

# MNC Trend Report 2018

The Future of Work

**LRS** Labour  
Research  
Service



Trade Union Competence Centre  
for Sub-Saharan Africa

## Contents

|                                                      |    |
|------------------------------------------------------|----|
| Acronyms .....                                       | 3  |
| List of Companies .....                              | 4  |
| Introduction .....                                   | 7  |
| The Top Performers .....                             | 8  |
| Top 10 Employers .....                               | 8  |
| Top 10 Revenue .....                                 | 8  |
| Top 10 Profit (before Tax) .....                     | 9  |
| Top 10 CEOs .....                                    | 9  |
| Revenue & Profit within MNCs .....                   | 11 |
| Mining Sector: Revenue & Profit .....                | 12 |
| Revenue .....                                        | 12 |
| Profit before Tax .....                              | 13 |
| Construction Sector: Revenue & Profit .....          | 15 |
| Revenue .....                                        | 15 |
| Profit before Tax .....                              | 16 |
| Food & Beverage Sector: Revenue & Profit .....       | 18 |
| Revenue .....                                        | 18 |
| Profit before Tax .....                              | 19 |
| Industrial Sector: Revenue & Profit .....            | 21 |
| Revenue .....                                        | 21 |
| Profit .....                                         | 22 |
| Banking & Financial Services: Revenue & Profit ..... | 24 |
| Revenue .....                                        | 24 |
| Profit .....                                         | 25 |
| Paper & Packaging Sector: Revenue & Profit .....     | 27 |
| Revenue .....                                        | 27 |
| Profit before Tax .....                              | 28 |
| Transport Sector: Revenue & Profit .....             | 29 |
| Revenue .....                                        | 29 |
| Profit .....                                         | 30 |
| Diversified Holdings Sector: Revenue & Profit .....  | 32 |
| Revenue .....                                        | 32 |

|                                                                  |    |
|------------------------------------------------------------------|----|
| Profit .....                                                     | 34 |
| Health.....                                                      | 36 |
| Revenue .....                                                    | 36 |
| Profit .....                                                     | 37 |
| Hospitality .....                                                | 39 |
| Revenue .....                                                    | 39 |
| Profit .....                                                     | 40 |
| Retail Sector: Revenue & Profit .....                            | 41 |
| Revenue .....                                                    | 41 |
| Profit before Tax .....                                          | 42 |
| Technology and Telecommunications Sector: Revenue & Profit ..... | 44 |
| Revenue .....                                                    | 44 |
| Profit .....                                                     | 45 |
| Media Sector & Education, Bus, Training & Employment .....       | 46 |
| Revenue .....                                                    | 46 |
| Profit .....                                                     | 46 |
| Directors' Remuneration .....                                    | 48 |
| KING IV Continued .....                                          | 48 |
| Mining Sector .....                                              | 49 |
| Construction.....                                                | 52 |
| Food and Beverage .....                                          | 54 |
| Industrial .....                                                 | 56 |
| Paper & Packaging .....                                          | 58 |
| Transport.....                                                   | 60 |
| Banking & financial Services .....                               | 62 |
| Diversified Holdings .....                                       | 64 |
| Education, Bus, Training & Employment .....                      | 66 |
| Health.....                                                      | 68 |
| Hospitality .....                                                | 70 |
| Media .....                                                      | 72 |
| Retail .....                                                     | 74 |
| Technology & Telecommunications.....                             | 76 |
| Summary of Findings.....                                         | 78 |

|                                                    |    |
|----------------------------------------------------|----|
| The Wage Gap.....                                  | 81 |
| The Future of Work.....                            | 82 |
| Introduction .....                                 | 82 |
| Technological Changes in the Retail Sector .....   | 83 |
| What Is The Reality In The Developing World? ..... | 84 |
| Flexibility in the Retail Sector.....              | 86 |
| A Response: The Broader Framework .....            | 88 |
| A Response: Bargaining at the Workplace.....       | 89 |
| Conclusion.....                                    | 90 |
| Bibliography .....                                 | 92 |

## Acronyms

|                 |                                                                               |
|-----------------|-------------------------------------------------------------------------------|
| <b>CEO</b>      | Chief Executive Officer                                                       |
| <b>FES-TUCC</b> | Friedrich Ebert Stiftung Trade Union Competence Centre for Sub-Saharan Africa |
| <b>GUF</b>      | Global Union Federation                                                       |
| <b>HR</b>       | Human Recourses                                                               |
| <b>LRS</b>      | Labour Research Service                                                       |
| <b>LTI</b>      | Long-Term Incentives                                                          |
| <b>MNC</b>      | Multinational Corporation                                                     |
| <b>PBT</b>      | Profit before Tax                                                             |
| <b>STI</b>      | Short-Term Incentives                                                         |
| <b>AI</b>       | Artificial Intelligence                                                       |
| <b>HDI</b>      | Human Development Index                                                       |
| <b>IT</b>       | Information Technology                                                        |
| <b>LSM</b>      | Living Standards Measure                                                      |
| <b>OECD</b>     | Organisation for Economic Co-operation and Development                        |

# List of Companies

| Company                             | Financial Year End | Sector                               |
|-------------------------------------|--------------------|--------------------------------------|
| Barclays Africa Group               | 12/31/2017         | Banking and Financial Services       |
| Discovery                           | 6/30/2017          |                                      |
| FirstRand Bank                      | 6/30/2017          |                                      |
| Investec                            | 3/31/2017          |                                      |
| Liberty Holdings                    | 12/31/2017         |                                      |
| Nedbank                             | 12/31/2017         |                                      |
| RMB Holdings                        | 6/30/2017          |                                      |
| Sanlam                              | 12/31/2017         |                                      |
| Standard Bank Group                 | 12/31/2017         |                                      |
| Aveng                               | 6/30/2017          | Construction                         |
| Basil Read                          | 12/31/2017         |                                      |
| Group Five                          | 6/30/2017          |                                      |
| Murray & Roberts                    | 6/30/2017          |                                      |
| Pretoria Portland Cement            | 3/30/2017          |                                      |
| WBHO                                | 6/30/2017          |                                      |
| Barloworld Limited                  | 9/30/2017          | Diversified Holdings                 |
| Bidvest                             | 6/30/2017          |                                      |
| Hosken Consolidated Investments     | 3/31/2017          |                                      |
| Remgro                              | 6/30/2017          |                                      |
| Searadel Investments                | 6/30/2017          |                                      |
| Adcorp Holdings limited             | 2/28/2017          | Education, Bus Training & Employment |
| Anglo-Vaal Industries               | 6/30/2017          | Food and Beverage                    |
| Astral Foods                        | 9/30/2017          |                                      |
| Clover Industries                   | 6/30/2017          |                                      |
| Crookes Brothers                    | 3/31/2017          |                                      |
| Distell                             | 6/30/2017          |                                      |
| Pioneer Foods                       | 9/30/2017          |                                      |
| RCL Foods                           | 6/30/2017          |                                      |
| Tiger Brands                        | 9/30/2017          |                                      |
| Tongaat Hulett                      | 3/31/2017          |                                      |
| Adcock Ingram                       | 6/30/2017          |                                      |
| AfroCentric Investments Corporation | 6/30/2017          | Health                               |
| Aspen Holdings                      | 6/30/2017          |                                      |
| Life Healthcare Group               | 9/30/2017          |                                      |
| Mediclinic                          | 3/31/2017          |                                      |
| Network Healthcare Holdings         | 9/30/2017          |                                      |
| City Lodge Hotels                   | 6/30/2017          | Hospitality                          |
| Sun International                   | 12/31/2017         |                                      |
| Tsogo Sun Holdings                  | 3/31/2017          |                                      |

