

Aug
2012

DEV research briefing

Chinese Competition and the Restructuring of South African Manufacturing

One of the most significant transformations of the global economy over the past quarter century has been the re-emergence of China as a major economic power. This has posed a major challenge for South Africa's manufacturing sector, the largest and most developed in Africa.

This Briefing Paper considers the impact of Chinese competition on industrial production, employment and manufactured exports from South Africa. It looks at two aspects of this competition: from imported Chinese products in the domestic market and from Chinese exports to other Sub-Saharan African countries which are important markets for South African exporters of manufactures.

1. The Re-emergence of China and the South African manufacturing sector

Since the ending of apartheid, the high level of unemployment has been a major concern in South Africa. In recent years the official unemployment rate has been around 25% with estimates of up to 34% if discouraged work-seekers are included. Rather than alleviating the employment crisis, the manufacturing sector has exacerbated it, experiencing a decline in employment of over 350,000 jobs since 1990 (from more than 1.5 million to less than 1.2 million in 2010). The declining share of the manufacturing sector in both GDP and employment has been partly attributed to increasing competition from imports. In the 1990s this was promoted by major reductions in tariff protection which led to increasing import penetration. Over the past decade, imports from China have risen rapidly making them a particular focus of attention.

China is now the world's second largest economy in terms of GDP after the US and has overtaken Germany as the world's largest exporter. In 1995 China was ranked 10th in terms of sources of imports to South Africa, but by 2010 it had become the largest source of imports ahead of Germany and the US. The impact that China's growth and integration with the global economy has on other countries has given rise to concern since the time of its negotiations to join the WTO, and these concerns have intensified over the past decade.

South Africa has the largest and most developed industrial sector in Africa, but compared to China it is small and has faced increased difficulties in

competing with China both domestically and in international markets. This has contributed to a restructuring of the South African economy reflected both in the declining share of manufacturing in GDP and employment and the composition of manufacturing output.

The current structure of trade with China is of particular concern to policy makers in South Africa as reflected in President Zuma's comments at the FOCAC meeting in Beijing in July 2012 that an unequal trade relationship based on the supply of raw materials is unsustainable.

This Briefing Paper is based on the research project **Chinese Competition and the Restructuring of South African Manufacturing** funded by the ESRC Pathfinder Research Projects programme, Grant No. ES/I035125/1.

The research was led by Rhys Jenkins (School of International Development, UEA) and Lawrence Edwards (Department of Economics, UCT)

Contact: Professor Rhys Jenkins,
R.O.Jenkins@uea.ac.uk

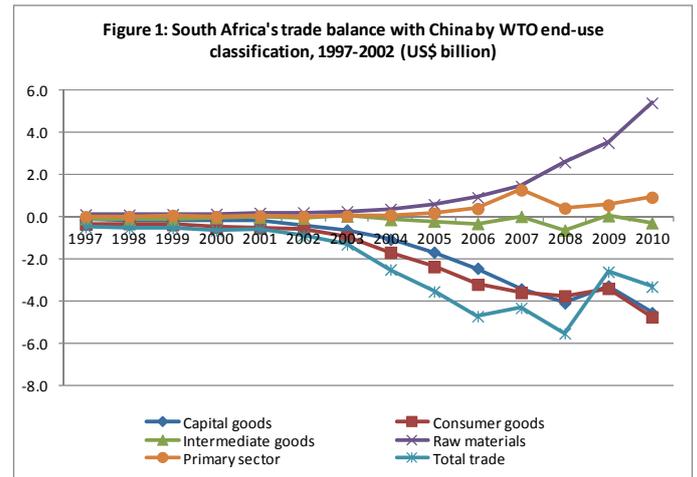


2. Chinese competition in the domestic market

Trade between South Africa and China

Trade between South Africa and China has grown dramatically over the past decade, but both the levels and structure of trade show significant asymmetries. Overall, South Africa has had a substantial and growing trade deficit with China, as shown in Figure 1. In terms of structure, South African exports to China are overwhelmingly of primary products and resource based manufactures, whereas imports from China are almost entirely manufactured goods, particularly consumer goods and increasingly capital goods.

