



## **MANUFACTURING SUBSECTORS**

### **Wood and paper**

**December 2017**

Industrial policy aims to promote diversification and tailor interventions to the needs of individual manufacturing industries. To support evidence-based policymaking, TIPS has completed a series of notes on the main manufacturing subsectors in South Africa. These briefing notes provide information on the contribution to the GDP, employment, profitability and assets, the market structure and dominant producers, major inputs and international trade. They bring together data from Statistics South Africa, Quantec and Who Owns Whom to provide a more detailed overview of each sector.

This note summarises key data and information on the wood and paper subsector as of December 2017. It will be updated as information becomes available.

---

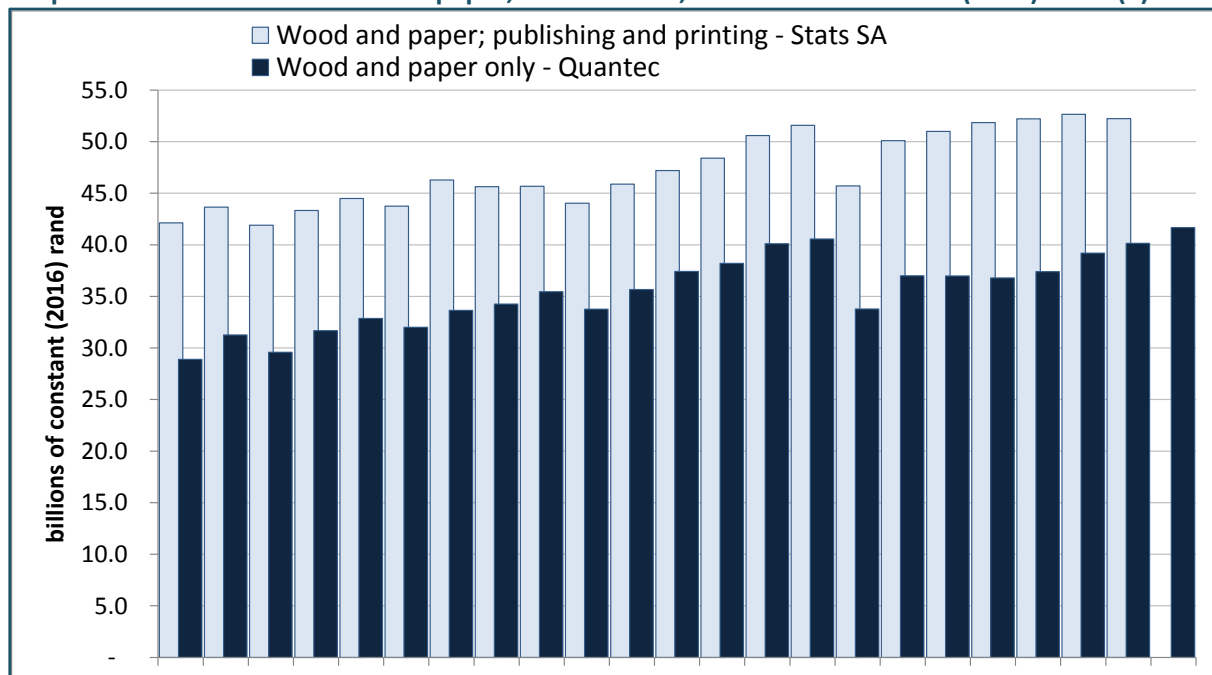
Wood and paper refers to the processing of wood, including milling and pulping as well as production of final products such as plywood, furniture and paper. Printing and publishing are dealt with separately because they differ substantially from the wood and paper sections of the value chain.

## 1 Contribution to GDP

Data for the contribution of manufacturing industries to the GDP (that is, for value add by industry) comes from two sources: the GDP data published by Statistics South Africa (Stats SA), and Quantec, which develops estimates based on the Stats SA figures for sales, production and employment by industry and sub-industries. The figures are not identical, although they typically show the same trends. This briefing note provides both.

Wood and paper grew 2,3% a year from 2000 to 2008, according to Quantec. It dropped by 4,5% in the global financial crisis from 2008 to 2009, but then climbed fairly steadily at 2,5% a year from 2009 to 2017. The Stats SA data do not provide separate value add figures for wood and paper, but they show a similar trend for wood, paper, publishing and printing, as Graph 1 shows.

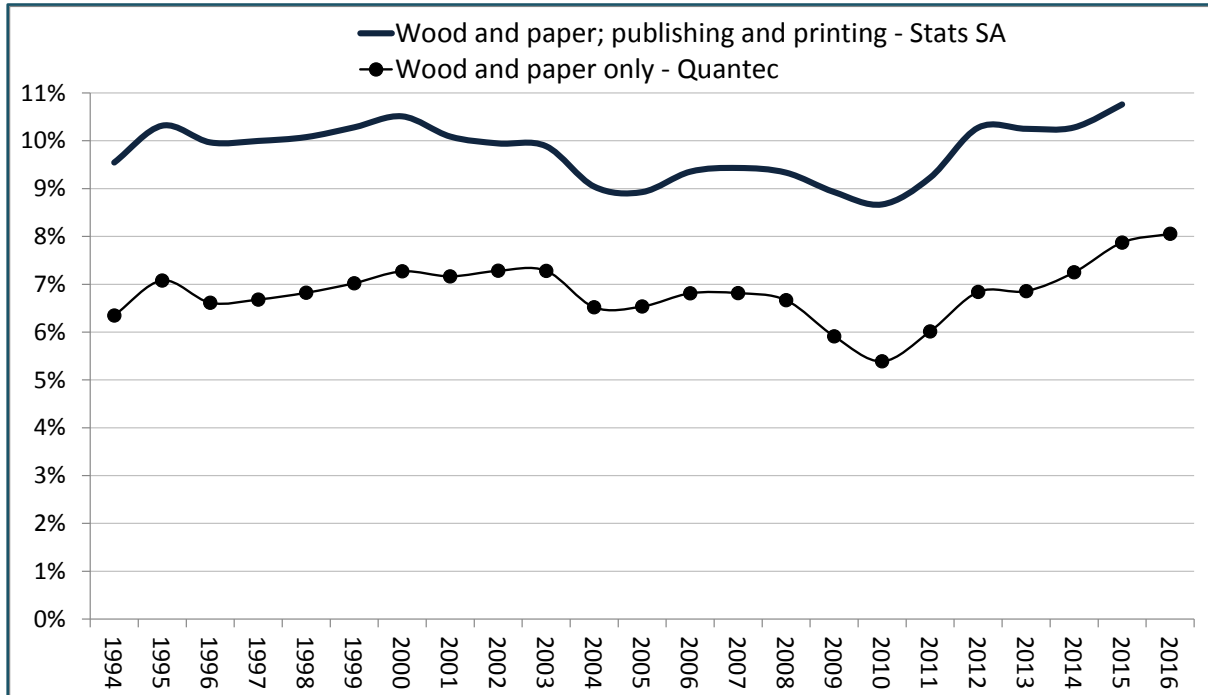
**Graph 1. Value added in wood and paper, 1994 to 2016, in billions of constant (2016) rand. (a)**



*Note: (a) deflated by calculating the deflator used in the sources from figures in current and constant rand, and then rebasing to 2016. Source: Statistics South Africa, GDP P0441. Annual quarter and regional revisions. Q4 2016. Excel spreadsheet. Series on manufacturing subsectors in current and constant rand. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) in September 2017; and Quantec EasyData. Standardised regional data. Database in electronic format. Series on value added in current and constant rand. Downloaded from [www.quanis1.easydata.co.za](http://www.quanis1.easydata.co.za) in September 2017.*

According to Quantec estimates, the share of wood and paper in total manufacturing value added fell from just over 7% of value added in 2003 to over 5% in 2010, then climbed sharply to 8% in 2016.