|                          |            |                                          |
|--------------------------|------------|------------------------------------------|
| AECI                     | 12/31/2017 | <b>Industrial</b>                        |
| African Oxygen           | 12/31/2017 |                                          |
| Altron                   | 2/28/2017  |                                          |
| ArcelorMittal SA         | 12/31/2017 |                                          |
| Denel                    | 3/31/2017  |                                          |
| Eskom Holdings Limited   | 3/31/2017  |                                          |
| Invicta Holdings         | 3/31/2017  |                                          |
| Reunert                  | 9/30/2017  |                                          |
| Sasol                    | 6/30/2017  |                                          |
| Caxton CTP               | 6/30/2017  |                                          |
| Naspers                  | 3/31/2017  | <b>Media</b>                             |
| African Rainbow Minerals | 6/30/2017  | <b>Mining</b>                            |
| Anglo American Platinum  | 12/31/2017 |                                          |
| Anglo American plc       | 12/31/2017 |                                          |
| AngloGold Ashanti        | 12/31/2017 |                                          |
| Assore limited           | 5/30/2017  |                                          |
| BHP Billiton             | 6/30/2017  |                                          |
| Exxaro                   | 12/31/2017 |                                          |
| Glencore Xstrata         | 12/31/2017 |                                          |
| Gold Fields              | 12/31/2017 |                                          |
| Harmony Gold             | 6/30/2017  |                                          |
| Impala Platinum          | 6/30/2017  |                                          |
| Kumba Iron Ore Limited   | 12/31/2017 |                                          |
| Lonmin plc               | 9/30/2017  |                                          |
| Petra Diamonds           | 6/30/2017  |                                          |
| Sibanye Gold             | 12/31/2017 |                                          |
| Trans Hex                | 3/31/2017  |                                          |
| Mondi Group              | 12/31/2017 |                                          |
| Nampak                   | 9/30/2017  |                                          |
| Sappi                    | 9/30/2017  | <b>Paper and Packaging</b>               |
| Cashbuild                | 6/30/2017  | <b>Retail</b>                            |
| Foschini                 | 3/31/2017  |                                          |
| Massmart                 | 12/31/2017 |                                          |
| Mr Price                 | 3/31/2017  |                                          |
| Pick n Pay Stores Ltd    | 2/26/2017  |                                          |
| Shoprite                 | 7/2/2017   |                                          |
| Spar                     | 9/30/2017  |                                          |
| Truworths                | 7/2/2017   |                                          |
| Woolworths               | 6/25/2017  |                                          |
| MTN Group                |            | <b>Technology and Telecommunications</b> |
| Telkom                   | 3/31/2017  |                                          |
| Vodacom Group Limited    | 3/31/2017  |                                          |

|                       |            |           |
|-----------------------|------------|-----------|
| ACSA                  | 3/31/2017  | Transport |
| Cargo Carriers        | 2/28/2018  |           |
| Grindrod              | 12/31/2017 |           |
| Imperial Holdings     | 6/30/2017  |           |
| South African Airways | 3/31/2017  |           |
| Super Group           | 6/30/2017  |           |
| Transnet              | 3/31/2017  |           |

# Introduction

The Labour Research Service (LRS) Multinational Corporation (MNC) Database was created in partnership with the Friedrich-Ebert-Stiftung Trade Union Competence Centre for Sub-Saharan Africa (FES-TUCC) and is now entering its eighth year of existence. The aims of this database and concomitant report have remained the same:

*The aim of the South African MNC Database and relevant MNC Trend Report is to broaden support for Global Union Federations (GUFs), national federations and unions to build alliances for regional and international campaigns; to support efforts of workers to transform Governance and Industrial Relations policies and practices of South African MNCs in which they organise through the provision of relevant information and by building capacity within the unions to research and monitor these companies.*

The 8<sup>th</sup> MNC Trend Report provides an overview of the company information contained in the SA MNC Database. The database includes company finances, operations, remuneration and geographical spread of 91 South African MNCs that operate across Africa. The MNC Database has been populated with this information since 2008, which provides a unique dataset from which to analyse financial trends. This report is focused on two main areas of study. Firstly, the financial trends of the 91 sampled companies are analysed within 14 economic sectors, including revenue growth as well as revenue compared to competitors. In addition to this, each company's profit before tax (PBT) is analysed compared to its sector and competitors. Within this context, the remuneration strategies of the top level of directors is analysed. Finally, we take a quick look at the total remuneration packages of directors compared to the lowest employees in the company.

The last section of this report, titled 'the Future of Work', takes a closer look at the developments around the automation of jobs. This section aims to put this within the broader context of the developing world, as opposed to the developed world. It is questioned whether the reality in the developed world is a reality in Africa, and also makes some suggestions as to how unions and workers can use technology to further their own agendas.

**The LRS MNC Database can be found online – the information found in this report is available immediately for free download from the LRS and FES-TUCC websites at <http://www.lrs.org.za/mnc> and <http://www.lrs.org.za/mnc/?set=info&fes>**



# The Top Performers

## Top 10 Employers

When listing the top employers by number of employees, Glencore Xstrata comes out on top. However, Glencore operates across the world, whereas Shoprite operates exclusively in Africa. This makes Shoprite the largest employer in Africa when compared to the other MNCs on our list. Many companies don't specify between outsource and in house employees. So, while being the top employer in Africa, it's unclear whether Shoprite makes use of labour brokers, and to what extent.

| Company                 | Sector                               | Total Employees | Employees (In house) | Employees (Outsourced) |
|-------------------------|--------------------------------------|-----------------|----------------------|------------------------|
| Glencore Xstrata        | Mining                               | 154832          |                      |                        |
| Shoprite                | Retail                               | 143802          |                      |                        |
| Bidvest                 | Diversified Holdings                 | 117705          |                      |                        |
| Adcorp Holdings limited | Education, Bus Training & Employment | 84056           | 3758                 | 80298                  |
| Anglo American plc      | Mining                               | 69000           |                      |                        |
| Sibanye Gold            | Mining                               | 66472           | 53139                | 13278                  |
| BHP Billiton            | Mining                               | 60644           | 26146                | 34498                  |
| Transnet                | Transport                            | 58828           | 53661                | 5167                   |
| Pick n Pay Stores Ltd   | Retail                               | 54400           |                      |                        |
| Standard Bank Group     | Banking and Financial Services       | 54047           | 48322                | 5725                   |

## Top 10 Revenue

The top 10 companies by revenue are dominated by mining and industrial, the top three being mining companies, followed by Eskom Holdings and Sasol, both in the Industrial sector. Shoprite remains a big player in sixth position, affirming its place as a retail giant on the continent.

| Company Name           | Sector                            | 2017 Revenue (ZAR) |
|------------------------|-----------------------------------|--------------------|
| Glencore Xstrata       | Mining                            | 2.78E+12           |
| BHP Billiton           | Mining                            | 4.79E+11           |
| Anglo American plc     | Mining                            | 3.75E+11           |
| Eskom Holdings Limited | Industrial                        | 1.77E+11           |
| Sasol                  | Industrial                        | 1.72E+11           |
| Shoprite               | Retail                            | 1.41E+11           |
| MTN Group              | Technology and Telecommunications | 1.33E+11           |
| Standard Bank Group    | Banking and Financial Services    | 1.28E+11           |

|                          |                                |          |
|--------------------------|--------------------------------|----------|
| <b>Imperial Holdings</b> | Transport                      | 1.2E+11  |
| <b>Sanlam</b>            | Banking and Financial Services | 1.14E+11 |

## Top 10 Profit (before Tax)

The Mining and Banking and Financial services sectors are making large amounts of profit, with Naspers (in the Media sector) coming in fourth with a profit of over ZAR 41 billion.

| CompName                      | Sector                            | Profit before Tax ZAR |
|-------------------------------|-----------------------------------|-----------------------|
| <b>BHP Billiton</b>           | Mining                            | 1.46913E+11           |
| <b>Glencore Xstrata</b>       | Mining                            | 93527027027           |
| <b>Anglo American plc</b>     | Mining                            | 78642857143           |
| <b>Naspers</b>                | Media                             | 41243243243           |
| <b>Standard Bank Group</b>    | Banking and Financial Services    | 41194000000           |
| <b>FirstRand Bank</b>         | Banking and Financial Services    | 33157000000           |
| <b>Sasol</b>                  | Industrial                        | 30008000000           |
| <b>Kumba Iron Ore Limited</b> | Mining                            | 21688000000           |
| <b>Barclays Africa Group</b>  | Banking and Financial Services    | 20879000000           |
| <b>Vodacom Group Limited</b>  | Technology and Telecommunications | 19228000000           |

## Top 10 CEOs

The top paid CEOs by total remuneration is led by Naspers CEO Bob van Dijk, whose total remuneration package was increased significantly because of a very large LTI payment. Cutifani of Anglo American PLC and Ralphs of Bidvest received large LTIs of ZAR 46 million and ZAR 89 million respectively. Neither Basson of Shoprite nor Munro of Liberty Holdings were paid an LTI, but both made it to the top ten with very large salaries. This is explored in more depth later in the report.

