented by industry stakeholders, government and labour, the executive committee is accountable for strategic planning and direction, as well as effective oversight of identified projects, plans and policies.

This structure is mandated to perform the following functions:

- Formulate a national competitiveness improvement strategy;
- Monitor and coordinate support to regional industries;
- Initiate, support and fund localisation research projects;
- Engage with local and provincial authorities on the development of local automotive sectors and clusters.

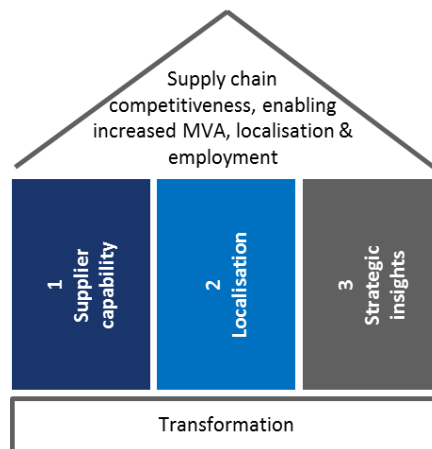
The executive committee has appointed a service provider as well as B&M analysts to facilitate the activities of the executive function. Accountability for the delivery of projects and decision-making, however resides with the executive committee.

Strategic Priorities

The objectives of ASCCI are supported by three strategic priorities:

- **Supplier capability** – activities focused on bolstering supplier production capabilities;

- **Localisation** – activities to increase local content, spanning competitive local material inputs through to investment in new supplier process technologies;
- **Strategy** – activities to develop insight into critical policy, regulatory and related issues that influence growth in supplier MVA.



1. Supplier capability

The key objective is to achieve comparable levels of supplier productivity to leading cost countries. This will be accomplished by establishing TS 16949 as an effective indicator of base operating standards; implementing world class manufacturing interventions at 120 suppliers; developing shop floor skills through team leader and operator skills programmes; and supporting engineering and artisan skills programmes which demonstrate a sustainable impact on scarce skills availability and roll-out.

2. Localisation

This priority aims to increase levels of localisation (as value of vehicle sales ex-factory, less all imported content) by developing a cost advantage from the utilisation of locally available base commodity raw material materials and through enhancing tier 1 and tier 2 localisation by the identification of technology gaps and associated opportunities, as well as the facilitation of investment in six designated technologies in each tier.

3. Strategic insight

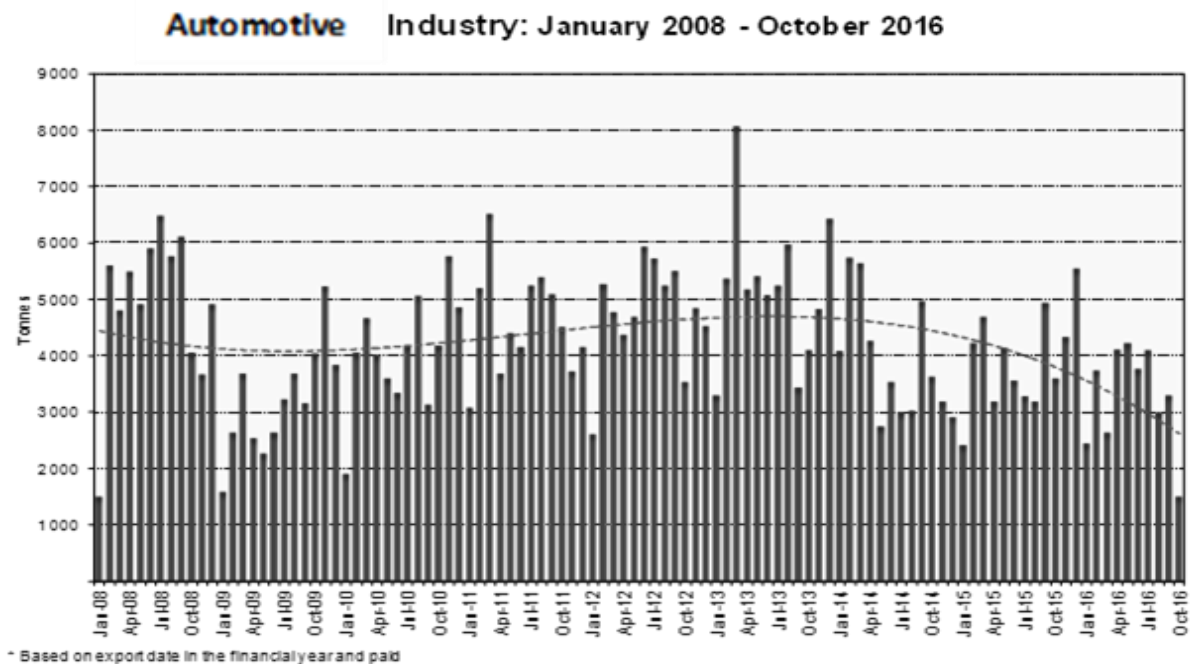
This priority focuses on increasing local content and the generation of employment creation opportunities by developing a comprehensive understanding of blockages and enablers to competitive local supply; conducting a regulatory review of the South African market to provide policy recommendations to increase local producer share of the domestic vehicle market; conducting a regulatory review of the African market to develop trade policy recommendations directed at growing a viable, sustainable, large-scale African automotive market; and facilitating buyer-supplier linkages through the matching of enterprises to domestic localisation and export market opportunities.

Going Forward

Based on the deployment of projects and initiatives aligned to one or more of these strategic foci, ASCCI intends to address constraints and impediments to competitiveness and enable supply chain capabilities, thereby enabling supplier growth.

The achievement of these specified objectives will assist the industry in addressing the broader economic challenges of growing industry employment, while at the same time advancing industry transformation. Given the influence of the national automotive industry, a key role of ASCCI will be to encourage and facilitate alignment of these projects with the broader industry supply chain development strategy.

The graph below shows their activity through the COSM-fund:



Source: SAISI

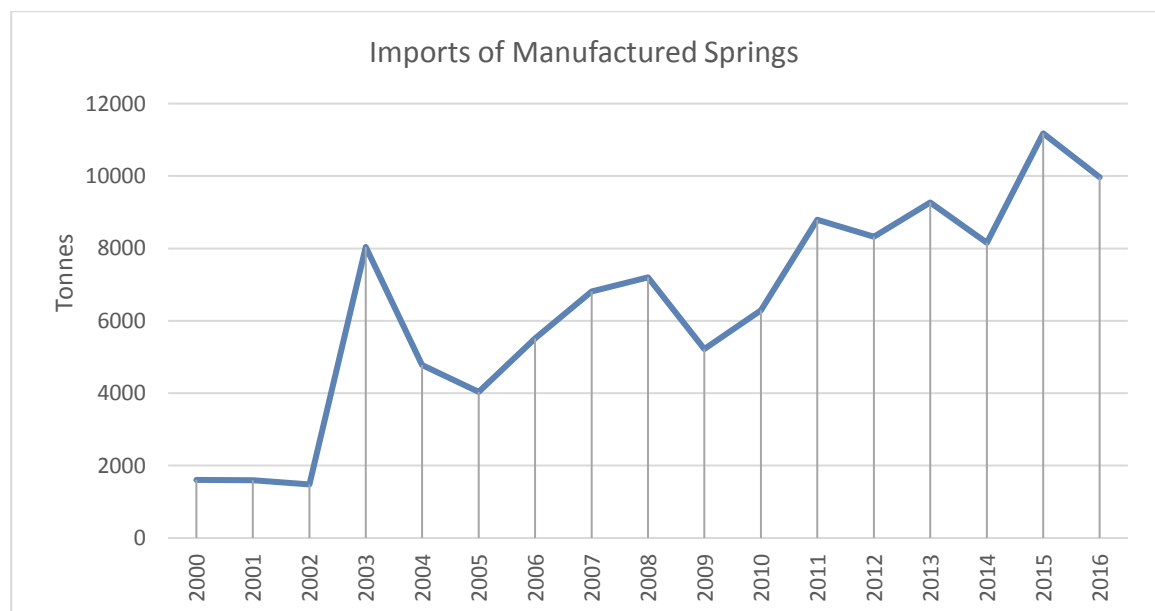
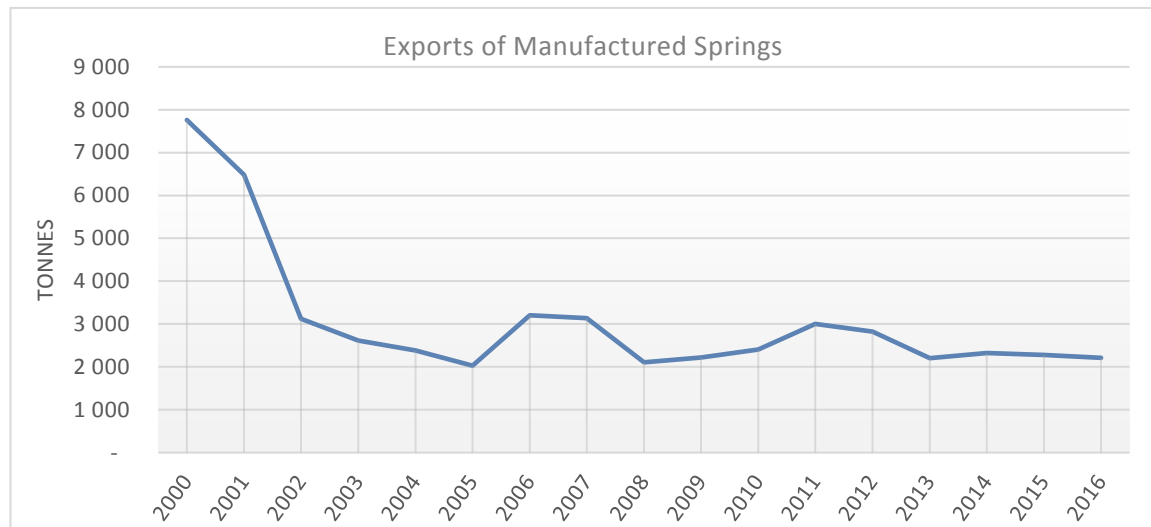
Automotive Component Manufacturers

The component manufacturers do not share the same benefits as the OEMs and have to earn their place in the supply chain as competitive suppliers to the automakers. The dynamics therefore are quite different and where the OEMs are not directly confronted with steel suppliers, it is the direct supply for components.