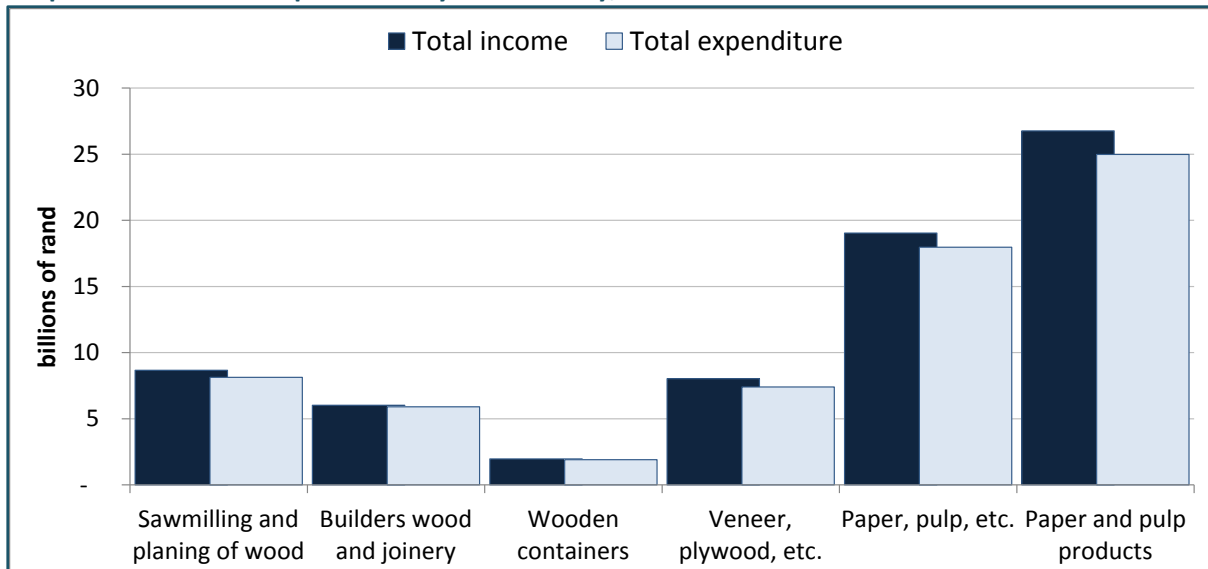
**Graph 2. Wood and paper contribution to manufacturing value added**



Source: Calculated from Statistics South Africa, GDP P0441. Annual quarter and regional revisions. Q4 2016. Excel spreadsheet. Series on manufacturing subsectors in current rand. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) in September 2017; and Quantec EasyData. Standardised regional data. Database in electronic format. Series on value added in current rand. Downloaded from [www.quanis1.easydata.co.za](http://www.quanis1.easydata.co.za) in September 2017.

Around two thirds of turnover in the wood and paper industry came from the production of paper and paper products.

**Graph 3. Income and expenditure by sub-industry, 2014**



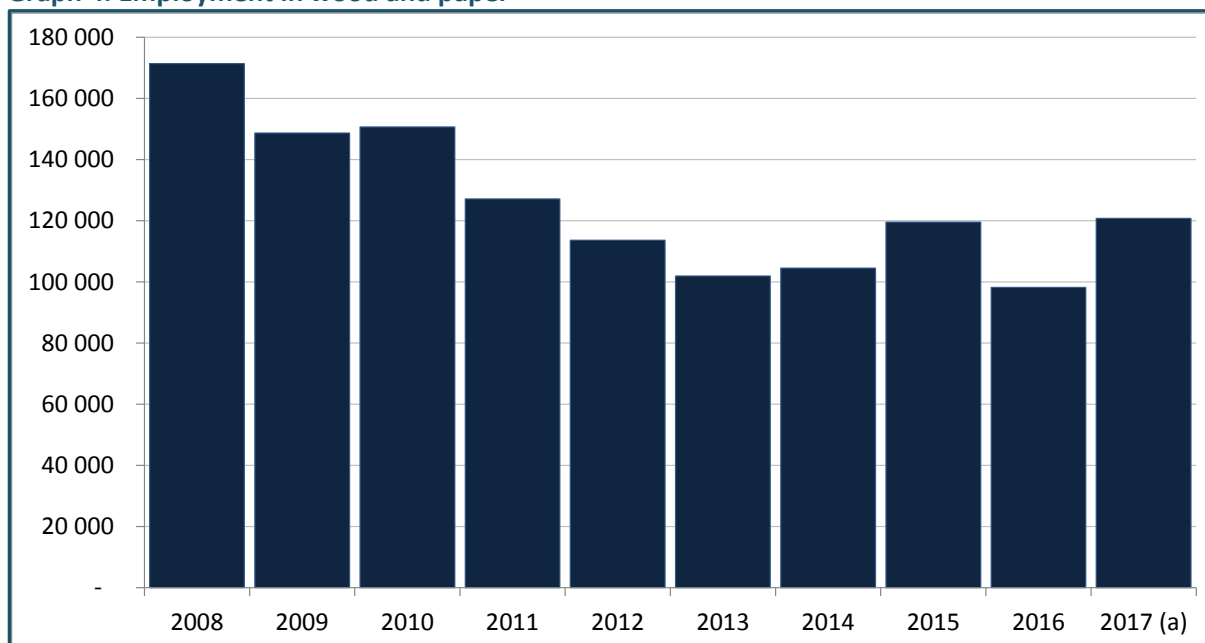
Source: Statistics South Africa. 2016. Manufacturing Industry: Financial. Table 3, p. 18.

## 2 Employment

Employment data provided in this review draw on Stats SA's Quarterly Labour Force Survey, which was introduced in 2008. Its annual figures, in Labour Market Dynamics, are averages of the quarterly findings. This methodology is used to derive annual data for total employment by industry in 2016 and the year to the third quarter of 2017.

Employment in wood and paper dropped by 70 000, or 40%, from 2008 to 2013, then more or less levelled out.

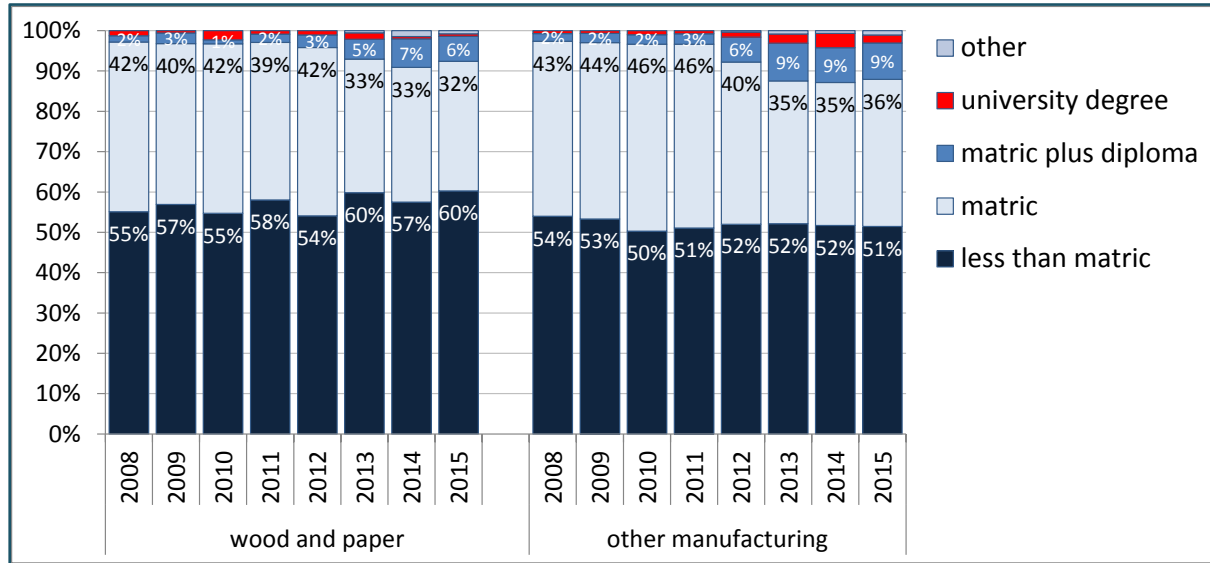
**Graph 4. Employment in wood and paper**