| Company Name              | Industry                       | CEO       | Salary ZAR | Cash bonus ZAR | Benefits ZAR | Other payments ZAR | LTI payment ZAR | Total    |
|---------------------------|--------------------------------|-----------|------------|----------------|--------------|--------------------|-----------------|----------|
| <b>Naspers</b>            | Media                          | Dijk      | 14918919   | 13148649       | 1689189      | 0                  | 1.41E+08        | 1.7E+08  |
| <b>Anglo American plc</b> | Mining                         | Cutifani  | 21433333   | 34616667       | 7000000      | 2133333            | 46383333        | 1.12E+08 |
| <b>Bidvest</b>            | Diversified Holdings           | Ralphs    | 9164000    | 7227000        | 825000       | 912000             | 89606000        | 1.08E+08 |
| <b>Mr Price</b>           | Retail                         | Bird      | 5859000    | 0              | 1448000      | 723000             | 85336000        | 93366000 |
| <b>BHP Billiton</b>       | Mining                         | Mackenzie | 21250000   | 24025000       | 6437500      | 0                  | 36937500        | 88650000 |
| <b>Liberty Holdings</b>   | Banking and Financial Services | Munro     | 3919000    | 4125000        | 475000       | 57107000           | 0               | 65626000 |
| <b>Sibanye Gold</b>       | Mining                         | Froneman  | 10265000   | 15158000       | 1103000      | 174000             | 25956000        | 52656000 |

|                       |                                         |        |              |          |         |          |          |          |
|-----------------------|-----------------------------------------|--------|--------------|----------|---------|----------|----------|----------|
| <b>Shoprite</b>       | Retail                                  | Basson | 4965600<br>0 | 0        | 64000   | 394000   | 0        | 50114000 |
| <b>FirstRand Bank</b> | Banking<br>and<br>Financial<br>Services | Burger | 9328000      | 13900000 | 4120000 | 2446000  | 20250000 | 50044000 |
| <b>Assore limited</b> | Mining                                  | Cory   | 5666000      | 13777000 | 1531000 | 28778000 | 0        | 49752000 |

## Revenue & Profit within MNCs

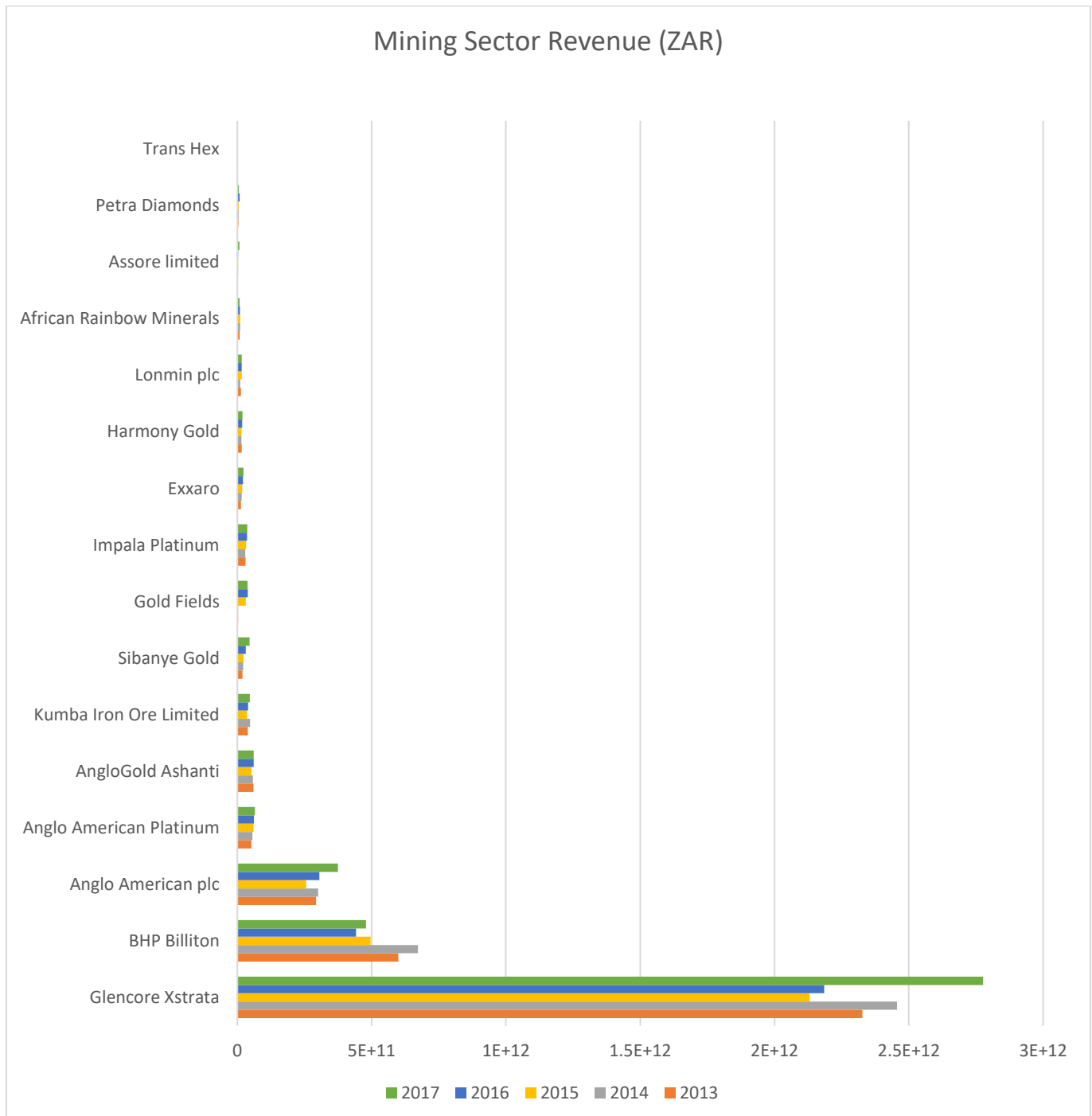
Companies often cite a decrease in revenue or profit as a reason why wage and labour demands can't be met. Companies can report revenue as a negative, for example, a 10% decrease in revenue. And while revenue may indeed have decreased, this could mean slower growth than the year before, as opposed to actual losses. In this way, numbers specifically related to growth can be misconstrued.

This section looks at the revenue and profit of the MNCs included in the list above. The objective is to show information that will enable unions to establish to what extent claims of lowered revenue and profit are factual and to monitor company performance. The section also gives unions an overview of the performance of companies in their sector, which in turn provides a bigger picture within which to assess company performance.

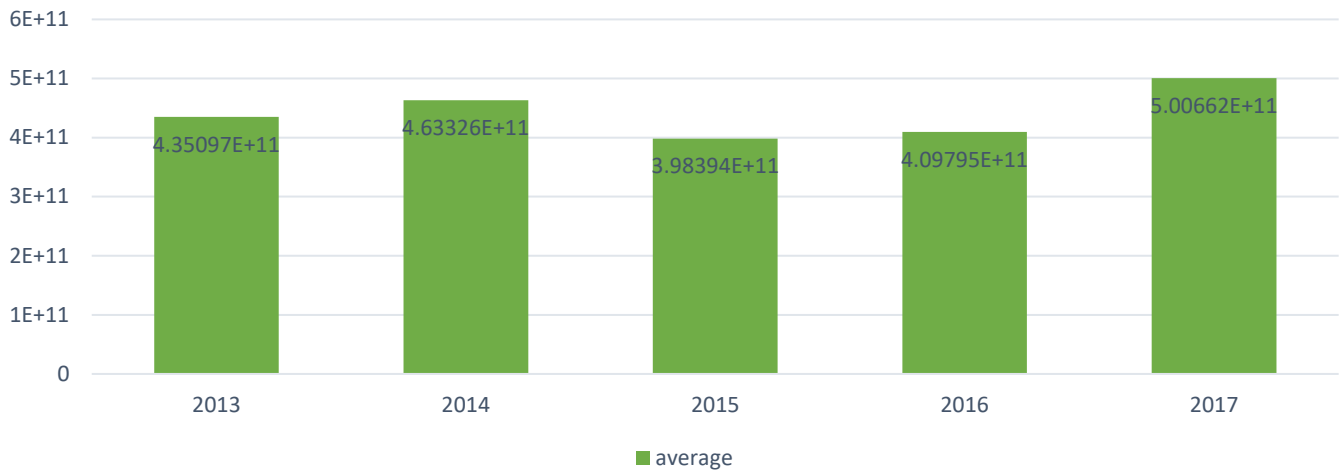
## Mining Sector: Revenue & Profit

### Revenue

The mining sector has shown a significant increase in revenue, at 22% from 2016 to 2017. Big players like Glencore Xstrata, BHP Billiton and Anglo American Platinum have had significant increases in revenue during this time. This is in contrast to the previous year when both Glencore and BHP Billiton showed limited or no growth. Gold Fields, African Rainbow Minerals, Petra Diamonds and Trans Hex decreased in revenue. Sibanye Gold saw the largest growth in revenue by almost 46%.



