# Challenges and opportunities

Complex governmental structures, a lack of processing capacity, detrimental exchange rates, an abundance of shale gas, urbanisation and political instability – all factors that present challenges and opportunities for the global steel industry, says worldsteel's director-general Dr. Edwin Basson.

By **Matthew Moggridge***

IN 2012, India produced 77.6Mt of steel and was ranked the world's fourth largest producer by worldsteel.

India is beginning to import on a regular basis – "and that is because the Indian economy is still growing," said Dr. Edwin Basson, director-general of worldsteel, adding that India is unlikely to be viewed as 'the new China' in the short-to-medium term. This, he argued, is because India has a much more diversified society and a more complex governmental structure than China.

"I don't think we will get the combined single-focus effort to develop the economy that we saw in China between 1978 and 2000," he said. "Be that as it may, India is the world's most populous nation with very industrious people and a very clever society. They will find ways to overcome their obstacles and continue to grow."

Basson believes that, at present, India's 'obstacles' have been weighing on the country's steel industry and delaying the construction of new steelmaking capacity and this has resulted in India importing steel.

"You could say that economic growth in India is stunted by the fact that there is not enough steel available," he said, but this could be a good thing inasmuch as it mops up excesses elsewhere in the world.

It is inevitable that India will develop additional steelmaking capacity in future and become a larger producer. "In the next three to five years we'll start seeing changing conditions in India that could have an impact on the Indian economy," he said, stressing that a lack of steel won't stunt economic growth, but might slow it down.

**Brazil**

Brazil produced 34.5Mt of steel in 2012 and is ranked the ninth biggest producer in the world.

Currently Brazil has an excess supply of steel, but lacks the capacity to process it.

"Part of their steelmaking capacity only goes to the slab stage and it comes from a policy about 10 years ago when a number of global steelmakers decided to put the front end of their operations – the steelmaking bit – into resource-rich countries like Brazil and then export steel slabs to places like Europe for re-rolling prior to being sold in various markets," explained Basson.

As a result, Brazil has an excess of slab-making capacity and just enough rolling capacity to satisfy its own demand. "That in itself has not deterred economic growth," said Basson. A detrimental exchange rate has reduced Brazil's export attractiveness.

A lot depends upon how US monetary policy unravels and whether or not it will bring Brazil's exchange rate down, thereby providing growth impetus into the Brazilian economy, which in turn will absorb more steel.

There was a time when exporting steel from Brazil was attractive, but with the exchange rate the way it is, importing has become more attractive, bolstered by global excess capacity that has encouraged steel products to flow towards Brazil. Basson believes this is a natural trend and not a driving force for the under-performance of the Brazilian steel industry.

It all begs the question of whether the ultimate goal of most developing nations is to emulate China and become virtually self-sufficient in terms of steel production. Basson believes that it is not an explicit goal, but argues that, since the global crash in 2008, the common wisdom has been that countries with a stronger industrial base have weathered the storm better than those with a weaker industrial base. Basson believes that this has led various governments to talk up 're-industrialisation'. India and Brazil – as well as the USA – have been vocal in this respect and in Europe the EU has stipulated that 20% of GDP has to come from an industrial base.

"Whether this will lead to a new approach towards self-sufficiency I don't know – and I don't believe it will at the moment – but certainly at present there is a great liking for the idea of industrial redevelopment, which may create some notion that it is good to be self-sufficient in steel," Basson said.

A key reason behind Brazil's currently strong exchange rate – the Real is two or three times stronger against the US dollar, claims Basson – is the nation's success as a raw material exporter. While it could become self-sufficient in terms of its own rolling capacity, it is currently a strong export market for China, the CIS and Spain.

**Latin America**

Latin America has been a net importer of steel since 2010. While Mexico is part of NAFTA (North American Free Trade Agreement) worldsteel counts it as part of Latin America. "In spirit and in action they appear to be more South American than North American and, therefore, in our figures, when we talk about Latin America, it is South America plus Mexico," Basson explained, adding that the Latin American economy is dominated by what happens in Mexico.

Mexico imports a fair amount of high-end steel products for the oil industry and for the automotive sector via the USA. In 2012, Mexico produced just over 18Mt of steel.

Chile, Peru and Ecuador are big regional players along with Argentina, which has its own fairly sizeable production capability and produced 5Mt of steel in 2012. All of these countries, however, rely upon imports, particularly for flat-rolled products, but are more self-sufficient in long-rolled steel, which is used by the construction industry. Urbanisation will drive some steel demand growth in the region and, according to Basson, 'there is a lot of infrastructure upgrading that still needs to be done' so expect strong demand growth in the future.

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**USA**

The shale gas boom in the USA has two potentially positive effects: one is reducing the pure cost of steel production; and the other is the possible revival of US steel production capabilities.