*Note: (a) Calendar years except for 2017, which is the year to the third quarter. Source: Calculated from Statistics South Africa. Labour Market Dynamics. 2008 to 2015. Series on employment by industry. Electronic databases. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) Nesstar facility in September 2017; and Quarterly Labour Force Survey. Q1 2016 to Q3 2017. Series on employment by industry. Electronic databases. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) Nesstar facility in December 2017.*

Education levels in wood and paper were lower than in the rest of manufacturing. In 2015, 60% of workers in the industry did not have matric, compared to 51% in the rest of manufacturing. Moreover, the share of workers with a degree was well below that in the rest of manufacturing.

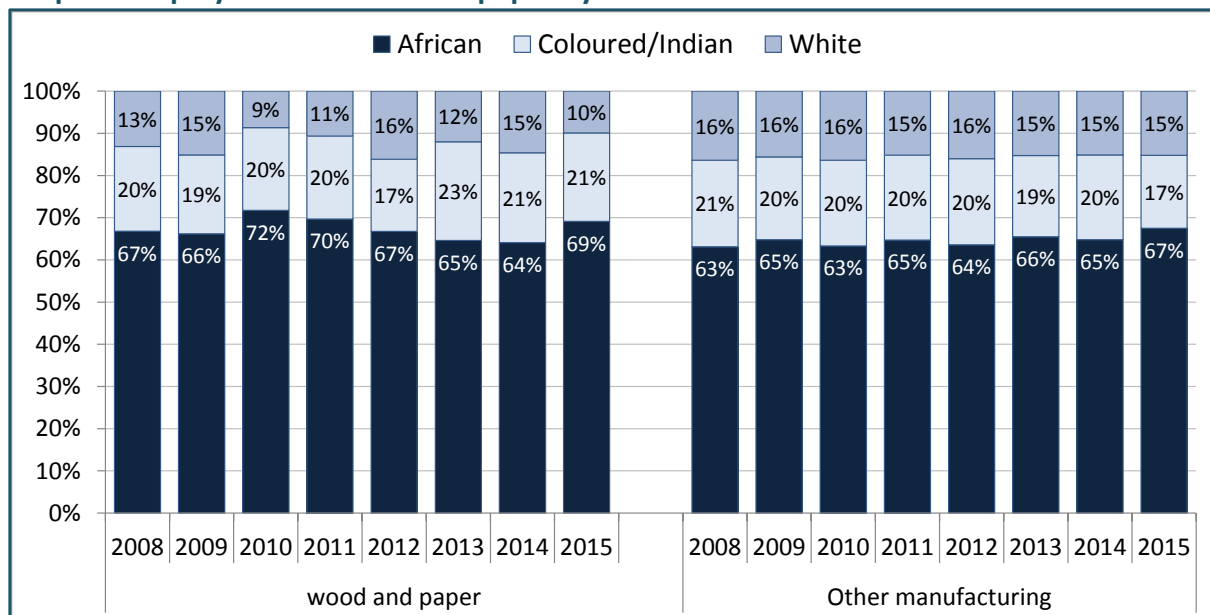
**Graph 5. Employment by education level in wood and paper compared to other manufacturing**



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and education. Electronic databases. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) Nesstar facility in September 2017.

In 2015, the racial composition of workers in wood and paper was virtually the same as in the rest of manufacturing.

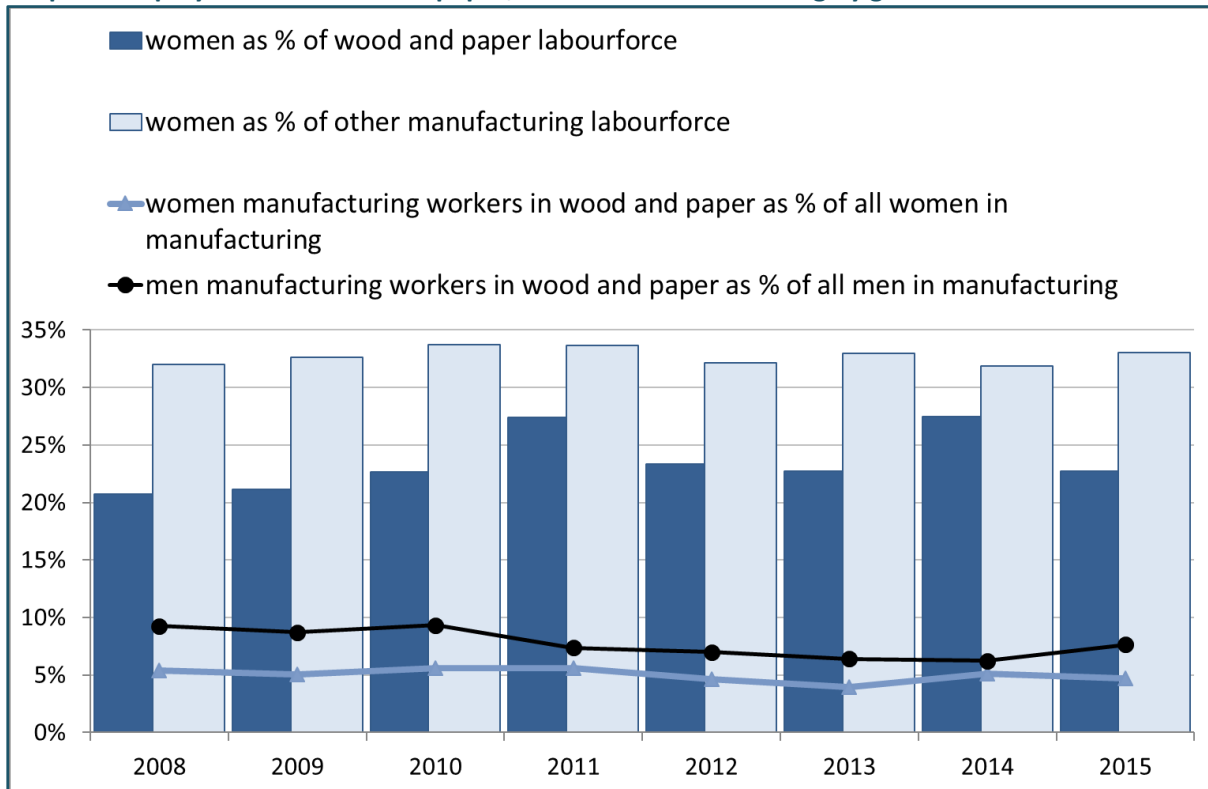
**Graph 6. Employment in wood and paper by race**



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) Nesstar facility in September 2017.

Women made up around 24% of the labourforce in wood and paper, more than 10% less than for the rest of manufacturing. Wood and paper employed 8% of all men in manufacturing, but only 5% of women.