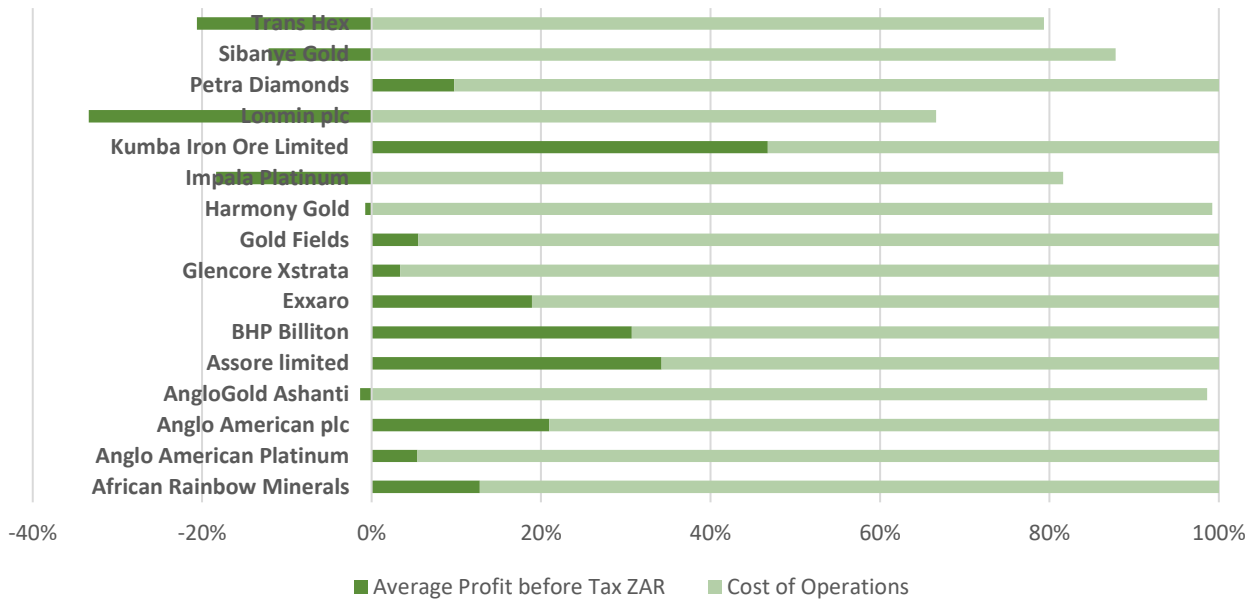
## Mining Sector Average Revenue (ZAR)

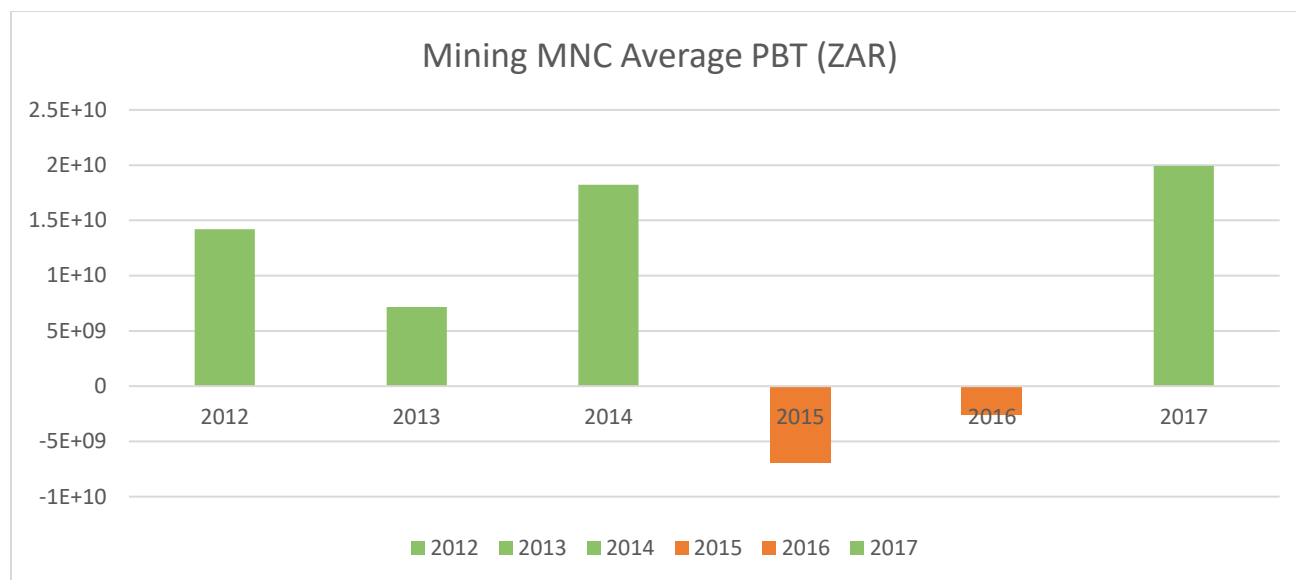


### Profit before Tax

As a percentage of revenue, Kumba Iron Ore limited has made significant PBT. While having a significant increase in revenue, Sibanye Gold is operating at a loss of ZAR 7 Billion. Lonmin plc operated at a loss of Over ZAR 16 Billion. On average the mining sector seems to have increased its PBT significantly from 2016 when on average these MNCs were operating at a loss.