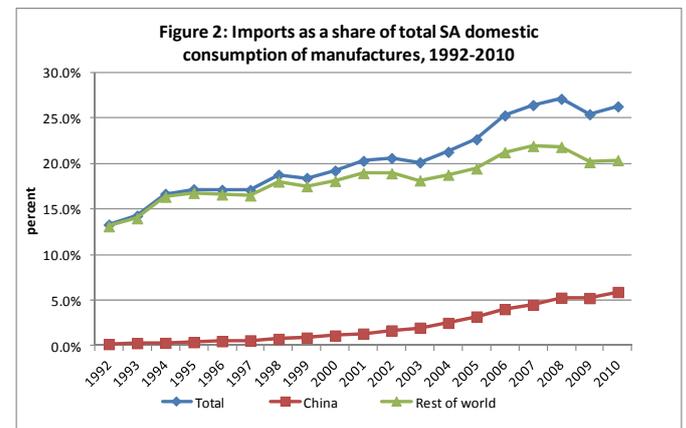
China's share of South African imports of manufactures increased from 2% in 1995 to over 18% in 2010. On the other hand, despite the rapid growth of Chinese GDP over the period, China only accounted for around 5% of South African exports of manufactures in 2010.



Source: own elaboration from UNComtrade data

Penetration of Chinese goods in the South African market

In terms of the impact of Chinese competition on South African manufacturing and industrial employment, one needs to look at the share of Chinese and other imported products in the total consumption of manufactured goods. Figure 2 shows the increased openness of the South African manufacturing sector over the past two decades. During the 1990s, imports from China played a minimal role in increasing import penetration. This changed in the 2000s with China's accession to the WTO in 2001, so that much of the increased import penetration of this latter period can be attributed to China.



Source: own elaboration from UNComtrade data and Statistics SA data

Table 1: Top ten industries in terms of Chinese import penetration, 2010

Industry	Share
Footwear	46%
Knitted and crocheted fabrics	42%
Television, radio and other electronic equipment	32%
Electric lamps and lighting equipment	31%
Clothing	28%
General purpose machinery	23%
Household equipment	21%
Leather and leather products	19%
Spinning and weaving	18%
Furniture	15%

Source: own elaboration from UNComtrade data and Statistics SA data

Although in aggregate, Chinese imports only account for around 6% of total consumption of manufactured products in South Africa in 2010, this average masked considerable differences between industries. The share of Chinese products is over 40% in footwear and knitted fabrics, and over 30% in TVs, radios and other electronic equipment and in electric lamps and lighting equipment (see Table 1). In contrast in food, beverages and resource based industries such as saw milling and coke and petroleum products, imports from China account for less than 1% of South African consumption.

Many of the ten industries with the highest level of Chinese import penetration are traditional labour-intensive sectors such as textiles and clothing, footwear, leather products and furniture. Chinese competition in these industries is likely to have a particularly severe impact on employment especially of unskilled workers.

The impact of Chinese competition on domestic production and employment

A major concern in South Africa in recent years has been the effect of Chinese imports on domestic production and particularly on employment. This led to quotas being imposed on Chinese clothing and textile products in 2007 in response to a surge in imports.

A rise in import penetration from China does not necessarily involve the displacement of domestic production because it is possible that imports from

China substitute for imports from other countries as companies relocate production to China. However, Table 1 shows that almost all the increase in import penetration by China prior to its accession to the WTO and three quarters of the increase in Chinese import penetration subsequently, displaced domestic production. While industrial production in South Africa grew by 14% between 2001 and 2010, this increase would have been around 5% higher in the absence of increased Chinese import penetration.

Table 1: Estimated displacement of other imports and domestic production

	1992-2001	2001-2010
Total gain by China (R. mn.)	7,242	41,384
Gain from Domestic Producers (R mn.)	7,161	30,296
As % of Total Gain	98.9%	73.2%
As % of Domestic Sales in Base Year	1.5%	5.0%

Source: own elaboration from UNComtrade and Statistics SA data

Chinese competition can affect industrial employment in South Africa in a number of ways. First, the displacement of local production tends to reduce jobs directly through layoffs and plant closures. But there are also indirect impacts where firms facing increased Chinese competition respond by introducing more capital-intensive technologies, or move out of the most labour-intensive product lines in each industry.

Table 2: Impact of Chinese Imports on Employment

	1992-2001	2001-2010
Loss of employment to Chinese imports	-24,117	-77,751
Loss of employment to all imports	-144,734	-110,318
Productivity growth	-352,617	-226,124
Change in employment	-179,457	-113,467
Gain from exports to China	2,585	4,080

Source: own elaboration from UNComtrade and Statistics SA data

Table 2 shows that the direct loss of employment attributable to displacement of domestic production by imports from China was relatively modest in the period 1992-2001, both in relation to the loss of jobs as a result of overall increases in import penetration and the overall change in industrial employment. It was much more significant after China joined the WTO. Industries which have been particularly hard hit include clothing, knitted and crocheted fabrics, footwear, spinning and weaving and furniture. The numbers presented here do not take into account any indirect effects of Chinese competition mentioned earlier. Econometric analysis, which does capture some of these effects, also found a significant negative impact of Chinese import penetration on employment

levels. It also suggested that the relationship was particularly strong in low wage industries.