**Graph 7. Employment in wood and paper, and other manufacturing by gender**



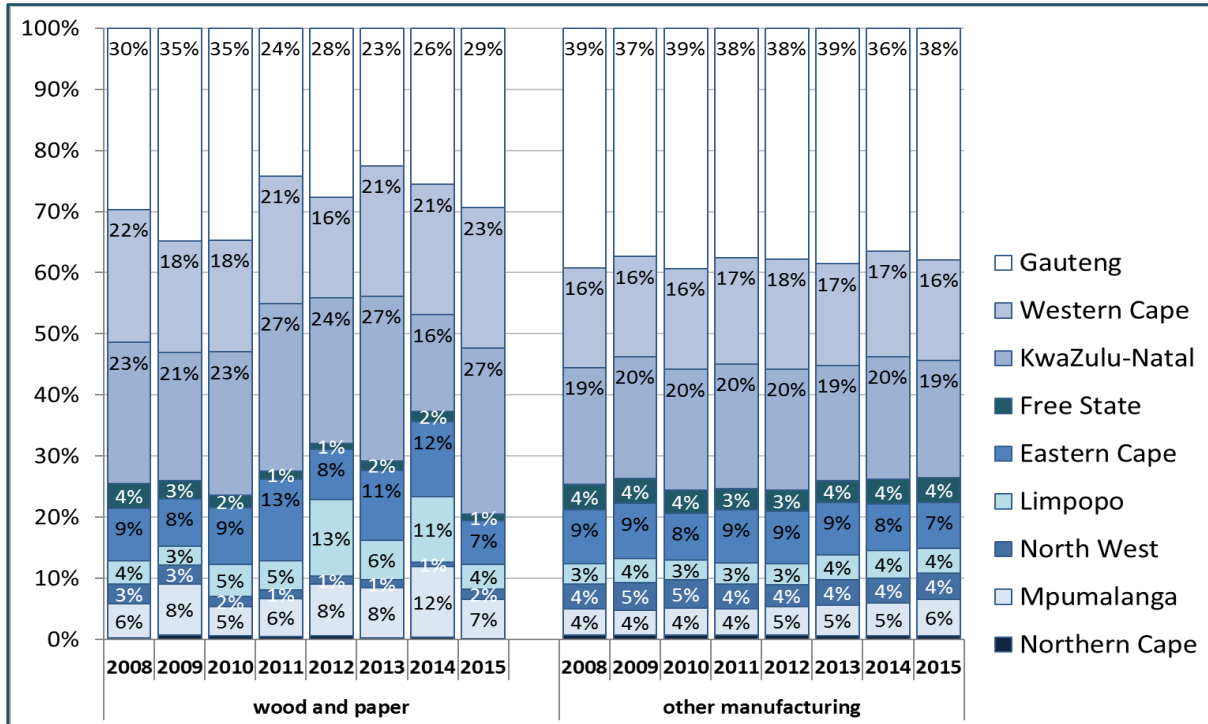
Source: Statistics South Africa. *Labour Market Dynamics. Relevant years. Series on employment by industry and gender. Electronic databases. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) Nesstar facility in September 2017.*

### 3 Location

Statistics South Africa provides information on employment by province. As Graph 8 shows, Gauteng, KwaZulu Natal and Western Cape accounted for three quarters of employees in wood and paper manufacturing, showing a similar trend in the rest of manufacturing. In contrast, of the 60 000 workers in forestry and logging, KwaZulu Natal had around 40% of employees and Limpopo and Mpumalanga a further 35%.

The location of manufacturing can also be understood in terms of how it was embedded in apartheid geography. To this day, only a tenth of manufacturing employment is in the former so-called “homeland” regions, where around a quarter of the population lives. In the case of wood and paper, around 13% of total employment was in the former “homeland” regions from 2008 to 2015.

**Graph 8. Employment by province in wood and paper compared to other manufacturing**

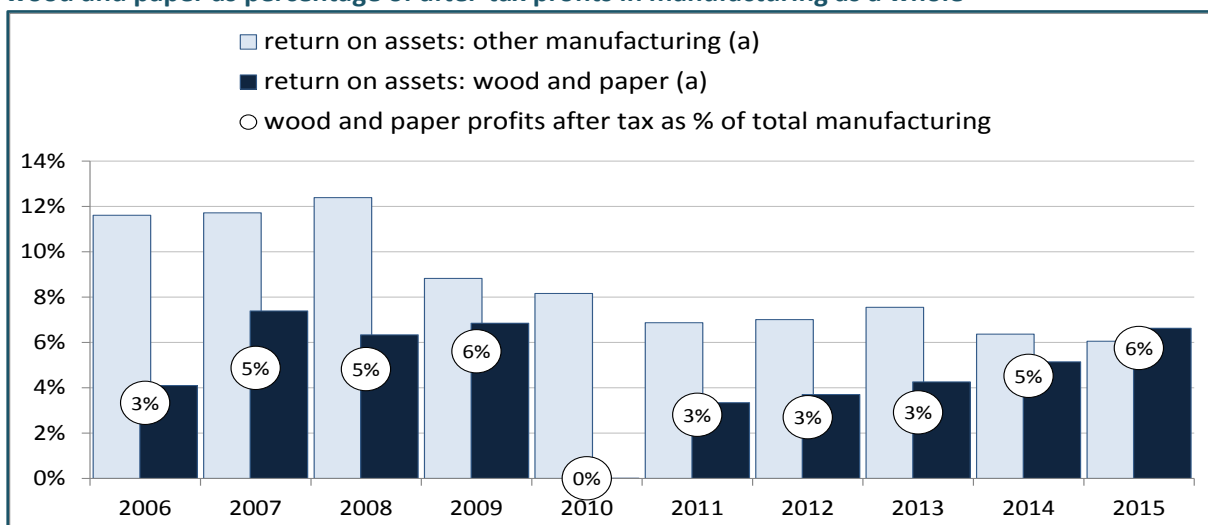


Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and province. Electronic databases. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) Nesstar facility in September 2017.

#### 4 Profitability and assets

From 2008, the after-tax return on assets in wood and paper averaged 5% a year. That was a lower rate than in the rest of manufacturing, where returns averaged 8% a year. Wood and paper provided around 4% of all manufacturing profits.

**Graph 9. Return on assets (a) in wood and paper and other manufacturing, and after-tax profits in wood and paper as percentage of after-tax profits in manufacturing as a whole**