## Mining Sector PBT

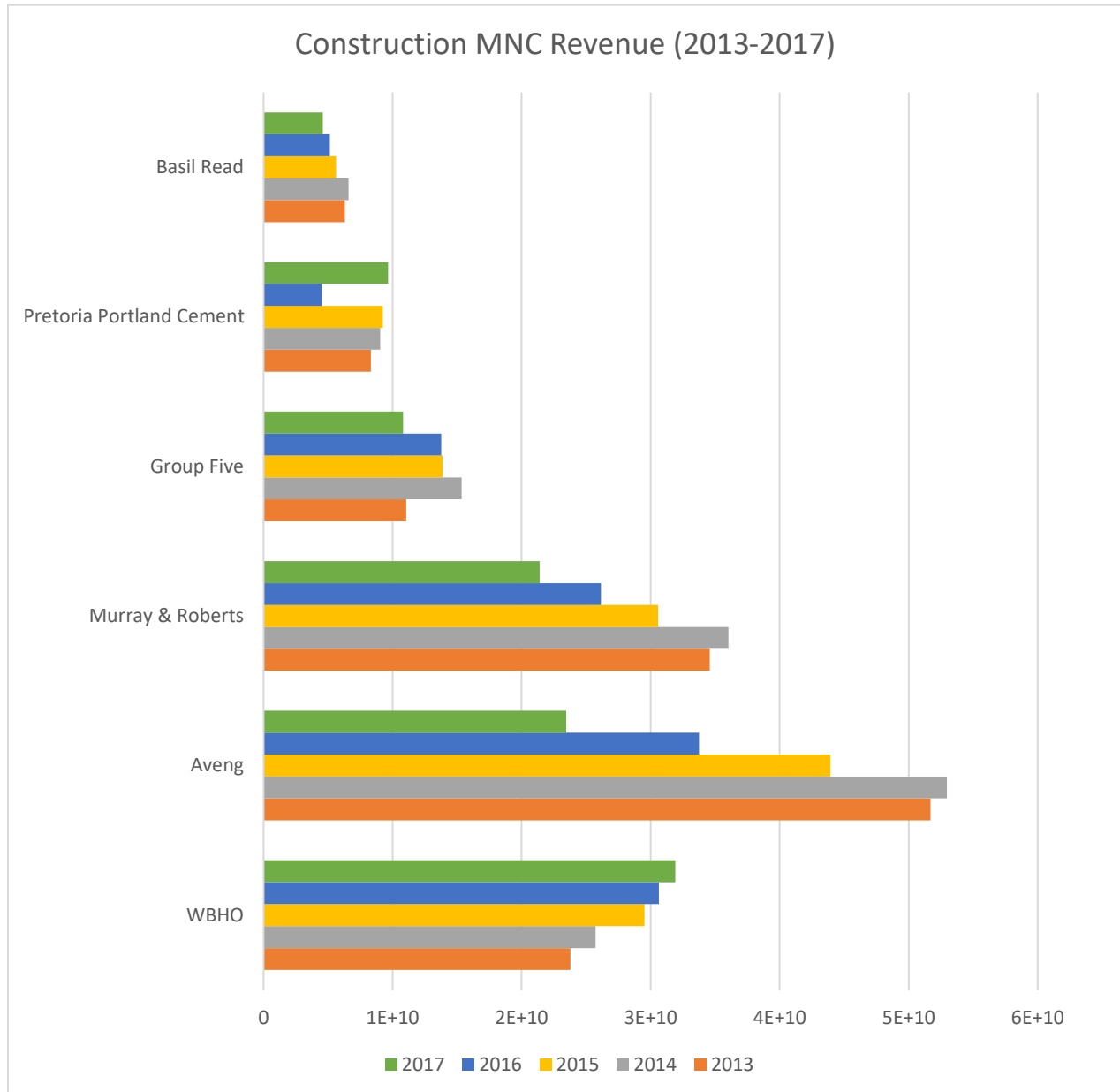




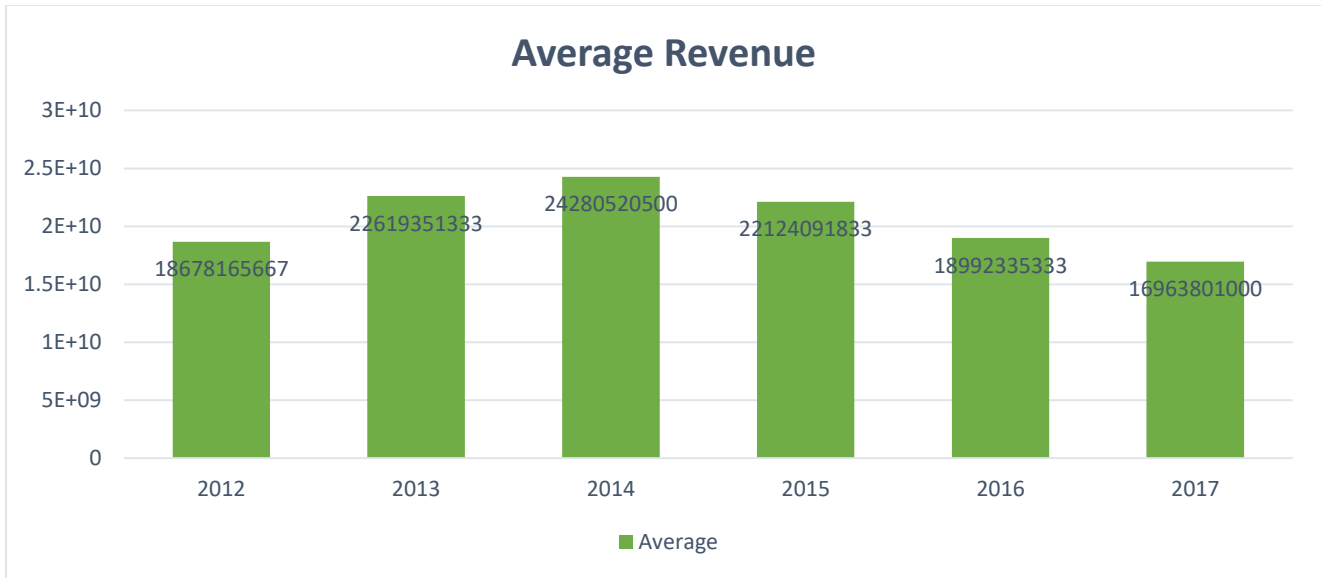
## Construction Sector: Revenue & Profit

### Revenue

Average revenue in the construction sector has been decreasing incrementally since 2014. In the period 2016 - 2017, revenue decreased by around 10.7% on average. All companies in this sector have seen a decrease in revenue, with the exception of Pretoria Portland Cement, which grew by a significant 114%, and WBHO which has been steadily growing since 2012 (2016 – 2017 growth: 4.10%).

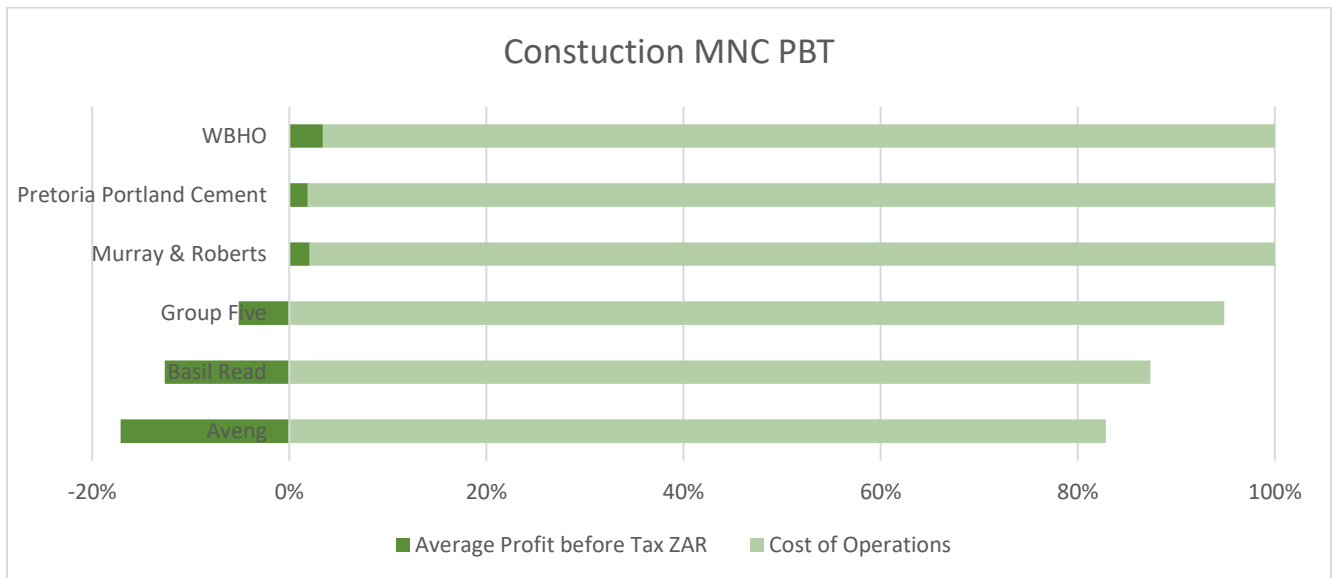


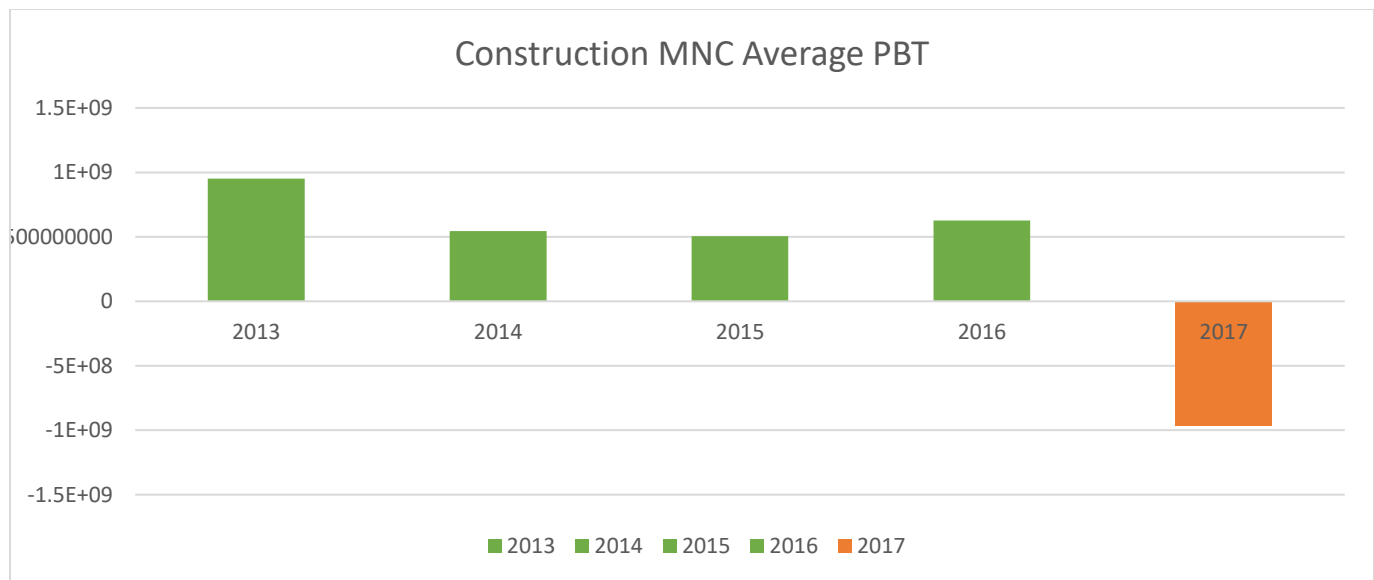




#### Profit before Tax

While PBT in the construction sector has seen a steady decrease since 2009, 2016 experienced a **24%** average increase. This increase in PBT can be explained by the growth in profit within WBHO, Murray & Roberts, Group Five and Aveng.