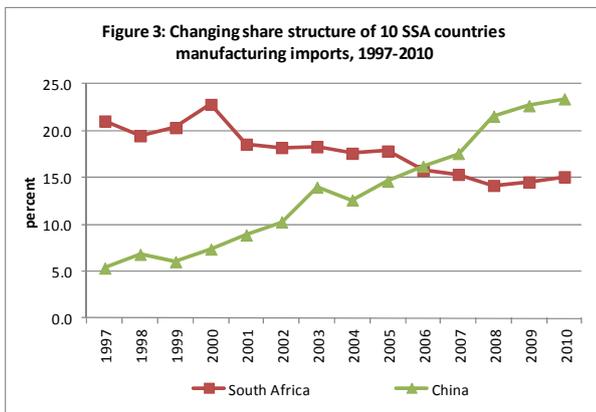
This suggests that imports from China have in recent years been an important factor contributing to the failure of the manufacturing sector to create jobs in South Africa. Not all the impacts associated with increased Chinese imports are negative. There are positive benefits to consumers from the availability of cheaper consumer goods, which may also have stimulated increases in employment in the retail sector. Producers also benefit in the form of cheaper intermediate inputs and capital goods. But as far as industrial employment is concerned, the effects are clearly negative.

3. Is China crowding out South African exports to Sub-Saharan Africa?

China's exports to Sub-Saharan Africa (SSA) increased from \$4.1 billion in 2001 to \$53.3 billion in 2011. The region is also an important market for South African manufactured exports, accounting for over a fifth of the country's total industrial exports, so that the growth of Chinese exports represents a potential challenge to South African producers. Although there are anecdotal reports of South African exports being crowded out by Chinese product, this is the first study to look in detail at the issue.

South Africa's ten most important export markets in SSA in 2010 were Zimbabwe, Zambia, Mozambique, DRC, Kenya, Angola, Nigeria, Tanzania, Malawi and Ghana, in that order. Although the value of South African exports to

these countries increased significantly over the past decade, its share of total exports to the ten countries has declined. In contrast China's share of exports increased significantly, particularly since becoming a member of the WTO in 2001 (Figure 3). China's exports grew at both the extensive margin (expanding the range of products exported) and the intensive margin (increasing the value of existing exports). Whereas there was relatively little competition between Chinese and South African exports in the late 1990s, it increased substantially over the past decade (Figure 4), affecting not only traditional labour-intensive products such as clothing and furniture, but also more sophisticated electrical and electronic products, moulds and machinery.



Source: own elaboration from UN Comtrade



Source: own elaboration from UN Comtrade

To what extent has the growth of Chinese exports crowded out South African exports to SSA and where has this been most severe? An extension of Constant Market Share analysis developed by Batista (2008) was used to estimate the loss of market share by South Africa to China at the product level (HS 6-digit) in each of the ten SSA countries.

On average South African exports to the ten countries would have been almost 10% higher (\$900 million more) had it not lost market share to China between 2001 and 2010. The most significant losses were in Angola and Tanzania where they represented over 20% of South African exports. The impact was least severe in neighbouring countries, particularly Zimbabwe, Zambia and Malawi, all of which were below average. These countries are landlocked and members of the SADC free trade

agreement, both of which would tend to give an advantage to South African products vis-à-vis Chinese imports.

Despite this loss of market share, the overall impact of China on the value of South African exports to SSA may be positive. Economic growth and demand for imports in a number of African countries has risen in response to the commodity boom led by the surging demand for raw materials in China. South African exporters to Africa have benefited indirectly from this over the past decade. However if Chinese demand for SSA commodities slows down in the future, the crowding out effect may lead to an absolute decline in South African exports to the region.

References

Batista, J.C. (2008), "Competition between Brazil and other Exporting Countries in the US import market: a new extension of constant market share analysis" *Applied Economics*, 40.

The **School of International Development (DEV)** at the University of East Anglia is a globally-renowned centre of excellence for teaching and research in international development. Visit www.uea.ac.uk/dev

The School has a unique partnership with **International Development UEA**, a charitable company that has pioneered research, training and consultancy in international development since 1967. Visit www.uea.ac.uk/dev/co for full details of the professional development short courses and consultancy services available through International Development UEA.