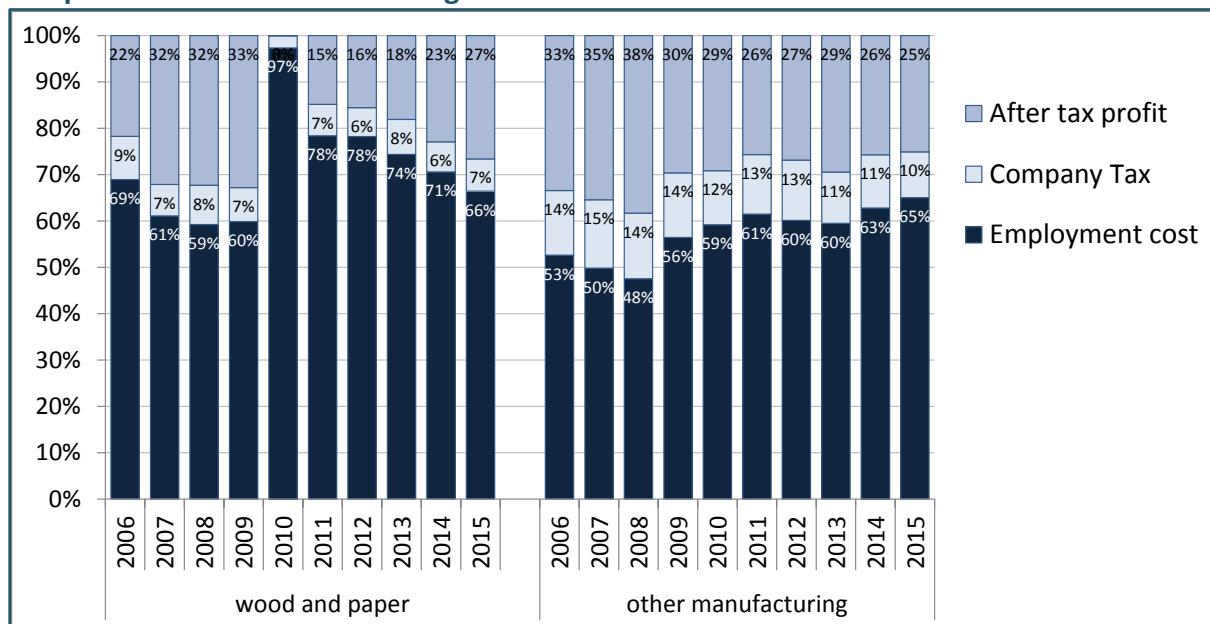


Note: (a) Profits before taxes and dividends less company tax as percentage of total assets. Source: Calculated from Statistics South Africa. Annual Financial Statistics. Disaggregated Industry Statistics for relevant year. Excel spreadsheet. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) in September 2017.

Based on Statistics South Africa estimates, in constant 2016 Rand, employment costs in wood and paper declined 43% from 2006 to 2015, falling from R27 billion to R16 billion.<sup>1</sup> In the same period, after-tax profits in the industry dropped by a quarter, from R8,6 billion to R6,2 billion, and company taxes fell by over half, to R1,6 billion. In other manufacturing, in contrast, employment costs climbed 16% in this period, after-tax profits fell by 30% and taxes by 34%.

The relatively rapid fall in profits and company taxes in wood and paper meant that, although the wage bill also fell in real terms, employment costs were relatively high as a share of income for much of the 2006 to 2015 period. After-tax profits and company tax absorbed a small share of income produced in the industry compared to the rest of the manufacturing.

**Graph 10. Share of remuneration, profits and taxation in income from wood and paper compared to other manufacturing**



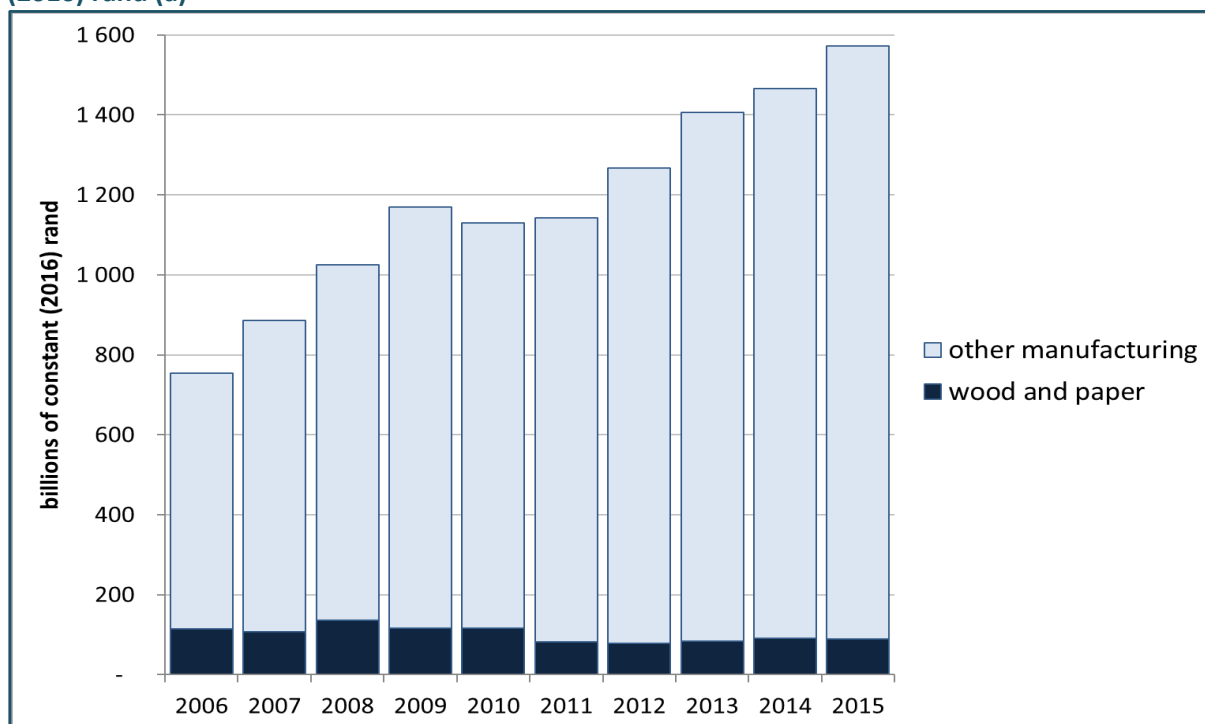
Source: Calculated from Statistics South Africa. Disaggregated Industry Statistics for relevant year. Excel spreadsheet. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) in September 2017.

In constant rand, the value of wood and paper assets dropped by 35% from 2008 to 2015, while the assets in the rest of manufacturing rose 67%. As a result, the share of wood and paper total manufacturing assets fell from 13% to 6% over this period.

<sup>1</sup> Deflated with CPI.



**Graph 11. Value of total assets in wood and paper, and other manufacturing in billions of constant (2016) rand (a)**

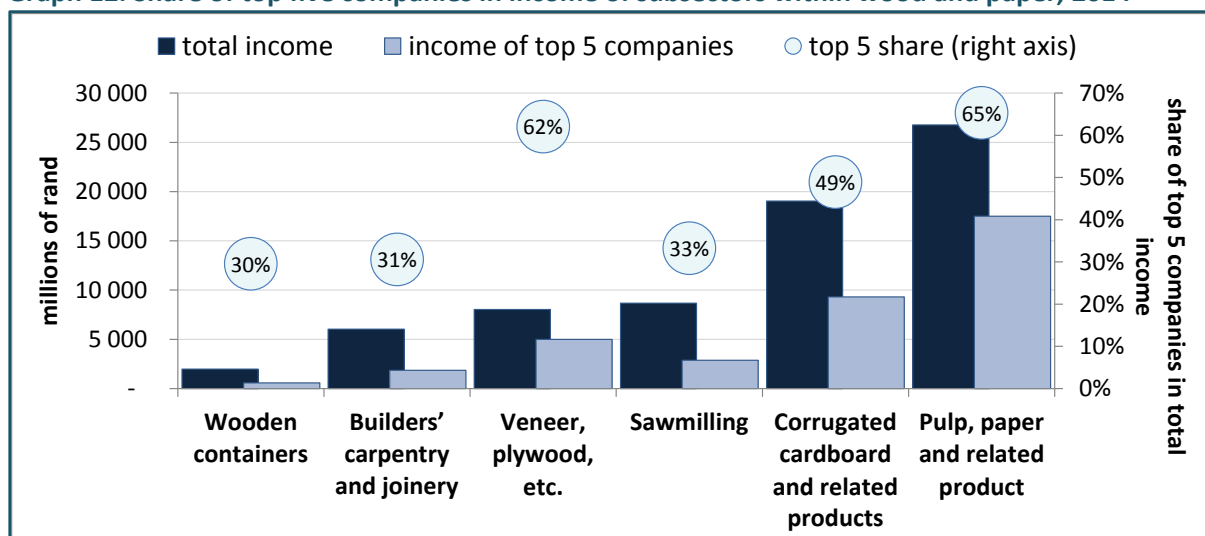


Notes: (a) Deflated with CPI. Source: Calculated from Statistics South Africa. Disaggregated Industry Statistics for relevant year. Excel spreadsheet. Downloaded from [www.statssa.gov.za](http://www.statssa.gov.za) in September 2017.