The US produces 80Mt of steel per annum, but demand stands at 100Mt. For the last decade or so, the USA has imported 20Mt of steel and, according to Basson, has been 'a consistent and, for the moment, natural net importer of steel'.

For Basson, the USA's need to import 20Mt of steel has been the chief cause of trade friction with Chinese and South East Asian steel exporters. While it is accepted that the US needs to satisfy its import requirement, whether it has to rely upon the lowest cost material around is debatable.

That 20Mt discrepancy creates a clear opportunity for new production capability, Basson argued – an opportunity that the US shale gas revolution could facilitate. He said that 65-67% of US steelmaking capacity was EAF-based with the remainder being BOF. "Most likely what could happen is that as these blast furnaces reach the end of their life cycle they may be replaced by other opportunities, maybe a mix of DRI and EAF, purely because the US has surplus energy and has suitable iron ore resources," he said.

"Our current estimation of future DRI production in the USA is higher than it is at the moment, but not outrageously so. We think there's about another 5Mt that will be added into the USA, but at present it seems to be replacing other iron making methodologies," Basson said.

For worldsteel, the US shale gas revolution will prove highly beneficial both in terms of energy availability and its extremely positive effect on the US economy. "The US is still a growing economy even if it has many aspects of maturity about it. It's not impossible that steel demand will continue to grow in the US for a number of years," said Basson, arguing that the US will continue to be a net importer of steel – in the region of 10-20Mt – depending upon the state of the economy.

**Japan**

Over the past two decades, Japan has reduced its steelmaking ability by about 15Mt, down from 80Mt to something like 67Mt, Basson said. "They've done this in a very controlled way, largely through consolidation of their domestic industry as demand has tapered off," he said.

Japan's infrastructure development has slowed considerably due to an ageing and stable population. "It has become more about replacement than new development," said Basson, adding that automotive demand has stabilised. "Overall we see a very stable future going forward at demands that will allow them to probably export between 10-15Mt per year," he said.

Where users of Japanese steel are concerned, the last 20 years has seen automotive production moving towards South Asia alongside joint venture agreements and regular exports to Indonesia, Thailand and elsewhere. "That process, I think, will continue," said Basson.

**The Middle East**

While a thawing of relations between the West and Iran is likely to be beneficial to the Iranian steel industry, Basson said that demand in Iran 'has been pretty robust all along'. "They have been a net importer of 6-8Mt for the best part of five to seven years on top of the 14.5Mt they are producing, so logically one could probably estimate that there is space to expand capacity," he said.

Onerous sanctions have prevented Iran from gaining access to technology and resources, as very few suppliers have been willing to risk going against sanctions legislation. "Thawing relations will most likely make it easier for steel capacity developing in Iran and while I haven't heard any specific announcements, there is speculation that Iran is contemplating a substantial increase in its own production capacity," said Basson.

The fact that Iran has access to an abundance of clean energy means that it could be an interesting player in a region that is expanding at present. "The whole MENA region has been picking up momentum over the last three to four years and we think it will continue. They're right in the middle of a very vibrant process of urbanisation," Basson said.

"Much of what we're seeing in terms of the debate about future capacity in Iran is linked to so-called DRI [Direct Reduced Iron] as a production route. It appears to be going down the route of DRI linked to EAF and DRI with natural gas as one of the reducting agents, which is similar to what we see in other countries in that region," he said.

In the 'Arab Spring' nations, Basson argued that the biggest single impact of recent political instability has been an inability to move material from one place to another; this prevents worker mobility and causes project delays. Egypt, he said, was a case in point. There will, of course, be strong future demand when 'peace breaks out' in Syria and the rebuilding process begins.

Going forward, Basson believes that the Middle East steel industry will grow given time, but will be stunted by incidents of political instability. While Iran is showing promise and is close to getting access to international resources, any process of reconciliation with the West will not happen overnight and this casts a shadow of uncertainty over its future growth in steel terms.

Political instability is behind Iraq's lack of steelmaking capacity, although Basson said it has always been an importer rather than a producer and is likely to continue that way going forward.

**Europe**

worldsteel harbours plenty of optimism for the European steel industry based on what Basson describes as a 'change of mindset'. "It seems that collectively European industry leaders have come to the point where they've said enough is enough," he said.

"There is growing optimism and it's been helped by the fact that Germany – all along – has done pretty well throughout the crisis, partly because Germany is an export-driven economy," he said, explaining how a weak Euro supported German growth. "The European story has turned a corner, but I don't think for a moment that it will be aggressive growth," he said. "But at least it will stop the 3-3.5% annual decline of the last two-to-three years."

worldsteel's economic committee estimates that 2014 growth in Europe could be as high as 2% on top of 2013.

"Alright, 2013 was a low base – and positive growth from a low base is nothing to shout about – but it's still positive growth and it's a huge improvement in the minds of the industry," he said. ■

**Next month, we publish part three of Steel Times International's exclusive interview with worldsteel's director general, Dr. Edwin Basson.**