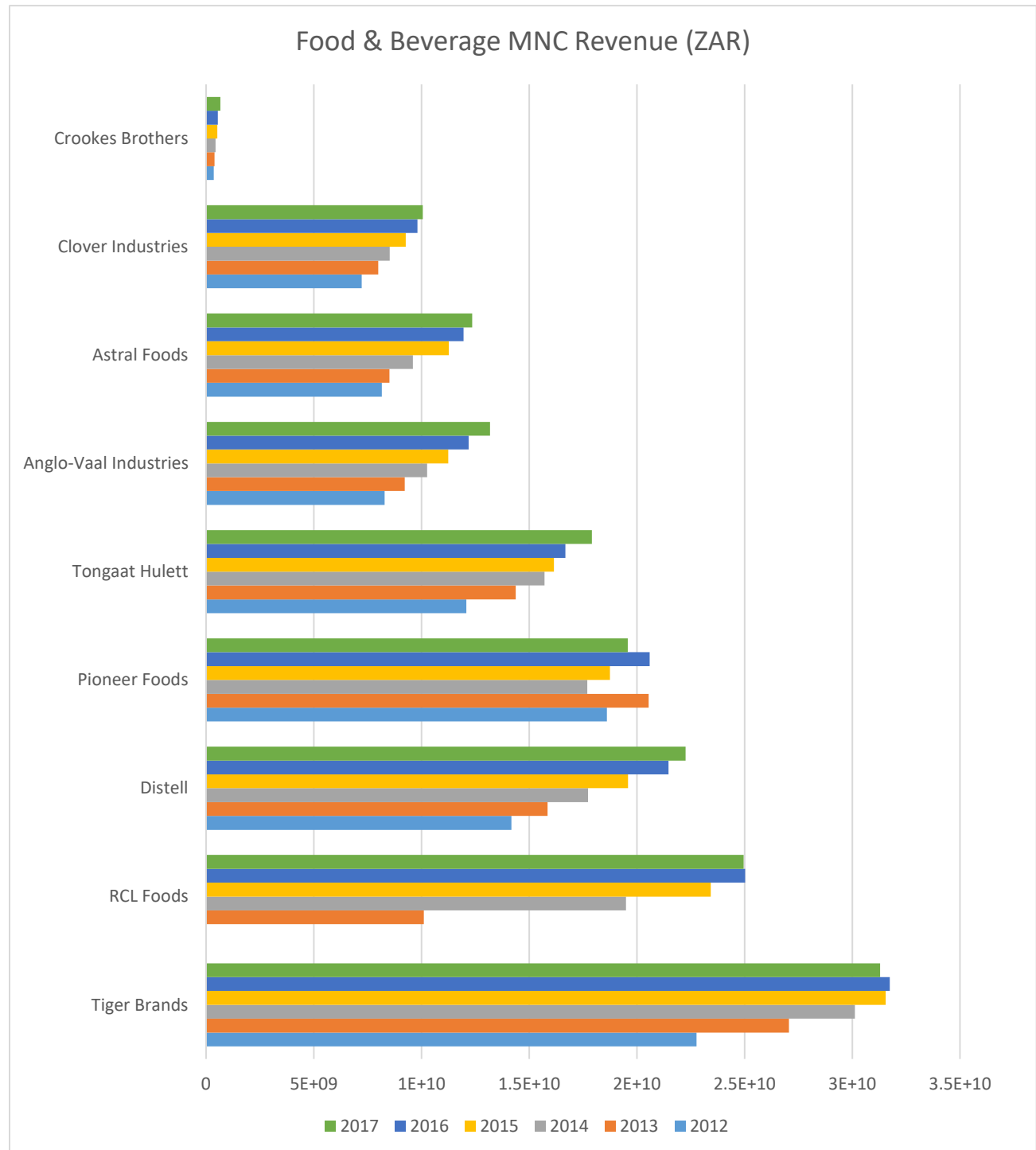


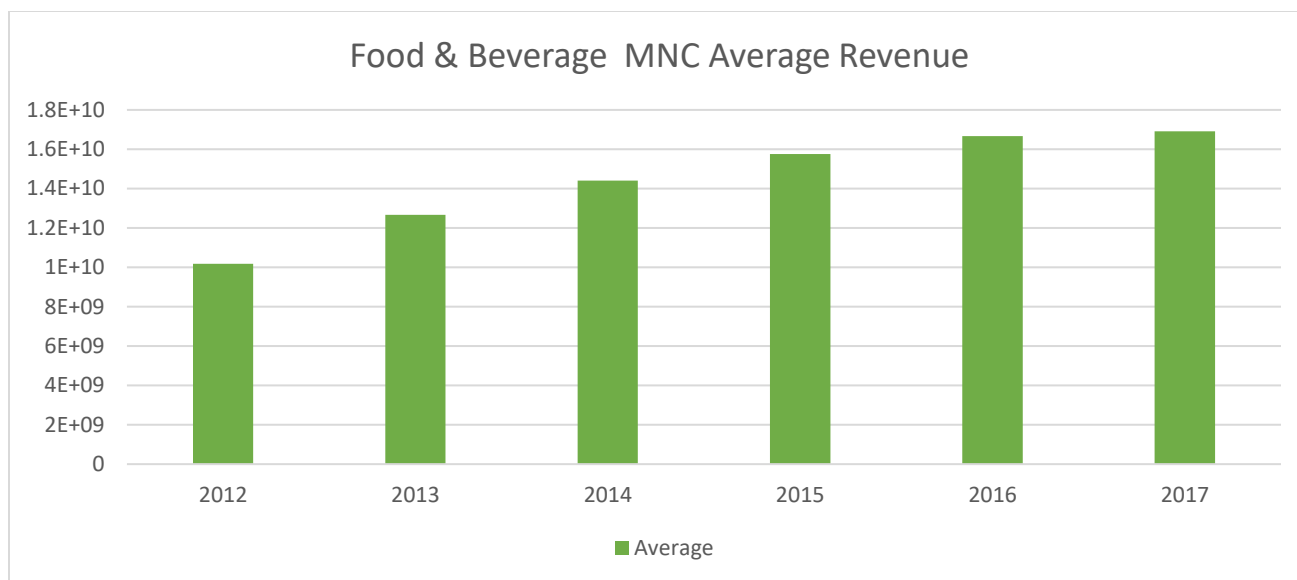


## Food & Beverage Sector: Revenue & Profit

### Revenue

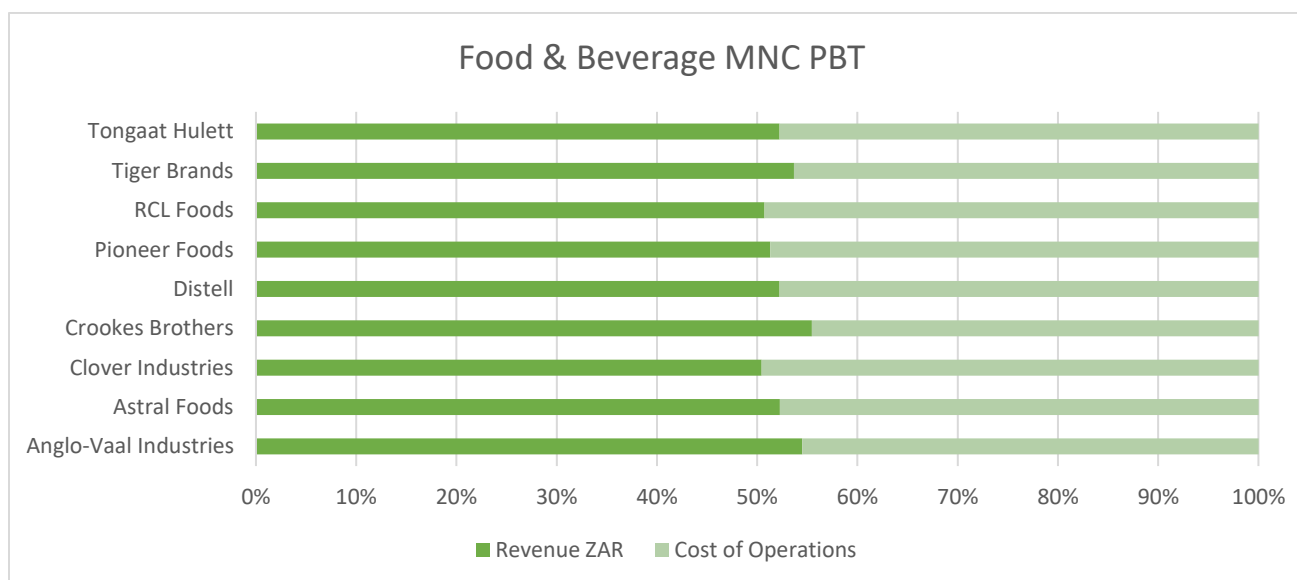
There has been a steady increase in average revenue in this sector over the last five years, with a 1.5% increase from 2016 to 2017. Crookes Brothers increased their revenue by over 22%, while Pioneer Foods, Tiger Brands and RCL Foods saw small decreases.

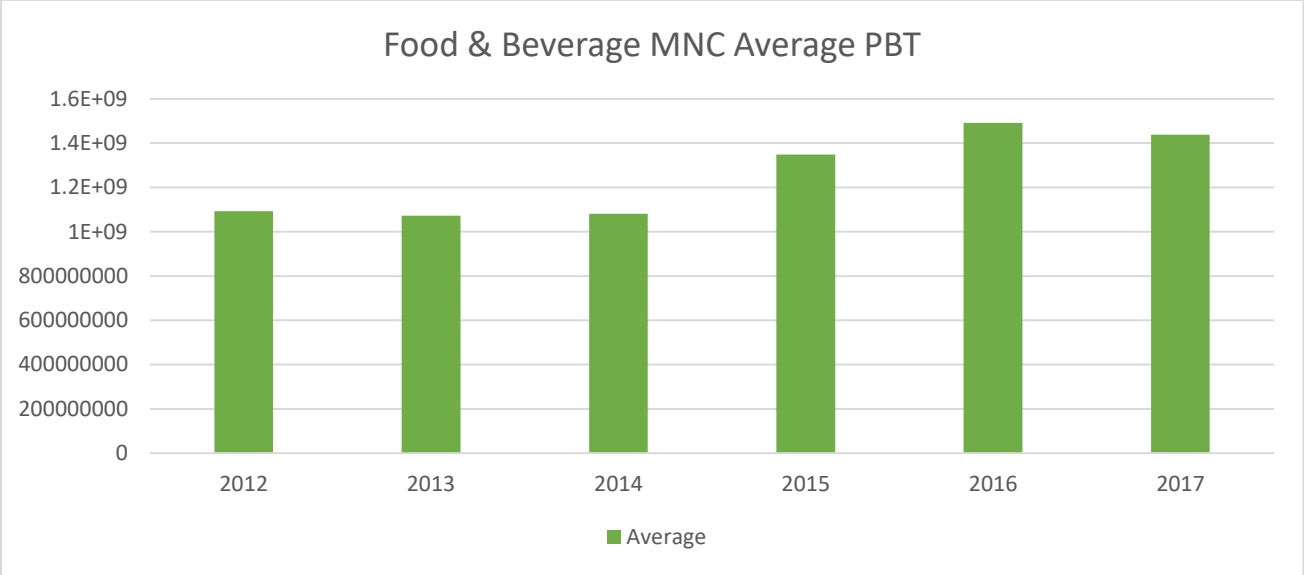




#### Profit before Tax

The PBT in the food and beverage sector shows a small decrease from 2016 (3.56%). Both Astral Foods and RCL Foods have increased their PBT significantly from 2016.