## 5 Market structure and major companies

According to Stats SA's Manufacturing Financial Statistics, in 2014 the share in total income of the largest five companies in most of the subsectors in wood and wood products was around 30%, lower than in most other manufacturing industries. In paper and pulp, however, the top five companies received 65% of total income, and they got 495 in cardboard production.

**Graph 12. Share of top five companies in income of subsectors within wood and paper, 2014**



Source: Statistics South Africa. 2016. Manufacturing Industry: Financial, 2014. Pretoria. Table 9, p 33, ff.

In 2015, the Labour Market Dynamics Survey found around 6 500 formal enterprises (that is, employers and self-employed) in formal wood and paper, compared to a total of around 60 000 in manufacturing as a whole, and 671 000 for the entire economy. The figure was too small to permit a meaningful analysis of trends.

Significant companies in wood and paper are described in Table 1. The industry had two dominant, vertically integrated paper producing companies, largely for export (Sappi and Mondi); a host of smaller logging and sawmilling enterprises; a few large packaging companies; a number of small tissue factories supplying the major retail chains; and a number of relatively small specialised companies producing among others moulded egg cartons, wooden window and door frames, and laminated board.

**Table 1. Market structure for major wood and paper products**

Company	Employees	Assets R billions)	Nature of business
<b>Vertically integrated paper</b>			
Sappi	12 000 (4 644 in SA)	66,9 (global)	Operations and manufacturing facilities on three continents which provide dissolving wood pulp, paper-pulp and paper-based products and solutions to a customer base across more than 150 countries. It has four paper mills and six sales offices in North America, seven mills and 18 sales offices in Europe, and six mills and six sales offices in Southern Africa.
Mondi	24 700 (1 600 in SA)	104,2 (global)	The company has approximately 154 000 hectares of owned and leased land under afforestation in South Africa. It operates a paper mill in Durban and a pulp and linerboard mill in Richards Bay.
<b>Forestry and wood</b>			
Hans Merensky Holdings	5 647		Merensky Timber has 69 000 hectares across South Africa and supplies pine and eucalyptus timber mainly to South African markets, with four sawmills and lumber distribution centres in Johannesburg, Cape Town and Durban. It also owns Westfalia Fruit.
York Timber Holdings	5 238	5,1	Owns 93 988 hectares of land (including 60 470 hectares of commercial pine and eucalyptus forest), operates four sawmills, a plywood plant in Sabie, as well as warehousing and distribution facilities.
York Timbers	2 700		York Timbers operates as a forestry and has four sawmills involved in the milling of timber. York Timbers Plywood business unit also manufactures plywood.
Komatiland Forests	2200		Logging and sawmilling among others for Sappi, Mondi, Hans Merensky and York Timber; owns one sawmill.

<b>Company</b>	<b>Employees</b>	<b>Assets R billions)</b>	<b>Nature of business</b>
SAFCOL	1 736	5,1	Forestry in Mpumalanga, Limpopo and KwaZulu-Natal across 18 commercial plantations covering a total area of 187 320 hectares and owns two sawmills.
Swartland Investments	1 600		Manufacturer and wholesaler of wooden window frames, doors, door frames and mouldings, supplying to builders' merchants.
Bracken Timbers	1 400		Forestry and agriculture, growing black wattle, pine, soya beans, sugar cane and maize, with sawmilling and charcoal manufacture.
MTO Forestry	1 400		Production of lumber, mining timber, transmission poles, wood chips, building fencing poles, and pulp from eucalyptus and pine plantations. Has two sawmills and almost 120 000 hectares of land under management.
Singisi Forest Products	1 400		Singisi Forest Products administers 58 000 hectare plantation of pine and has three sawmills.
Peak Timbers	1 200		Supplies timber for building and furniture.
U C L Company	1 100		The company has a sawmill and a wattle bark extract mill. It operates a timber growing estate of around 6 500 hectares. It supplies treated and untreated sawn board to the building, furniture and industrial markets.
C J Rance	1 009		Collection, cutting, milling and moulding of timber from Amathole Forestry Company at two sawmills.
NCT Forestry Co-Operative	562		Involved in the marketing and international supply of logs used for pulp production. Manages its own 17 150 hectares and members have 300 000 hectares. Has four wood-chipping facilities.
ShinCel	562		ShinCel operates a wood chipping plant for export to Japan.
PG Bison Southern Cape	550		Produces panels and board products.
Bedrock Mining Support	447		Treats and manufactures wood including support beams for the mining industry. Has three sawmills.
Weather-board	320		Manufactures wooden pallets.

<b>Company</b>	<b>Employees</b>	<b>Assets R billions)</b>	<b>Nature of business</b>
Springbok Box	300		Manufactures timber cable drums, decks and bed bases
Johannesburg Timber and Box CC	260		Manufactures wooden pallets, boxes and crates.
Afripallet CC	215		Manufactures and repairs pallets, crates and boxes.
KAP Industrial Holdings	18 995 (total group)	27,0	KAP Industrial Holdings is a holding company with interests in specialised contractual logistics, passenger transport, timber, chemical, automotive components and bedding. Subsidiaries include PG Bison (poles and boards); Hosaf (virgin polyethylene terephthalate (PET) resin for the beverage industry); and Woodchem (formaldehyde gas for the timber panel industry). Steinhoff owns 42% of KAP.
CHEP South Africa	1 177		Primarily involved in logistics but also manufactures wooden pallets.
<b>Paper products</b>			
Bidvest Paperplus	7 690		Manufactures, imports and distributes printed products, multi-channel communications, labelling solutions, packaging products, stationery and office product brands; undertakes general printing, print packaging and finishing.
Mpact	4 998	8,7	Mpact Paper recycles recovered paper; manufactures and sells corrugated packaging products; manufactures cartonboard and containerboard products. Has 42 manufacturing facilities in South Africa, Namibia, Mozambique and Zimbabwe, including 16 for recycling, three paper mills, 14 converting plants and eight plastics plants.
Nampak	6 678 (4 185 in SA)	24,1	Subsidiaries manufacture and distribute packaging products made from metal, paper, plastics and glass, and also manufactures and markets tissue products. Has a total of 51 production facilities but most are in plastics and metal.
Novus Holdings	2003	3,6	Has a tissue plant as well as 10 specialised printing plants in South Africa.

<b>Company</b>	<b>Employees</b>	<b>Assets R billions)</b>	<b>Nature of business</b>
Reclamation Group	1 480		Recycles paper as well as plastics and metals.
Transpaco	1 254	0,9	Subsidiaries are involved in the manufacture, distribution and recycling of plastic, paper and board products. Operates 11 manufacturing facilities (seven for plastic and four for paper and board)
New Era Packaging Bops	1 000		Owens a plant to manufacture board used to produce corrugated boxes.
Main Street 1310	801		Manufactures Twinsaver tissue and paper products at five manufacturing plants, mostly for sale through major retail chains.
Corruseal Group	800		Owens seven manufacturing subsidiaries involved in converting paper into corrugated packaging.
Kimberly-Clark of South Africa	672		Manufactures, sells and distributes disposable tissue and fibre-based products for consumer, commercial and industrial users, medical and pharmaceutical sectors. Has two plants.
A P L Cartons	445		Manufactures and markets corrugated board cartons, tray pads and other corrugated-related products to the shareholders and the fruit industry.
Keypak	400		Manufactures solid board, litho laminate and corrugated carton boards.
Huhtamaki South Africa	350		Manufactures plastic and paper containers and packaging for the fast food, catering, retail, fruit and egg industries. Has two manufacturing plants and two warehouses.
Treated Timber Products	350		Manufacture and supply of treated timber poles at six treatment plants for infrastructure, construction, trellising and fencing.
Green Tissue	270		Manufactures tissue products for retail chains. Has one plant.
Mogwele Waste	260		Manufactures packaging materials including corrugated boxes and corrugated sheets. Has one plant.
Universal Paper and Plastics (Bophuthat swana)	250		Manufactures tissues for retail chains. Has one plant.