From the import and export performance of automotive springs as component manufacturer, one can clearly see how imports increased since 2000 and how exports decreased over the same period.

Both these trends are driven by the lessening of competitiveness in the industry on the one hand and in this particular case the rationalisation of the product portfolio offered by the steel mills.

Automotive Components: Springs



Source: SARS Customs and Excise

b. Steel Structures and Construction, incl. Roofing and Cladding

The large companies in the industry are currently in a bad state, due to the absence of large contracts in Southern Africa. The smaller companies with lower overheads are doing much better as they can effectively tender and get the smaller contracts. Capacity utilisation in the industry is below 50%. The roofing and cladding players in the market are more successful when they offer complete solutions (value adding) instead of offering the product. The overall mood in this industry is negative and can be attributed to the low economic activity in the country. Steel prices per se is not a problem, as long as all the local players pay the same price. The inconsistent movement of steel pricing is an issue in the industry. Duties on primary steel products is not problematic unless the industry tries to get work outside the country where the duty, specifically Africa overland, has a knock-on effect. Furthermore, although price movements are announced, pricing structure changes which result in price movement are seldom announced, making it impossible to claim price escalations from the contracts.

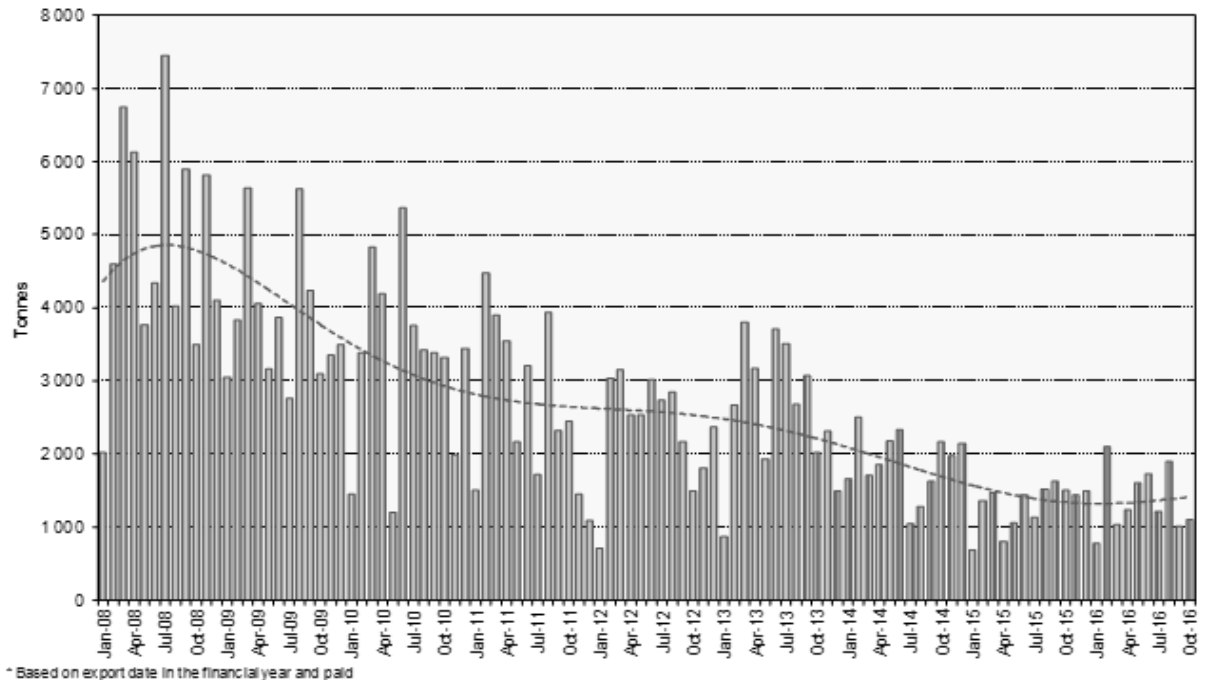
Regarding the service levels from the steel mills, product quality is excellent, but supply is overall not consistent with long lead times and bad on-time delivery performance, influencing the overall availability of steel products negatively.

The industry gets very little support from government in making it possible to expand business. Even where contracts are allocated, standards are unevenly applied, resulting in sub-standard products entering the market.

The salvation of the local market hinge on the infrastructure development programme, the circumvention of localisation and designation however remain a significant challenge. International contracts in the Sub-Saharan region will predominantly go to Chinese bidders. Many of the players in the industry ask for better coordination to be facilitated by government in the trade blocks, such as SADC, when contracts are out on tender.

Value added steel exports from this industry are about a third of what it used to be a decade ago.

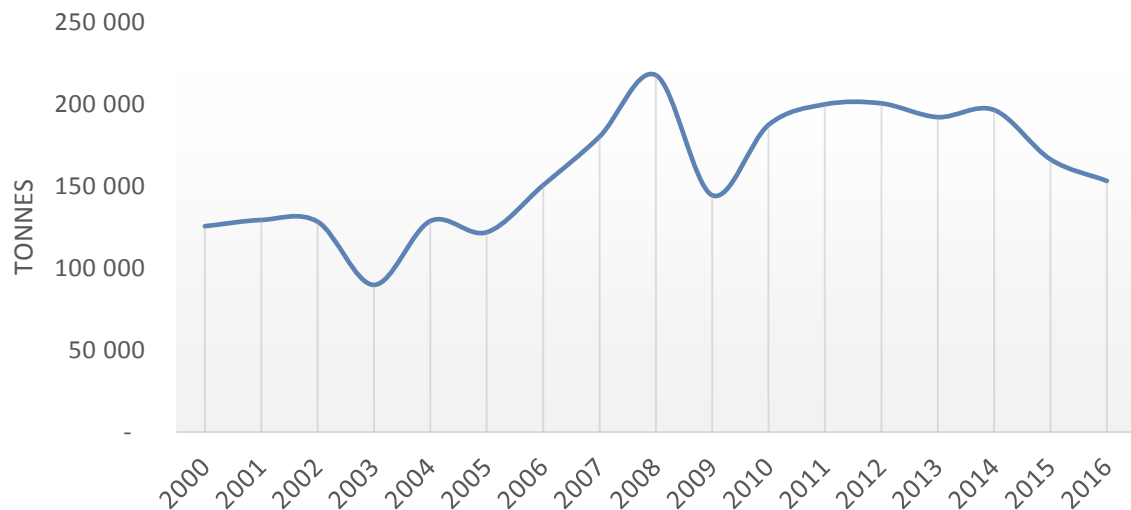
Structural Steel Industry: January 2008 - October 2016



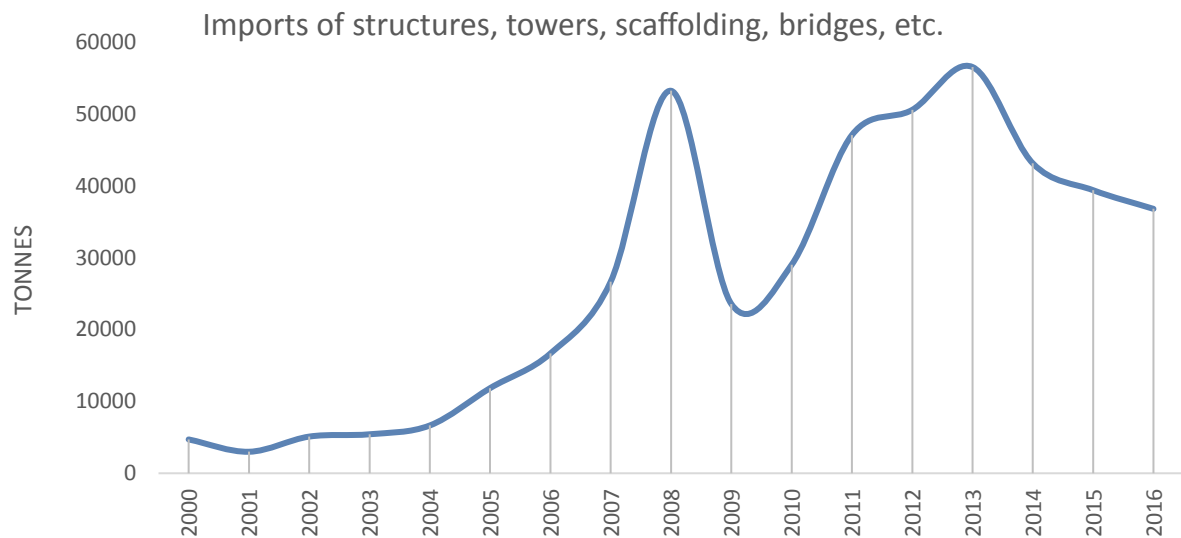
Source: SAISI

The construction manufacturing industry of South Africa became much more export-orientated over the last couple of years, as indicated in the export statistics reported by SARS's Customs and Excise. These statistics differ from the COSM statistics. This is because of the non-qualification for assistance to the Africa overland markets, where quite a few tower contracts were concluded. Recent activity, however, has dropped due to competitiveness against China.

Exports of structures, towers, scaffolding, bridges, etc.



Imports are on a steady growth path and have slowed down over the last two years as a result of the slowdown in the economy. Localisation efforts are also starting to pay off.



c. Mining components

The mining component industry regards itself as viable, sustainable and competitive. The companies in the industry that have been surveyed are mostly in the mine support business, as well as the drilling and mining business. Most of the products are supplied under contract, making it somewhat easier to accommodate changes in supply conditions. Therefore, price changes can be tolerated to a larger extent. The products are also less prone to any effect the duties might have and thus no complaints in this regard.