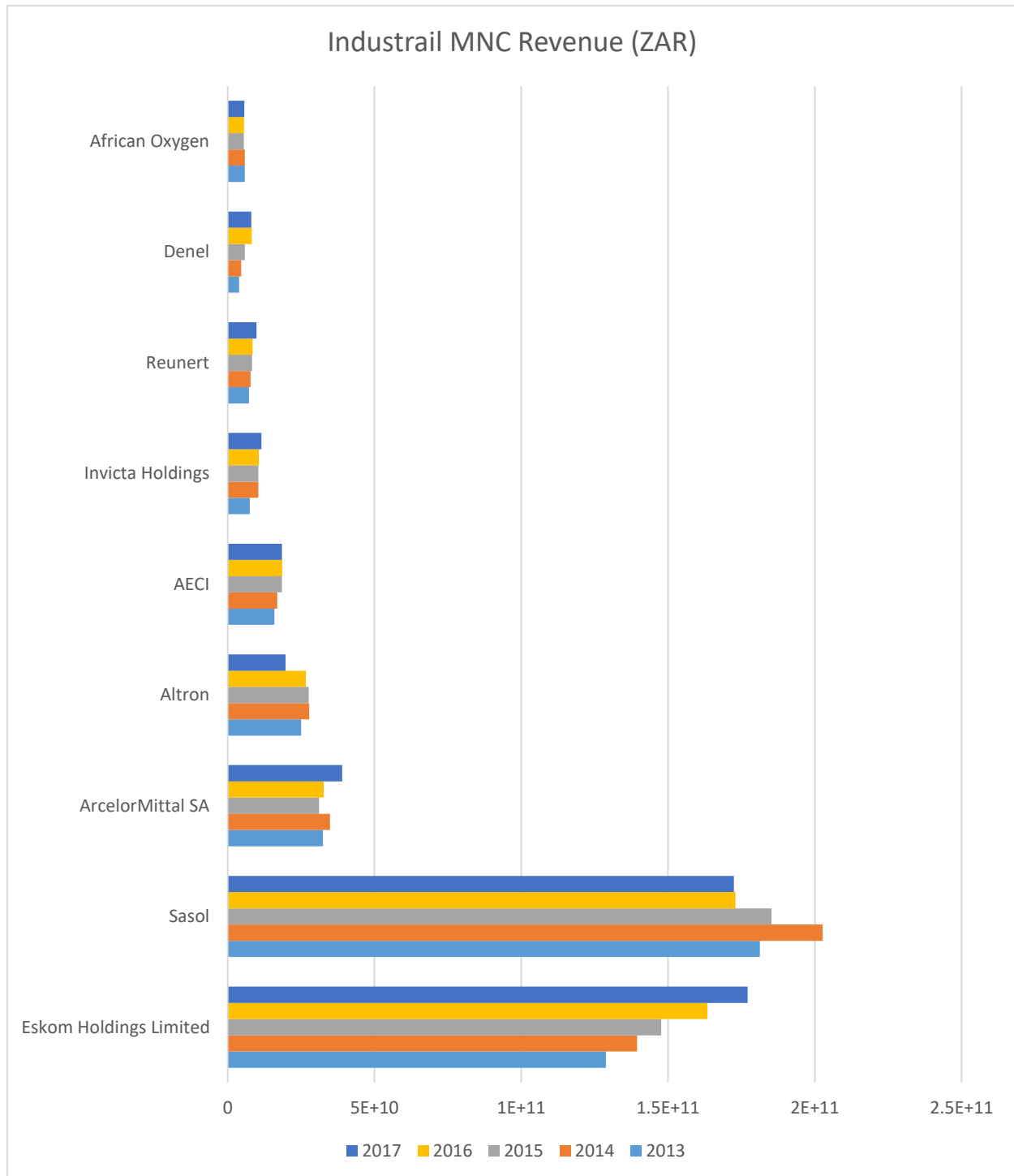


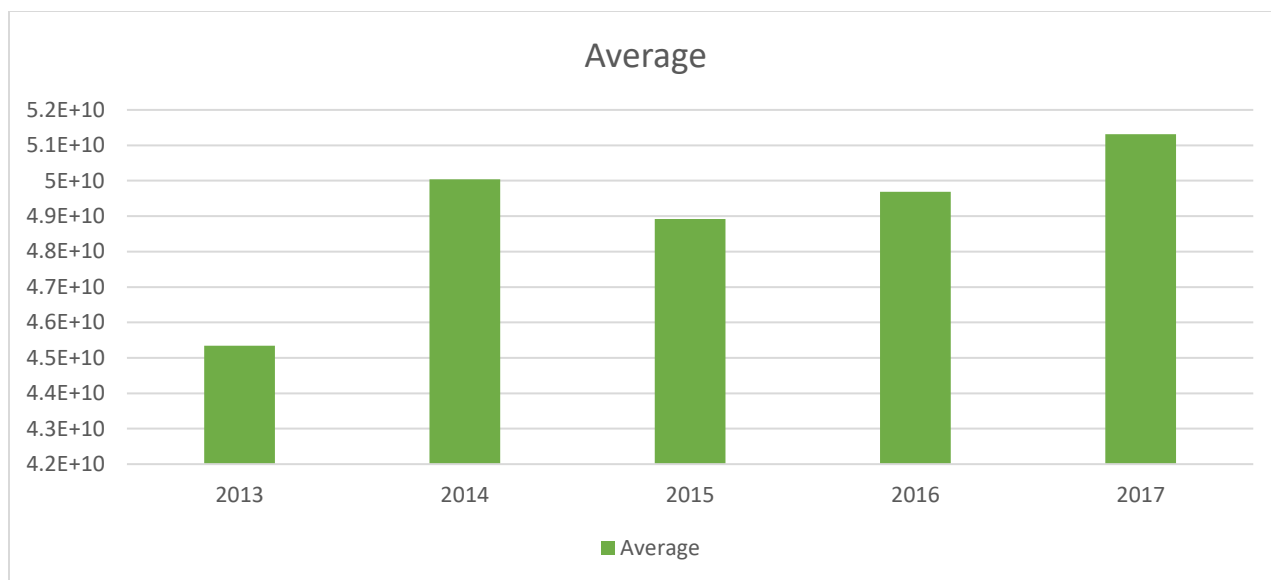


## Industrial Sector: Revenue & Profit

### Revenue

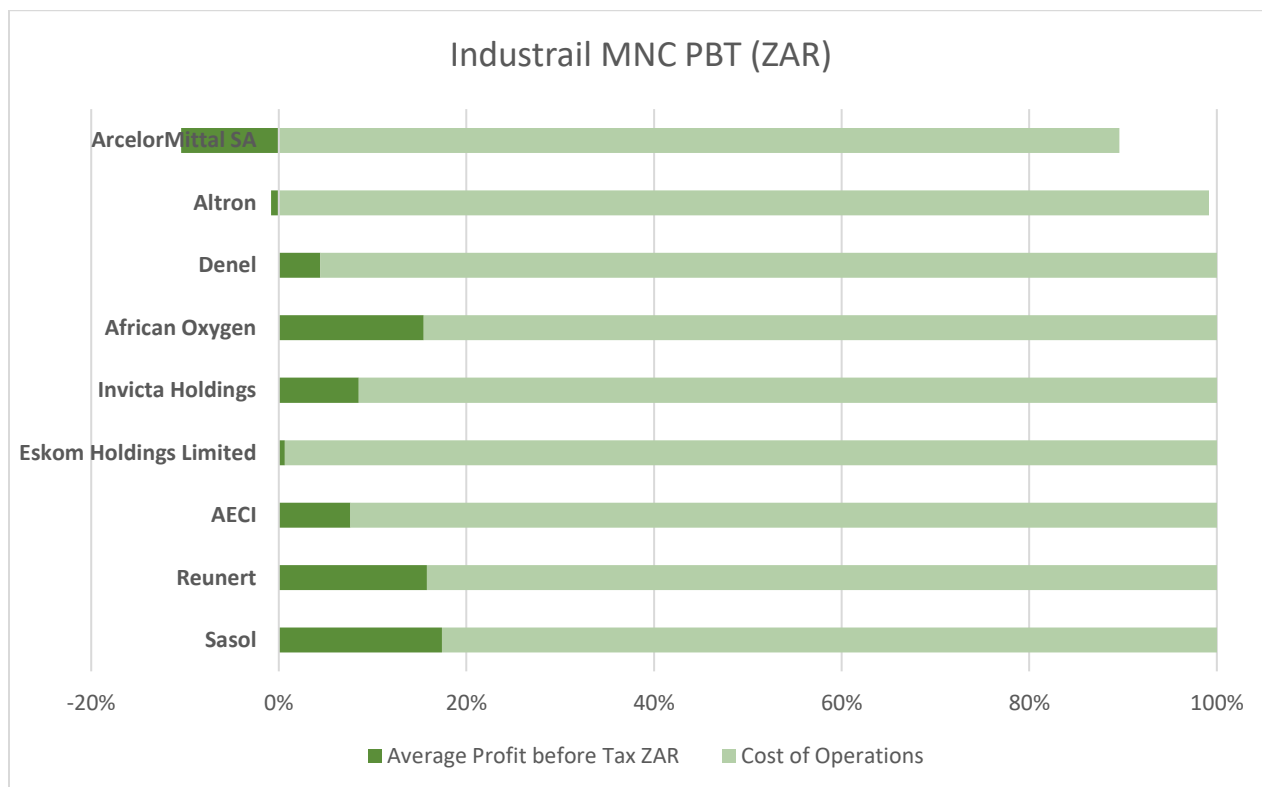
MNCs in the industrial sector have in average had a revenue increase of just over 3%. State-owned entity Eskom continues to grow with a revenue increase of 8.41% in this period, while Denel saw a loss in revenue of around 2%. Altron saw a big drop in revenue of almost 26%.