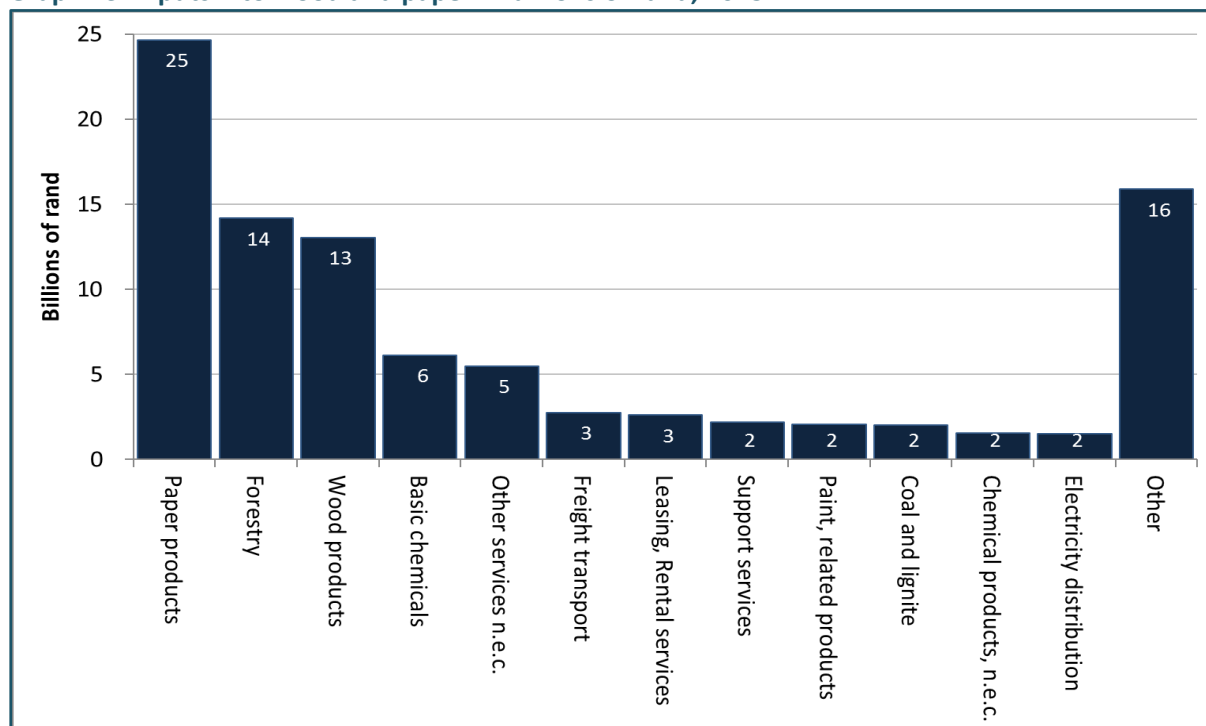
Company	Employees	Assets R (billions)	Nature of business
Dynamic Fibre Moulding	240		Manufactures moulded fibre packaging such as natural fibre egg packages. Has one plant.
Tetra Pak South Africa	240		Imports, manufactures and distributes liquid packaging containers supplying customers who utilise large volumes, such as liquid food producing companies. Has one plant.
Paarl Tissue	225		Manufactures tissue products. Has one plant.
Sylko	185		Produces gift wrapping, and other specialised kitchen and school products. Has one plant.
Lothlorien	90		Manufactures kraft paper for the corrugation industry. Has one plant. Also recycles.

Source: Who Owns Whom. Report generator. Electronic database. Large companies in wood and paper. Downloaded from www.woweb.co.za in November 2017.

## 6 Major inputs

The main inputs into wood and paper are and paper products, forestry, and basic chemicals. In constant rand, the value of inputs remained almost unchanged from 2012 to 2015. Wood and paper products, forestry, and basic chemicals constituted about 55% of all inputs.

**Graph 13. Inputs into wood and paper in billions of rand, 2015**



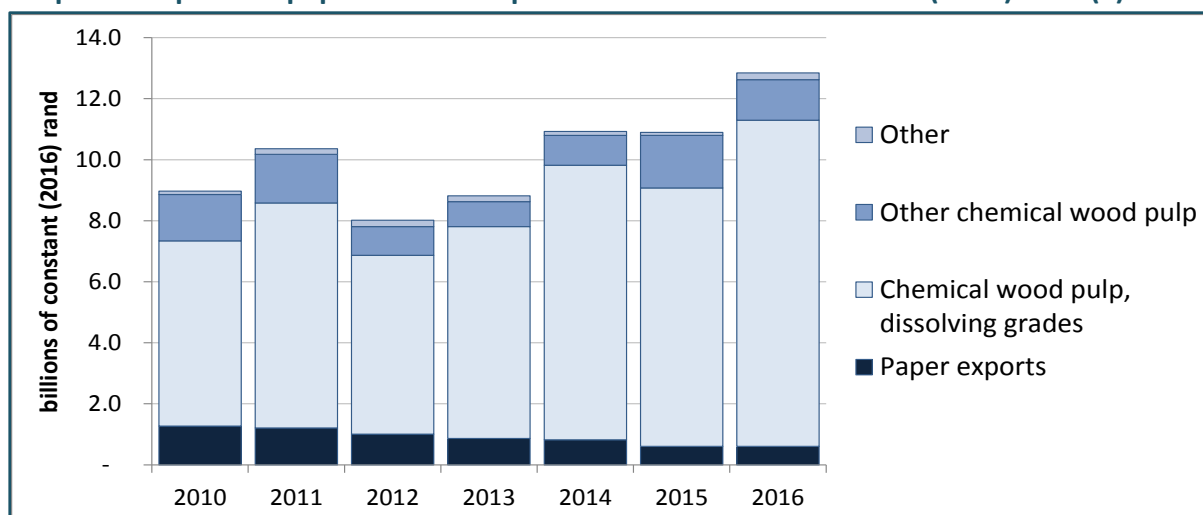
Source: Calculated from Statistics South Africa. Statistics South Africa, GDP data in excel format, Fourth Quarter 2017. Use Tables. Downloaded from www.statssa.gov.za in October 2017.

## 7 Trade

South Africa ran a surplus of close to R10 billion in its trade in wood products, but a deficit of almost the same magnitude in paper.

As Graph 14 shows, South African exports of wood products, almost entirely wood pulp, exceeded R12 billion in 2016, having risen by a third in constant terms from 2010. In 2016, they equalled just over 1% of total exports. Exports of paper came to only around 5% the value of wood exports. They had fallen by half in the same period, dropping to R600 million in 2016.