The quality of steel supply is excellent, but again supply could become problematic without enough stock to counter bad availability of primary steel products.

d. Pipe and Tube

The pipe and tube industry is operating in two distinct sub-industries, that of large diameter pipe, and that of small diameter pipe and tube.

The large diameter pipe, predominantly destined for conveyance of liquid and gas, is usually contract-driven. There is, however, a large volume of the pipe destined for mining and construction. These pipes are regarded as stock items and compete in the commodity market. To be successful in the tender bidding process, where international players are also participating, the correct benchmarked price for the input material is of the utmost importance. Therefore, the sub-industry is heavily dependent on support from COSM, the steel mills and government. With the slowing-down of the local economy, the activity in this

industry is directly affected with low volume output. Current capacity utilisation is in the region of 50% and that of the ERW capability about 30 to 35%.

Government should consider bridging capital until the export income realises. Something should also be done about the port costs.

Large diameter pipe exports have dropped considerably, due to competitiveness in the tender process.

The smaller diameter pipe and tube manufacturers are competing aggressively among one another due to the huge overcapacity in the country, as well as the fact that substantial volumes of cheap products are entering the domestic market. To survive, the industry ventured into a higher level of value addition to differentiate themselves from the cheap imports. New design structures with pipe and tube for the power pilons are now offered to the market. Pipe and tube applications go into:

- The domestic market – 70% (more and more project business)
- AOL – 15% (mostly stock items)
- Blue Water Exports – 15% (products further down the value chain) (Try to grow more into niche markets)

Pipe and tube applications will focus more on project work with opportunities in the next five years.

The legal and regulatory environment is very expensive for manufacturers to comply with, but the bigger manufacturers comply to these regulations as they will be penalised if not. The smaller manufacturers may not comply but they will get the jobs, without being penalised. Government support initiatives do not help much. They start initiatives, but don't see them through. Duties should be on the end products and at the bound rate.

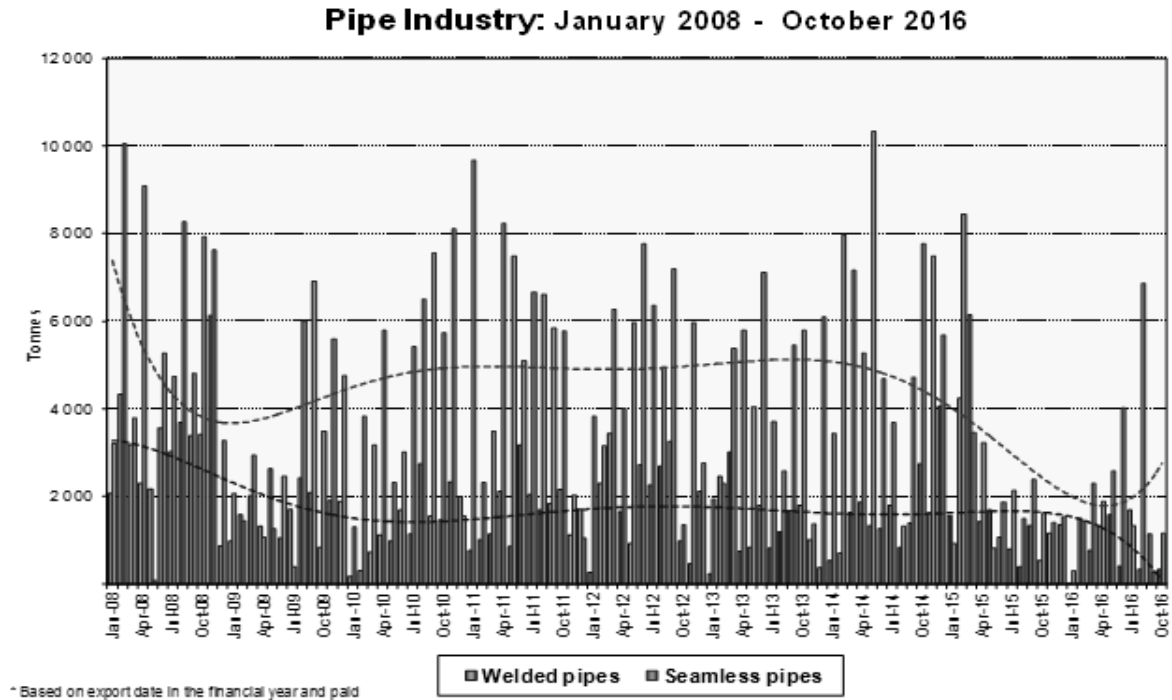
Current installed capacity utilisation is 50%, of which 80% is dedicated towards projects.

AMSA reduced their available steel grades for the automotive industry and therefore R&D is mostly around these processes. International players are far ahead of their South African counterparts, mostly due to economies of scale that cannot be achieved in South Africa.

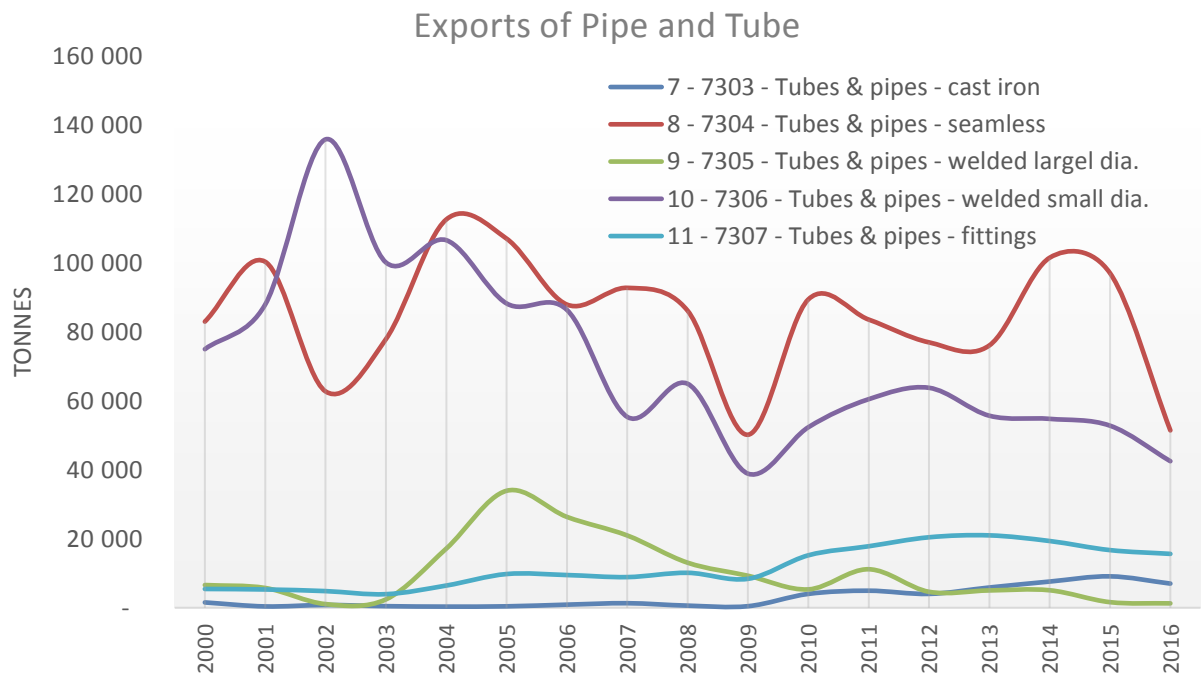
The industry is not in favour of the has no good word for the local steel mills; and bad quality is getting worse.

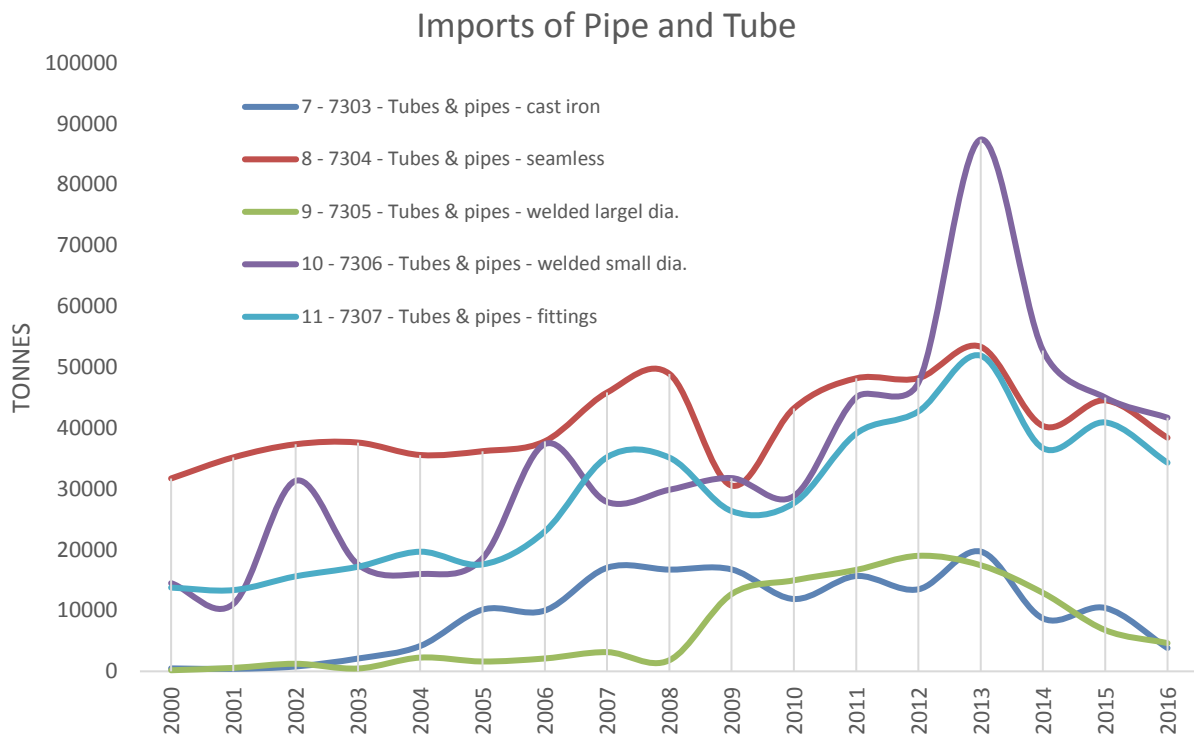
The local steel mills are characterised by poor product availability, lead time and unworkable product pricing. The lead time of eight to 12 weeks is shocking Resulting in increased inventory.

These local steel mills target the North and South Americas, Australia and other African countries (not AOL) with their export products.



Source SAISI





e. Wire drawing and rope manufacturing

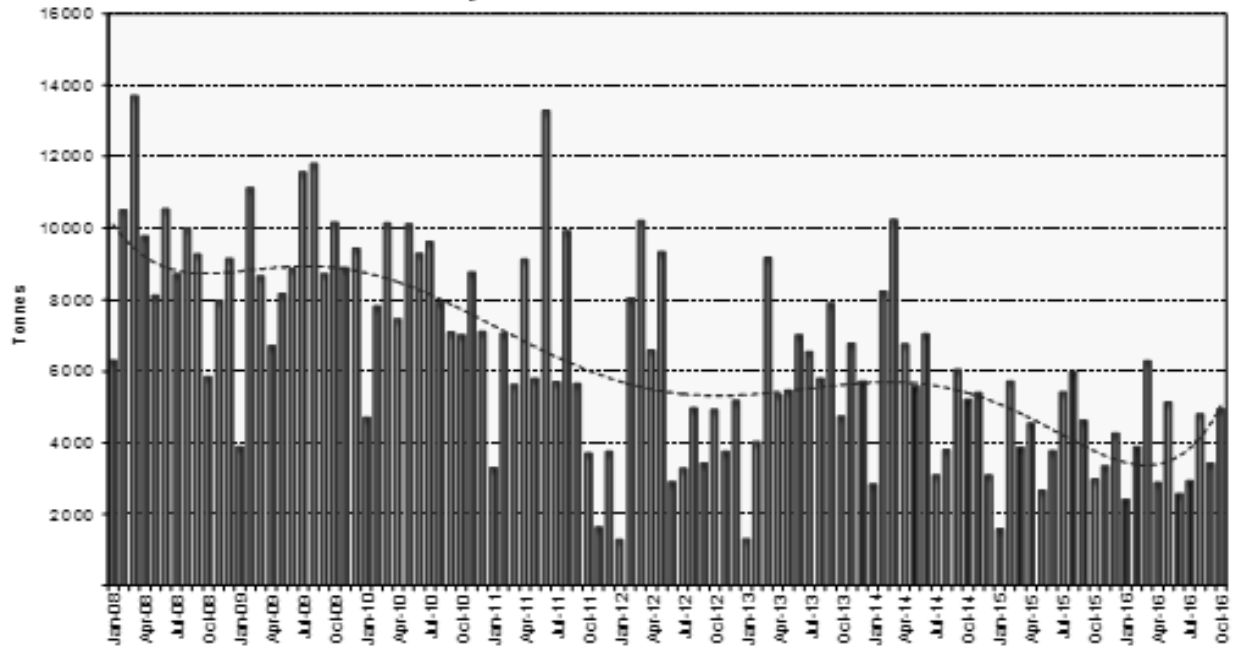
The wire drawing and rope manufacturers are finding themselves in difficult times. The industry has too much capacity for the current demand. As they put it: “There are too few projects and too many players chasing them”.

The general feeling among industry players is that the industry is in distress. Low capacity utilisation is putting the industry under pressure and it is necessary for the industry to regain economies of scale by exporting and regaining imported volumes. The inconsistency of the steel mills’ pricing aggravates the problem of competitiveness.

There is no trust among industry players, which they blame the Competition Commission for. They believe the Commission is haunting them and destroying the South African industry’s business, hence there is no coherence and longer-term strategy in this industry. Most of the industry’s products are contested by Chinese imports. Some of the wire drawers also keep the door open to import final products to the detriment of the industry as a whole. Capacity utilisation in the industry is currently at about 60%.

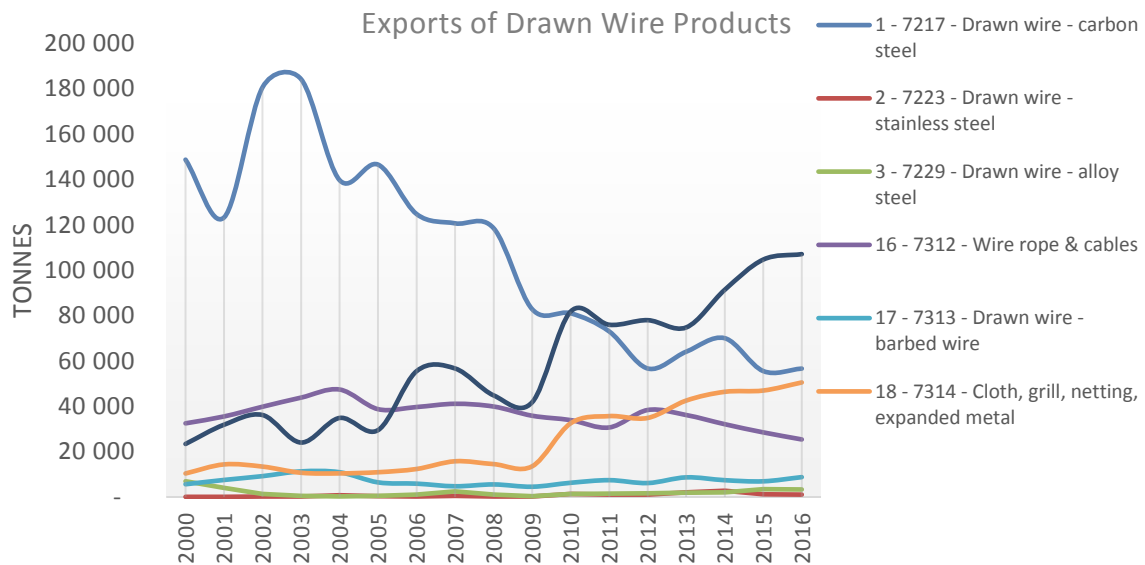
Value added export for this industry more than halved over the last ten years but has significant potential.

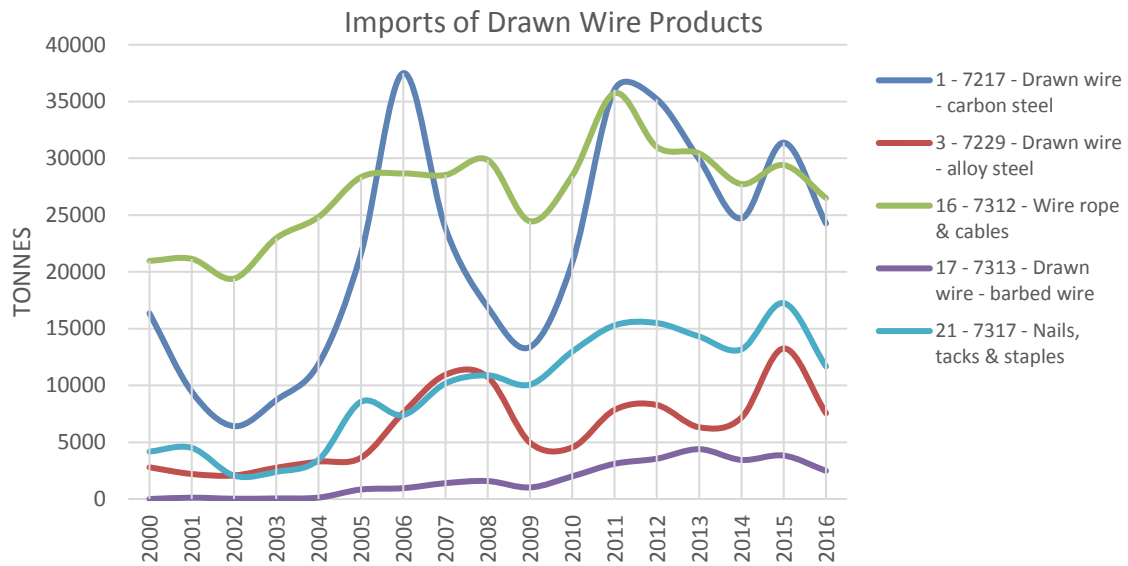
Wire Industry: January 2008 - October 2016