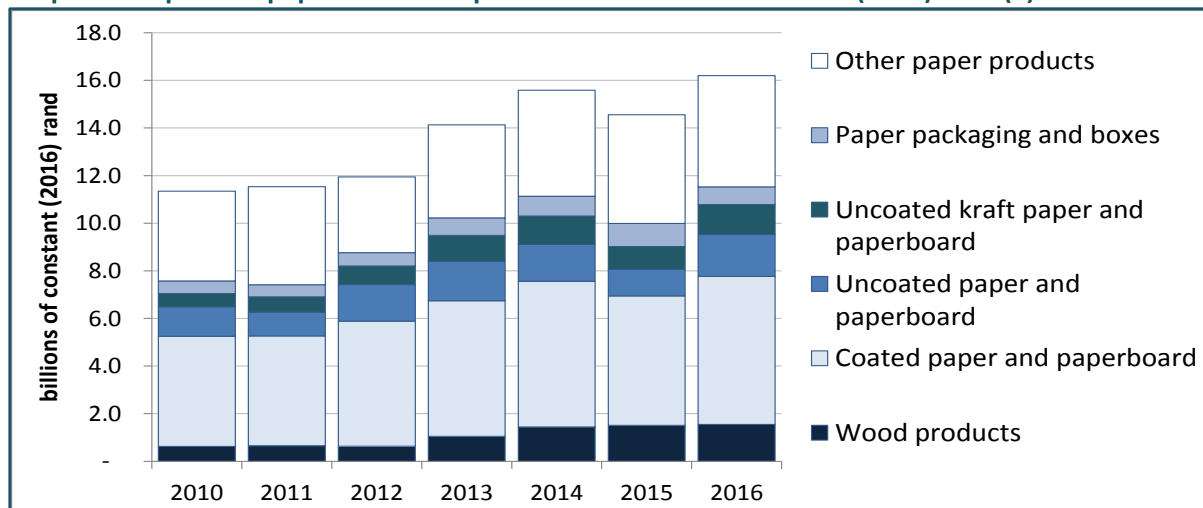
**Graph 14. Exports of paper and wood products in billions of constant (2016) rand (a)**



Note: Deflated with CPI. Source: Calculated from ICT, TradeMap. Electronic database. Series on exports of HS 47 and 48 by product. Downloaded from [www.trademap.org](http://www.trademap.org) in November 2017.

Imports showed the opposite trend, with far higher imports of paper than of wood products, and a total equal to around 1,5% of total imports. The value chain as a whole in South Africa had a deficit. Moreover, it exported relatively unbeneficiated products and imported more value-added ones.

**Graph 15. Imports of paper and wood products in billions of constant (2016) rand (a)**

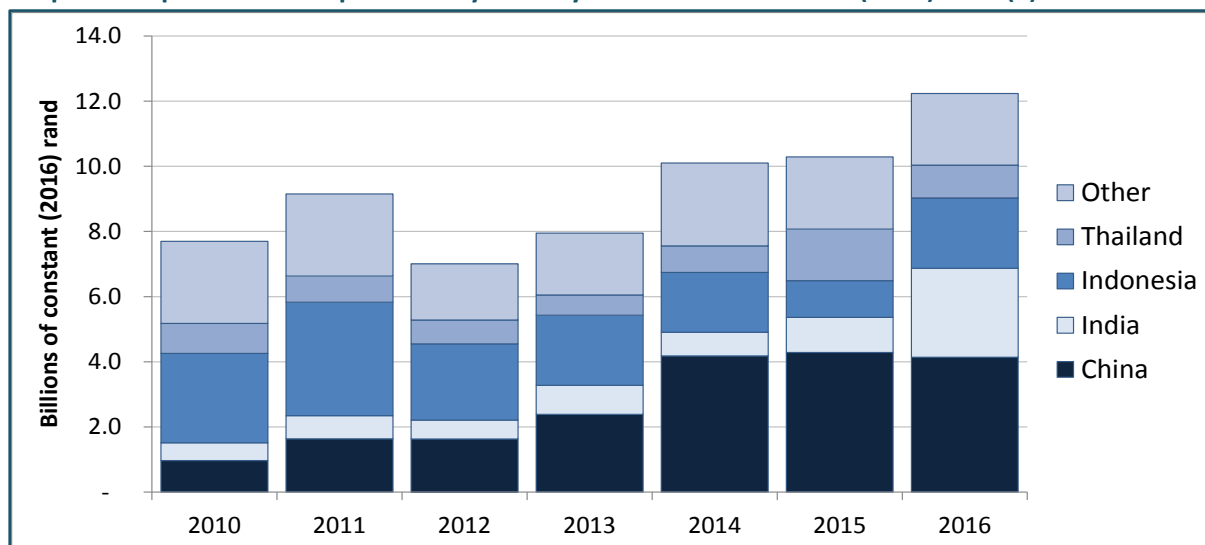


Note: Deflated with CPI. Source: Calculated from ICT, TradeMap. Electronic database. Series on imports of HS 47 and 48 by product. Downloaded from [www.trademap.org](http://www.trademap.org) in November 2017.

South African exports of wood went primarily to Asia. The increase from 2014 to 2016 resulted almost exclusively from higher exports to India and China. In contrast, other African countries

bought almost three quarters of South African paper exports, with most of the rest going to Europe. The decline in paper exports was spread fairly equally across regions.

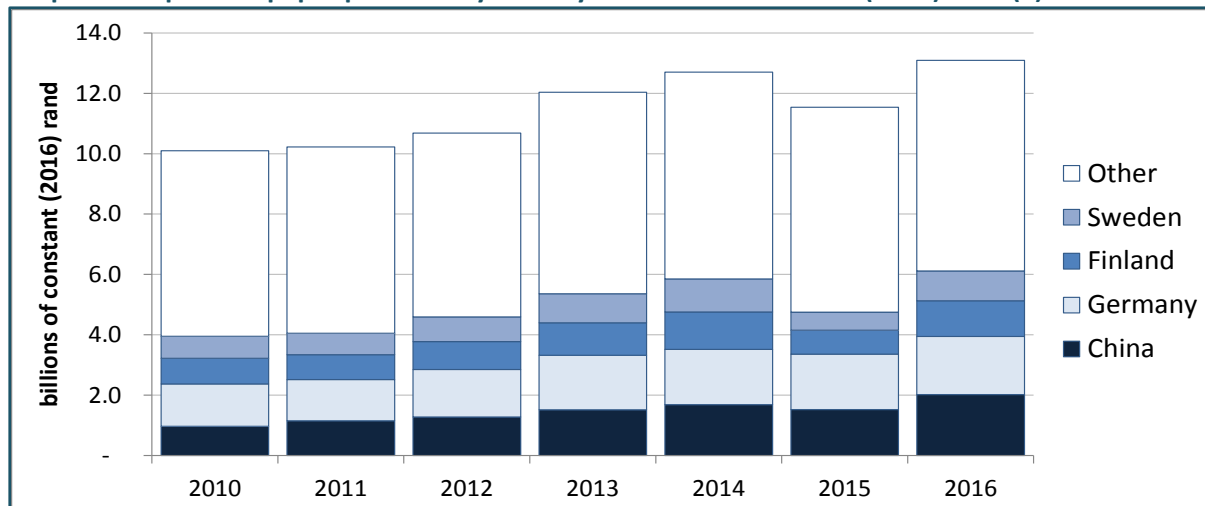
**Graph 16. Exports of wood products by country in billions of constant (2016) rand (a)**



Note: Deflated with CPI. Source: Calculated from ICT, TradeMap. Electronic database. Series on exports of HS 48 by country. Downloaded from [www.trademap.org](http://www.trademap.org) in November 2017.

Paper import sources were more diversified, with Europe and China as major sources and virtually none from other African countries. Imports from China accounted for around a third of the growth in foreign paper purchases, although it still provides only a seventh of the total. Wood imports also come from diverse overseas sources, including New Zealand, the US, Brazil, Finland and Sweden.

**Graph 17. Imports of paper products by country in billions of constant (2016) rand (a)**



Note: Deflated with CPI. Source: Calculated from ICT, TradeMap. Electronic database. Series on imports of HS 47 by country. Downloaded from [www.trademap.org](http://www.trademap.org) in November 2017.

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