* Based on export date in the financial year and paid

Source SAISI





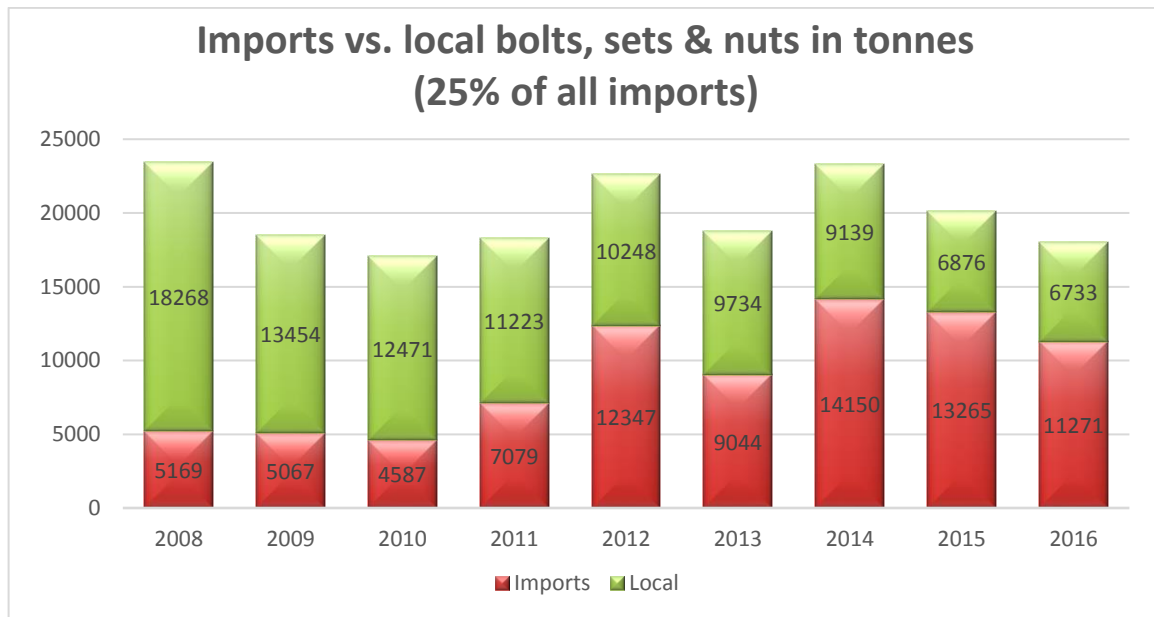
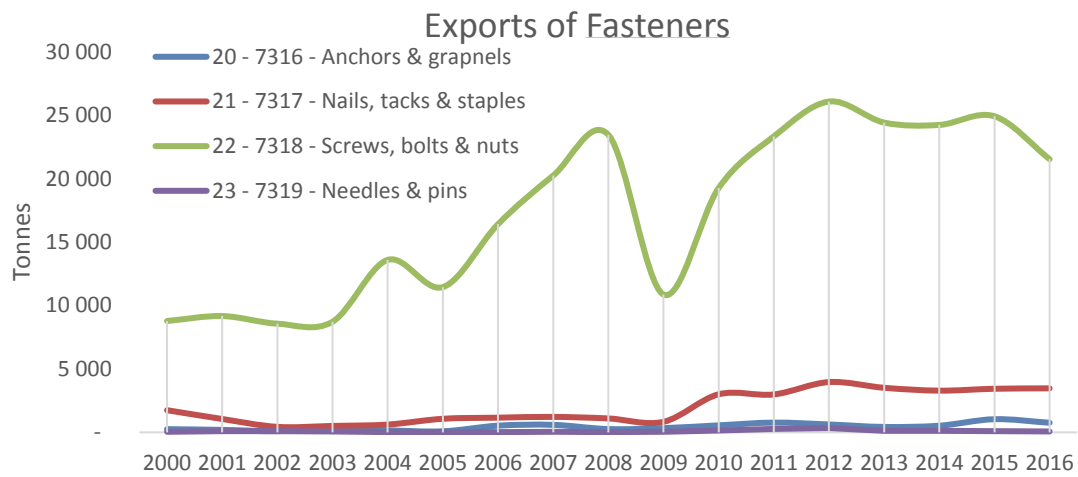
f. Steel fasteners

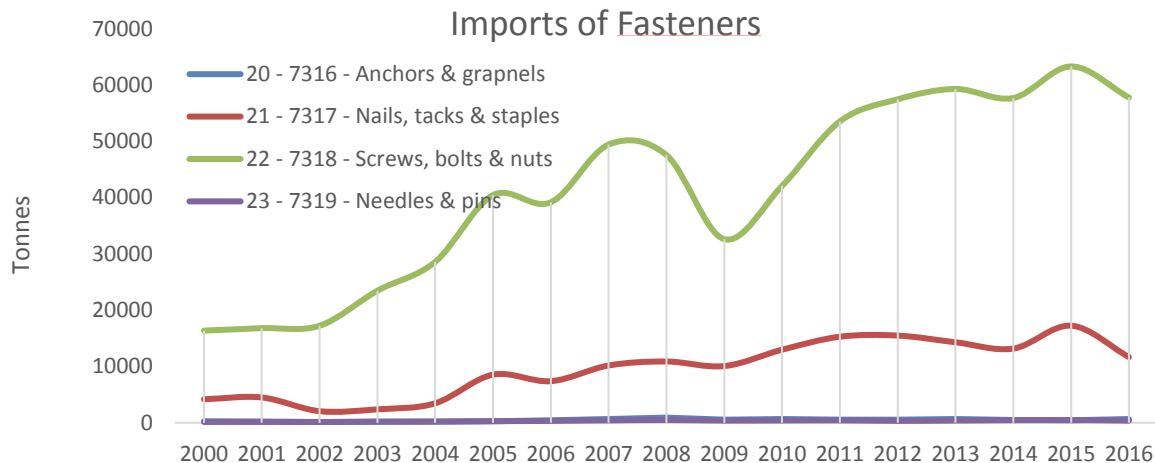
The industry has been dealing with the import threat for many years now, but imports are competitive and in some cases even cheaper than the raw material before conversion. Imports have displaced local market share. The escalating costs of production render the industry uncompetitive and the weakness of the Rand vs the USD has not helped to protect the industry either.

Employment has declined over the last 14 years and there is a reluctance to hire labour because of stringent inflexible labour dispensation.

There has been an unwillingness to invest capital as there are no returns. Dumping duties have not helped to protect the market as there were exceptions. The industry is importing final products at prices significantly lower than what they can produce at. As a result of this, they have lost economies of scale.

Overall, the industry is not strategically placed or assisted to develop critical mass compared to the Asian counterparts. Therefore, the industry believes that exports will not drive growth as Asian competition is aggressive.





The industry is however willing to turn the situation around, but they require the following:

- Take the relevant HS codes to the bound rate
- Apply for safeguard duties – As soon as bound rate duties are implemented
- Fasteners have been designated, but control is required
- The industry association is currently busy with the expansion of tariff codes (splitting import tariffs) to more clearly identify import products, as well as how to deal with exclusions
- Compiling of training manuals for SARS to improve customs control. The manuals will soon be ready
- The industry will support the introduction of a prior import surveillance system, similar to that of Europe and the USA to deal with circumvention
- Another angle is to lobby for making some standards compulsory through the NRCS

g. Conveyor manufacturers

During the 2014/15 financial year, there has been a 60% decrease in conveyer manufacturers' exports due to uncompetitive steel prices.

Their major problems to obtain contracts abroad include:

- Transit times – 48 days on the water to America
- Lead times – up to four months from order acceptance to delivery (manufacturing takes four to six weeks)

- Price

Input materials include welded pipes, structural steel, plates, HRC and round bar for a complete conveyor solution to customers.

Conveyer manufacturers do 85% local work, 10% exports and 5% AOL business. Seventy-five percent of their business is replacement work and 25% new contracts.

The industry carries exceptional high stock (input material) due to the poor reliability from the mills. Exports are prefabricated girders to the African market.

Sixty percent of conveyer manufacturers' input cost is steel-related; hence the business is very price sensitive.

Capacity utilisation is 60% (one shift of twelve hours per day). Thirty percent of the capacity was taken out in 2015. Conveyer manufacturers compete against lower quality suppliers in the local market, due to the absence of quality standards applied by some mines.

These manufacturers are happy about the available product qualities, but less happy about the availability, lead times and product price of the locally produced steel products. Market information is their biggest barrier to export.

Factors influencing taking on export orders are:

- Supply and demand conditions of the global and domestic markets
- Ease of entering a specific export market
- Lead time to supply the product
- Input material pricing
- Exchange rate

Only 95% of their products have its origin in South Africa and about five percent of their products, mainly bearings and seals, are imported.

Conveyer manufacturers rely mostly on COSM and mill assistance to export. The fluctuating levels of the rebates are difficult to manage as their contracts are usually over longer periods. The online portal could be a big plus if it worked properly. COSM is offering a too small incentive.

The industry expects better business conditions in the next twelve to eighteen months. The biggest sales growth opportunities are from South America, Australia and India.

These manufacturers believe they have a sustainable business as mines will always exist. The lifespan of a mine is 20 to 30 years.

h. Appliance manufacturers

The appliance industry mostly purchases their cold rolled sheet and galvanised sheet products from local manufacturers. Unfortunately, the appliance colour coated sheet is imported and no longer available from local producers. Defy, the South African home brand, was attained in 2011 by leading Turkish home appliance group, Arcelik. The group has invested over R1 billion in Defy since its takeover, focusing on innovation, brand development and its human resources.

Established in 1996, Whirlpool South Africa (Pty) Ltd. commenced to operate in South Africa. The company markets Whirlpool-branded, a global brand, within South Africa and to selected African countries. Some of the smaller manufacturers such as Atlas and TECSA also fill this space. The local producers of appliances are all quite active in selling their products in the Sub-Saharan markets, while a number of brands such as LG, Samsung, Bosch, AIM, SMEG and Hisense import finished products. Nevertheless, local manufacturers are of the opinion that they compete actively and efficiently with the imported products. Technology and manufacturing equipment is of the latest and contribute to the industry's efficiency.

The industry is not aware of the support programmes offered by the mills, COSM and government and could better position itself should it utilise these incentives.

A large portion of this industry's steel input is not produced in South Africa which was included in the Harmonised System (HS) codes on which the import duties were introduced. It was a very cumbersome and expensive process to obtain exemption/rebate on these imports. This process took nine months.

i. Hardware manufacturers

Hardware manufacturers manufacture and supply hand tools to the gardening, DIY, agriculture, construction and mining industries in South Africa.

The main competition in the South African hand tools industry is imported products from China and to a lesser extent, India. To counter this threat, anti-dumping duties have been successfully implemented on some of the products, e.g. 35% on wheel barrows. The threat of imports is unfortunately getting worse. There is no clear view on imports and the industry does not really know what is imported as the customs tariff codes are extremely wide. Policing of imports at South African ports also remains a major concern.

The main importers of hand tools in South Africa are some of the end users, e.g. Builders Warehouse, Agrinet, etc. Many imported products are also of inferior quality – 1.5mm steel is being used instead of 2mm steel.

The industry would find it extremely helpful if one can get the real landed cost of imported goods. Counterfeiting of many new products takes place, where Chinese factories copy products and export it to South Africa, even with a similar logo, e.g. Dasher for the Lasher trade mark. Indications are that if manufacturers can produce at full capacity, they can easily double their work force. Due to the threat of imports, Okapi has closed its hand tool business.

Main export markets for tools are Europe, the UK, USA, Australia and New Zealand. However, the continuous threat of Chinese imports is hampering the mentioned markets.

Exports into Africa are also problematic. Under-invoicing (a massive issue), logistics, forex and corruption are some of the major problems, whilst price remains the main competitive instrument. Import duties on certain products into certain countries, e.g. 25% into Kenya, could be a deal breaker.

Steel makes out approximately 70% of hardware manufacturing's cost, whilst electricity is a major additional and costly item. All steel, except for a small portion, is acquired from local mills.

The industry is of the view that government does not really care about the downstream steel industry. They also found the ITAC route to fight imports to be costly and cumbersome.

j. Rail Equipment Manufacturers

Rail equipment manufacturers' biggest local customer is Transnet.

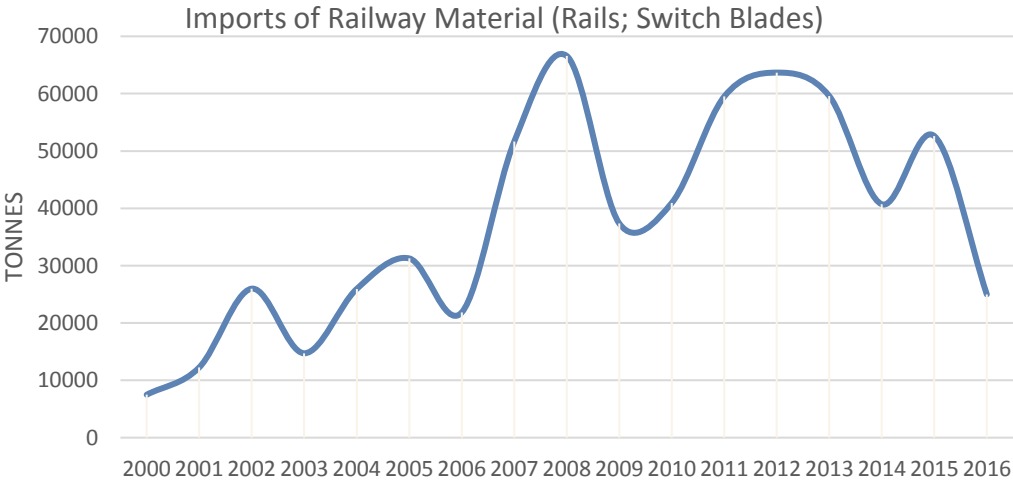
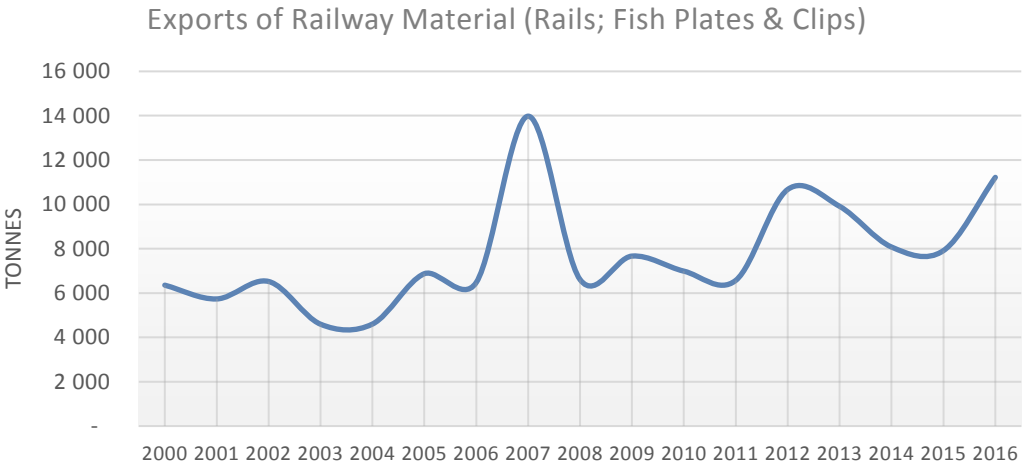
Input material, mainly long steel products, is supplied via the merchants. Some quality problems do occur from time to time, for example the rolling tolerances and decarburisation. The quality and safety of their final products are of utmost importance.

Currently these manufacturers are selling 70% to the domestic market, 15% overland Africa and 15% internationally. They have sufficient capacity and plan to increase exports by ten percent per annum.

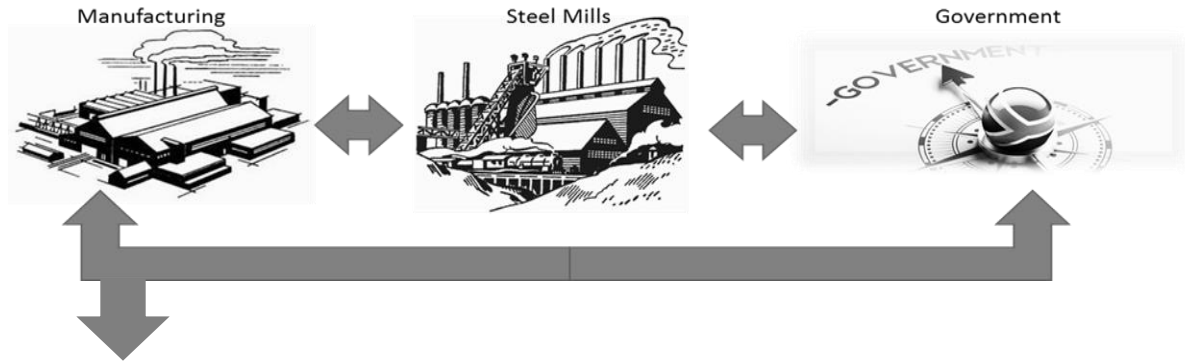
Rail equipment manufacturers depend on what is spent on infrastructure. Their business with Transnet has decreased and to keep their operations going, they have to increase exports. Designation is contributing to their success and the industry has a good working relationship with the DTI.

Their main competition in Africa is from China, India and Brazil.

They are currently developing new products for the American market. Pricing of the products is of utmost importance. Should they be successful, they will have to expand their workforce.



9. Key Challenges in the Downstream value adding industry

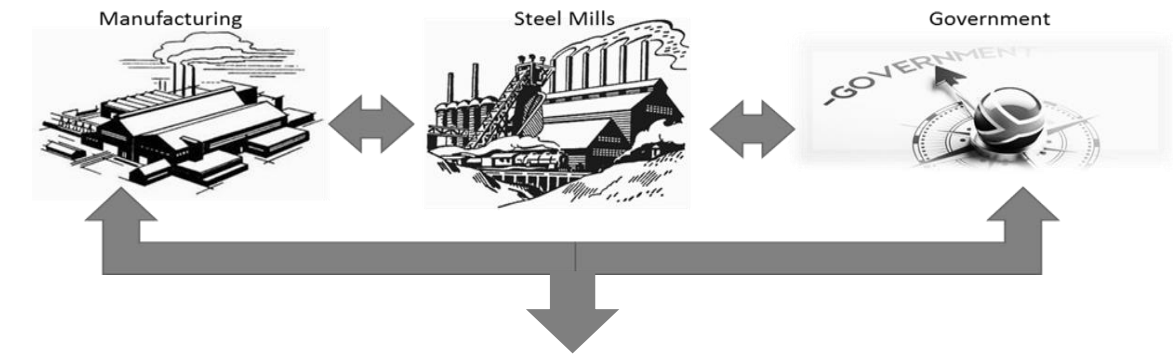


Key Challenges

- 1) Low economic growth and import of manufactured products result in low order intake and underutilised capacities
- 2) Slow product demand leads to loss in economies of scale
- 3) Exports markets lost due to competitiveness especially Africa Overland
- 4) Subsidised Chinese products flooding markets
- 5) Increasing cost of most production factors (input materials, labour, energy and logistics)
- 6) Industry importing final manufactured products to maintain their differentiation and to realise a margin and not supporting duty increases.
- 7) Fragmented and disorganised industries without longer term goals – poor communication and facilitation between industry, the steel mills and government
- 8) Competition matters cause distrust among industry players leaving opportunities unattended
- 9) Steel pricing
 - a) Inconsistent application of pricing structures
 - b) Not following global trends
 - c) Limited differentiation between large and small players

Various Interventions

- 1) Revitalise industry associations as representative bodies of the industry and ensure that decision makers are representing the stakeholders
- 2) Formulate medium/long term plans for the industry and develop an industry action plan in line with the government's Industrial Development Plan and IPAP
- 3) Address import replacement through the implementation of a pre-surveillance system
- 4) Simultaneous alignment of duty structures to that of the up-stream
- 5) Councils should be encouraged to deliver energy at cost while industry should be encouraged to venture in electricity cogeneration to drive down production cost
- 6) Logistics to be optimised via rail to port

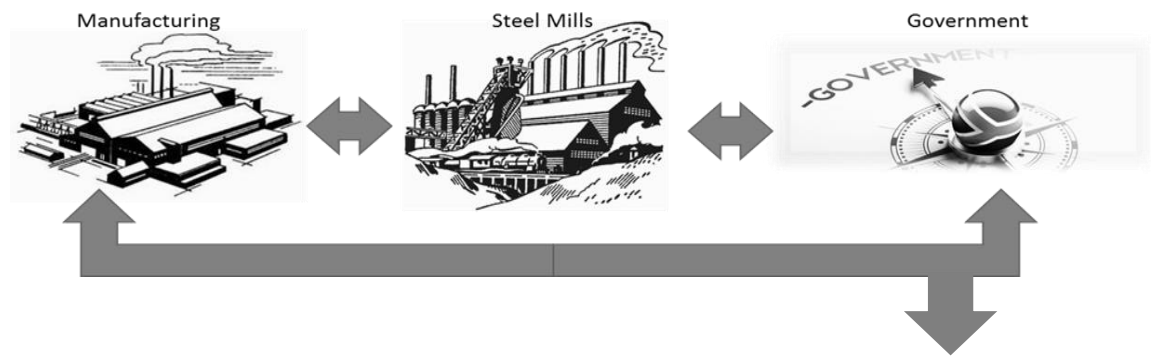


Key Challenges

- 1) Slow growth in apparent steel demand due to import substitution and low economic activity
- 2) Less competitive in export markets due to high cost of production, especially the integrated mills
- 3) Cost of production escalating due to loss of economies of scale
- 4) Formula - based pricing
 - 1) Not allowing for service cost to smaller customers
 - 2) Not incorporating duties and safeguards
- 5) Supply volatility – inherent to the steel mill activity
- 6) Supplier/customer distrust due to inconsistency of supply and pricing
- 7) Longer term sustainability concerns of the integrated mills
- 8) Reduced product range opening further import opportunities
- 9) Mini-mills supplying the sweet-spot of the product range and are more flexible than their integrated counterparts

Various Interventions

- 1) Be more consistent in pricing mechanisms reflecting global trends and relevant competition (Given affordability)
- 2) Address service delivery deficiencies through either forward integration into stockholding and bulk breaking, or allow fair differentiation levels to bulk buyers in the supply chain
- 3) Surplus production should be offered to the downstream at export parity transaction levels to encourage value addition and job creation



Key Challenges

- 1) Industry's cost of transformation is high and needs facilitation
- 2) A higher level of participation in industry associations to tackle and solve key challenges, enabling industry to achieve greater success with the execution of the government's long- and medium term growth targets
- 3) Project roll-out by SOEs and government rather irregular and slow, not gaining momentum and in most cases missing from industry's long term focus/plans
- 4) Circumvention of localisation and designation not to the benefit of industry and fulfilment of government's "Industrial Policy Action Plan" (IPAP)
- 5) Duties and Safeguards not implemented simultaneously throughout the supply chain (Up- and downstream)
- 6) Government's industry support structures incorporated into the Industrial Development Plan are not planned, organised, managed and controlled through the industry representative bodies and associations
- 7) Poor participation among industry players in developing and executing of strategic industry plans create distrust amongst the stakeholders

Various Interventions

- 1) Formulate overall steel industry specific long-term strategy with buy-in from all role players (up- and downstream)
- 2) Assist with the restructuring of the industry associations ensuring their capability to deal with the industry challenges
- 3) Information and training sessions to industry associations and their members on Competition matters
- 4) Facilitate consolidation in the industry to achieve better utilisation through economies of scale
- 5) Incorporate local content requirements into BBEE codes
- 6) Drive communication of all government assistance tools available to the downstream industry via associations to encourage the industry to achieve the Industrial Development Plan targets
- 7) Principle decision to implement unfair trade remedies
- 8) Load import port costs in favour of exports
- 9) Industry focused labour landscape
- 10) Predictability in SOE spending
- 11) Transparent localisation targets for SOE's
- 12) Improved regional cooperation

b. Economic Slowdown

In global context, economic growth subdued over the last number of years. The local economy followed this trend as real economic growth slowed to a mere 0.3% by the end of 2016, the lowest annual growth rate since 2009.

In light of the above, the entire steel production, steel manufacturing and engineering industries are facing a significant growth and cost squeeze since the 2009 financial crisis and in most cases, haven't been able to recover lost ground. Analysis over the last 46 years showed that the country needs to grow at least at 2% per annum to maintain steel consumption levels and to create a vibrant steel manufacturing sector.

c. Increased Imported Products

Over the last 15 years, the South African downstream steel manufacturing industry has experienced increased unfair competitive behaviour by some of South Africa's trading partners. Due to this increase in imports of final steel products, sometimes at lower prices and quality, economies of scale and jobs have been lost at an alarming rate in many sub-sectors. This has created a snowball effect whereby many downstream steel businesses have become unsustainable over the long-term.

In light of this, the application of specifications and standards, as well as the effective monitoring and policing of imports of final steel products at ports have become essential prerequisites for industry survival.

d. Cost of Doing Business in South Africa

South African downstream steel manufacturers have experienced an increasing input cost squeeze, of which the following are the most important:

i. Electricity

High energy costs have over the last number of years become a major concern for local manufacturers and which is not conducive to become and remain internationally competitive. This is especially the case where electricity is sourced from the local council.

ii. Labour

Notwithstanding the importance of earning a living wage, South African labour costs have in global terms contributed to the fact that South Africa's position has deteriorated from previously being a low-cost manufacturing hub to increasingly becoming a medium to high cost manufacturing hub. In addition, prolonged strikes, perceived by international customers as "civil unrest", have harmed the local industry's image as a reliable export destination.

The South African labour market is perceived as complex, "pre-historic" and needs to be aligned according to supply chains, although one has to take cognisance of historic legacies.

iii. Transportation and Port Costs

South African transportation and port costs have also shown steep increases over the last number of years, making many downstream steel export initiatives uncompetitive. In this regard downstream steel manufacturers eluded to the fact that the COSM rebate needs to be in the range of R600 to R700/t to cover at least logistics costs to and through the port in order to be competitive with regard to exports.

iv. Pricing of Steel

Primary steel mills' pricing policy is perceived by downstream manufacturers as inconsistent and not following global trends. According to the downstream industry, it creates disturbing anomalies and distrust in the market. In this regard, for example, ill-conceived pricing policies by primary steel mills, have largely contributed to the fact that the merchant function has all but disappeared. This impacted negatively on a homogenous supply function to the downstream industry.

Another major problem is the very small (3%) differential that exists between the largest and the smallest player in the industry. Typically, your large player will incur certain costs and overheads necessary to maintain a first world operation, so that your smaller player won't necessarily need to have all of the following in place:

- compliant with all legislation
- quality requirements
- carrying a full range of products
- R&D, etc.

The larger player will then start to import products at a lower cost in order to create a differential to fund these costs or go out of business. This is an important reason why, in some cases, duty increases are not supported by industry.

e. Material Availability

Many downstream manufacturers have indicated that they in many instances experience an increasing erratic and unreliable supply scenario from local primary mills. They furthermore experience little customer support. This whole negative supply conundrum is inhibiting domestic and export downstream business prospects.

In addition, downstream players are of the view that government should decide what they want from AMSA in particular, as they are worried about the latter's sustainability and skills base.

f. Tariff Levels for Value Added Products

The South African value added steel manufacturing industry is under significant pressure as a result of decreasing demand, increasing input costs and unfair competitive behaviour by some of

South Africa's trading partners. In light of these challenges facing the industry, certain remedies have been implemented to strengthen internal demand, decrease imports and increase exports.

Trade and Industry Minister, Dr Rob Davies has recently signed-off on the duties on downstream steel products as part of a "whole-value-chain approach" to support the domestic steel industry, which has been harmed by cheap imports as a result of a "global glut" of steel.

During interviews with the downstream manufacturing industry, it has also come to the attention that the ITAC application process is being perceived as being tedious and costly. In addition, it has been raised that the advances from the duties be ploughed back into the industry.

g. The China Issue

China has engineered remarkable growth in its steel industry over the past 20 years, producing over 800 million tonnes in 2016, which accounted for half of the world's steel production. This rapid growth has been both supported and fueled by government subsidies and preferential policies. This has led to enormous overcapacity in the industry and subsequently increased exports of primary steel, as well as manufactured goods.

State support used by the Chinese steel industry includes among others cash grants, equity infusions, government-mandated mergers and acquisitions, preferential loans and directed credit, land use subsidies, subsidies for utilities, raw material price controls, tax policies and benefits, currency policies, and lax enforcement of environmental regulation.

Against the background of these developments in China, the South African downstream steel industry has experienced a sharp increase in finished product imports from China over the last number of years. These have impacted negatively on the health of the local industry.

g. The Impact of the Competition Commission

The Competition Commission is a statutory body, constituted in terms of the Competition Act, No. 89 of 1998. The Commission is empowered to investigate, control and evaluate restrictive business practices, abuse of dominant positions and mergers in order to achieve equity and efficiency in the South African economy. It thus fulfills an important role in creating a more open, transparent and competitive South Africa.

Collusion fears have, however, created major distrust in the downstream steel industry, *vis à vis*, the Competition Commission. Certain industry players have indicated that they have the perception that the Commission is "haunting" the established business fraternity, making a Team South Africa approach to business impossible. This matter will have to be addressed in order to create a more robust and internationally competitive downstream industry.

h. Government Policies

It is the responsibility of a government to establish rules and regulations to guide business. In light of the foregoing, government economic policy and market regulations have an influence on the competitiveness and profitability of businesses. In South Africa of late, government policies for business have not been perceived as being conducive to create such a positive environment. This fact has been confirmed during many interviews with downstream steel manufacturers. It is thus of critical importance that the downstream steel industry and government develop a common trust and conduct as one combined Team South Africa.

Specific issues that need to be addressed include designation and local content requirements at SOEs, government infrastructure spent to be channeled to local suppliers, BBBEE, development of black industrialists, and coordinated export assistance. The Automotive Production and Development Programme (*APDP*) jointly developed by the DTI and NAACAM, could become a blueprint on how other industry sub-sectors should work closely with government, i.e. NAACAM's black supplier development programme.

i. Transformation

The South African downstream steel industry constitutes by and large of a group of family-owned businesses, which each have been developed over generations. Non-withstanding the importance and necessity to create a just and equal society in South Africa, Broad-Based Black Economic Empowerment (BBBEE) codes are perceived in the industry as being problematic, due to a lack of transformation in the industry. In addition, the fact that there are very few black industrialists available creates a negative chasm, which should be addressed in a positive and Team-South-Africa-First manner. The NAACAM Black Supplier Development Programme, once again, could become an important blueprint in this manner.

j. Creative Management

Many downstream steel manufacturers are truly world class in terms of technology development, industry expertise, efficiencies and global entrepreneurial flair. In order to develop a globally competitive Team South Africa, these characteristics should be nurtured for the sake of future generations, as well as the country at large.

However, in order to remain in business and ultimately globally competitive, South African downstream steel businesses internally need to develop an extremely creative management approach. In addition, they need to develop an understanding of government policies and ultimately a common trust.

k. Developing an Export Focus

Due to the size of the South African downstream steel product market against the backdrop of the global market, local manufacturing will only be viable if businesses develop a strong export mentality in order to reach production economies of scale. International solutions marketing in cluster contexts (as per example of the South African Capital Equipment Export Council – SACEEC), instead of pure product exports should be adhered to. A strong and working relation with the DTI regarding the marketing of Team South Africa on international trade shows, as well as viable rebate support from the primary steel mills should be part of the way to address the current challenge of diminishing steel value added export orders.

10. Interventions

a. Strategy formulation

Steel industry

The steel industry is widely accepted as one of the most important industries in the country in terms of job creation, input into other industries and as potential foreign currency earner. It is, therefore, essential that a formal, holistic strategy is developed for the South African steel industry with a clear long-term (30 years) vision and short- and medium-term goals to ensure alignment of all roleplayers inside and outside of the industry. This strategy must be aligned with the National Development Plan and the 18 Strategic Infrastructure Projects. It should also form an integral part of the next Medium Term Strategic Framework 2020 to 2025.

- Roleplayers
- SAISI representing the primary steel producers (Importers of primary steel products and regional mills should also be allowed to participate)
- Department of Trade and industry (DTI)
- Economic Development Department (EDD)
- Competitions Commission
- IDC
- SOEs as the drivers of infrastructure spending and future major consumers of steel to ensure that future infrastructure spent is captured by the local industry
- SARS
- Downstream steel industry representatives
- Transnet as service provider through Spoornet and Portnet
- Eskom as electricity supplier
- Kumba iron ore

This process must be facilitated by EDD. The strategy should be reviewed every five years or with shorter intervals should the need arise.

Downstream industry

An individual strategy per downstream industry must be developed which is aligned with the overall strategy of the South African steel industry. There should, therefore, be iteration between the overall strategy and that of the different industries. The roleplayers must be similar to the roleplayers involved in the development of the overall strategy, but could vary based on the dynamics of each individual industry. The industry associations should facilitate this process and the strategy should be reviewed regularly.

It will not make sense to try and structure all industries in such a way. The criteria to identify well-structured industries are as follows:

- Capital intensive industries with excess capacity
- Industries where large export potential exist
- Potential to supply large regional or even global projects
- Industries that supply into industries where strong or concentrated buying power exists
- Industries combatting a common threat, i.e. low priced imports
- Industries identified that require a formal strategy:
- The automotive industry - probably already has such a strategy in place, it is just a question of alignment
- Wire industry
- Steel construction, including fabricators and manufacturers
- Rail and rail equipment
- Powerline industry
- Capital equipment
- Fasteners
- Large bore pipe

Once the envisaged strategies are developed and being implemented, a co-ordinating function attended by above roleplayers should be re-established. A revitalised downstream development committee (DDC) can fulfil this role.

b. Industry associations

Restructure funding to industry associations to equip them to fulfil the strategic role as envisaged above. In addition to the strategic function, the associations should be equipped to be the custodians of tariff and non-tariff barriers, including quality standards.

Industry associations should become actively involved in capturing of mega projects in the region by coordinating capacity. See intervention on the Competitions Commission.

The DTI must play an active role in the associations and must, therefore, learn and understand the industry.

c. Steel pricing

- Consistency in pricing policies and discount structures
- Pricing must reflect global trends
- Pricing formula for flat products must reflect the pricing of the region that the downstream industry is competing against – given affordability

- Merchant/Intermediaries' role in financing, breaking bulk, processing and keeping stock should be incorporated into the overall strategy and catered for in the pricing mechanisms. This is essential on some products to ensure economies of scale and continuity of supply
- It must be kept in mind that a one-size-fits-all approach cannot work in the downstream steel industry. Each industry is unique with its own drivers. There is a need that pricing be differentiated, depending on the product manufactured and the market it is being sold into. For instance, a product that has duty protection in South Africa does not have the same protection in Zambia, so you might be competitive at a given steel price in South Africa but not in Zambia.

d. Competition Commission

The Competition Commission must give clarity on the following issues:

- sharing of trade data and what constitutes collusion so that the industry associations can function as envisaged on coordinating industry matters
- Coordination of mega projects, both locally and internationally
- Steel mill pricing policies to allow flexibility in the market to address changing market conditions.

This could be in the form of practice notes on implementation, similar to SARS.

To facilitate consolidation in the industry and therefore economies of scale, the commission should revisit its merger and acquisitions criteria.

e. Trade barriers

- A principle decision needs to be taken by the government on its position on the unfair trade remedies and China's market economy status. The current policy can potentially result in the closure of portions of the downstream industry.
- Bound rates – All downstream products need to be taken to the bound rate.
- A clearly defined strategy for the industry should improve the speed of decision-making at the International Trade Administration Commission (ITAC).
- Policing of imports: A task team must be created with special powers to investigate irregularities.
- Introduction of a pre-surveillance system on all imports of downstream products with all applications made public in order to allow the industry the opportunity to supply the required products.
- Non-duty trade barriers through the Metrology Act.
- Enforcement of quality requirements.

- Create a forum with SARS to facilitate an easy route to split HS codes to facilitate exemptions of import duties and to simplify policing of imports.

f. BBBEE

Incorporate local content requirements into BBBEE codes.

g. Labour organisations

Develop a more focused approach to labour relations to ensure industry-focused representation in setting common goals.

h. Electricity costs

- Where town councils supply electricity to the industry, it should be at a breakeven price, including the cost of infrastructure.
- Policy should encourage co-generation initiatives with the installation of lower-cost energy alternatives, i.e. renewable energy and utilisation of unutilised energy sources, for instance gas generated as by-products. This could be in the format of tax rebates which is double the cost of the project deductible in the first year. These credits should be tradeable to facilitate industries which have been under duress with assessed losses. Another option could be to introduce attractive buy-back tariffs or a combination of both.

i. Logistic costs

- Harbour costs should be loaded in favour of exports at the cost of imports.
- Expedite Transnet strategy to up service levels so that more freight is transported via rail. By increasing volumes, economies of scale will set in, thereby decreasing costs. There needs to be an active drive in Spoornet to move freight to rail.
- The industry should support the downstream export drive through the contribution to the logistical cost.

j. Government and SOE spending

- To facilitate investment in the downstream manufacturing industry to localise the spending on infrastructure and the long-term requirements of SOEs, expenditure should be captured on an official long-term plan which is updated regularly. Where possible, the execution of these projects should be at a consistent or predictable

rate. Decision-makers should be sensitive to the impact of changes in the long-term requirement of the manufacturing industry.

- State-Owned Enterprises (SOEs) must set clear, transparent targets on localisation which must be audited and the results made public.
- Designated products imported must be approved by relevant industry associations in conjunction with the DTI.

k. Regional co-operation

- Border crossings made easier for SADC manufactured goods.
- Improved support in neighbouring and other African countries to establish businesses through assistance and guidance through bureaucracy and other red tape.
- Alignment of economic strategies in the region.
- Regional cooperation to capture large projects in the region.

l. Funding

A Fund to support the steel industry should be created, the import duties recovered from imported steel could be utilised for this purpose. This fund should be GATT compliant and should be utilised for the following:

- Capex projects to combat imports of finished products
- Funding of export sales into Africa. This could be in the form of direct funding or reducing the risk profile.

11. Project Conclusions

The lower end of the value adding products (commodity products such as wire, pipe and tube, fasteners, roofing and cladding) manufacturers/industries are competing head-on with imports from China, India and Turkey. The cost of production contains more than 70% steel input cost in their total cost bucket. Therefore, sensitivity of the steel price is quite high on the agenda. A huge drive towards down-gauging, lighter coatings and trimming of specifications could be found in these industries in an effort to cut costs and to make a living in their “cut-throat” business environment. It is also these industries that depend quite heavily upon support from the mills, COSM and government. This is also evident in the magnitude of claims coming from these industries in comparison with total incentives paid to the industries.

Rivalry is fierce and therefore members from these industries do not function properly as an industry group, due to trust issues among members. Industry associations that are supposed to be representing their members, battle to direct the industry and hence the industry functions rudderless with everyone for themselves. There is also no long-term plan/focus for the industry.

Some individual companies are, however, differentiating themselves from the bundle, venturing further down the value addition path in an effort to escape the commodity route. We came across some prime examples of import substitution, such as welding wire, niche bolt and nut applications, high technology equipment replacing expensive old equipment, etc. These industries would function much better should they have better, more effective industry representation to facilitate the link with upstream and downstream in the supply chain and government. It is of the utmost importance that they develop their own long-term strategy, aligned with the DTI’s industry development plan and the implementation goals in IPAP.

The high end of the value adding products, such as automotive and appliances, seems to have much better representation and communication lines to their up- and downstream and government.

The automotive industry initiated the Automotive Supply Chain Competitiveness Initiative (ASCCI) in December 2013 to coordinate supply chain developments in the South African automotive industry. The creation of ASCCI was initiated jointly by the Department of Trade and Industry (DTI), OEMs, suppliers and labour in the industry. ASCCI is thus a first in respect of facilitating such breadth and depth of collaboration to develop a successful and sustainable local automotive industry.

The objectives of ASCCI are supported by three strategic priorities:

- **Supplier capability** – activities focused on bolstering supplier production capabilities;
- **Localisation** – activities to increase local content, spanning competitive local material inputs through to investment in new supplier process technologies;
- **Strategy** – activities to develop insight into critical policy, regulatory and related issues that influence growth.

Similar initiatives for the other steel consuming industries, thoroughly planned, organised, managed and controlled by capable industry associations could put the steel downstream manufacturing industries on a growth path again.