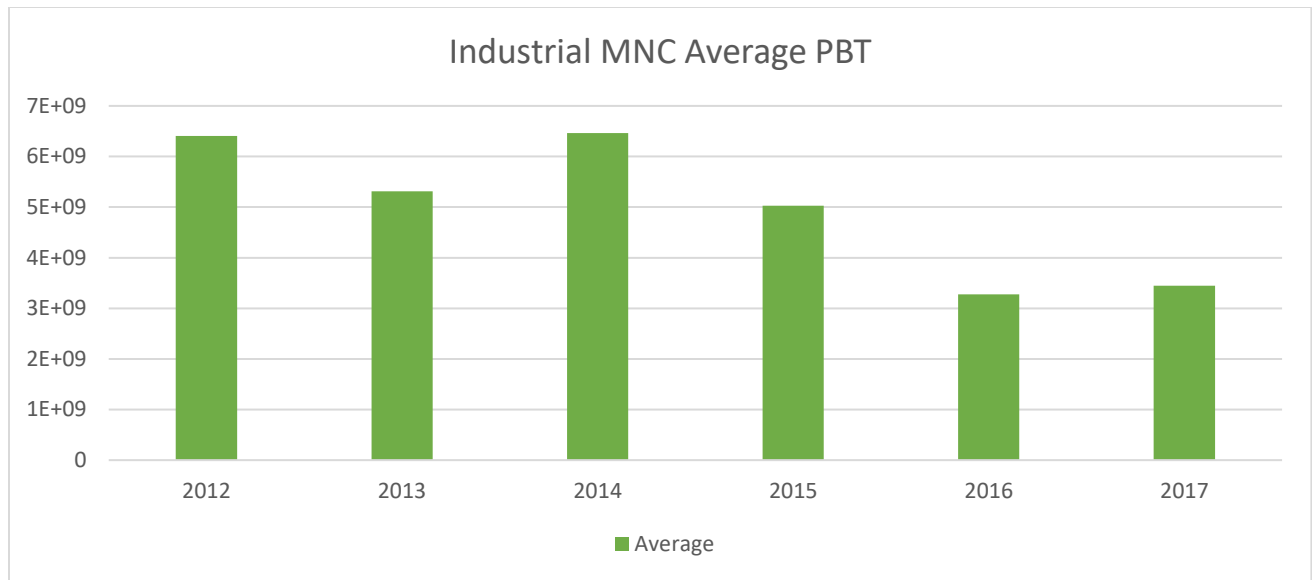




## Profit

On average, companies in this sector have increased their profit by about 5%. Altron and ArcelorMittal SA continue to operate at a loss. Eskom took a big hit in terms of PBT decreasing profit by over 80%. Both Sasol and AECl grew PBT by over 20%. Altron saw a huge increase of 84%, while Invicta grew it's PBT by 59.51%.



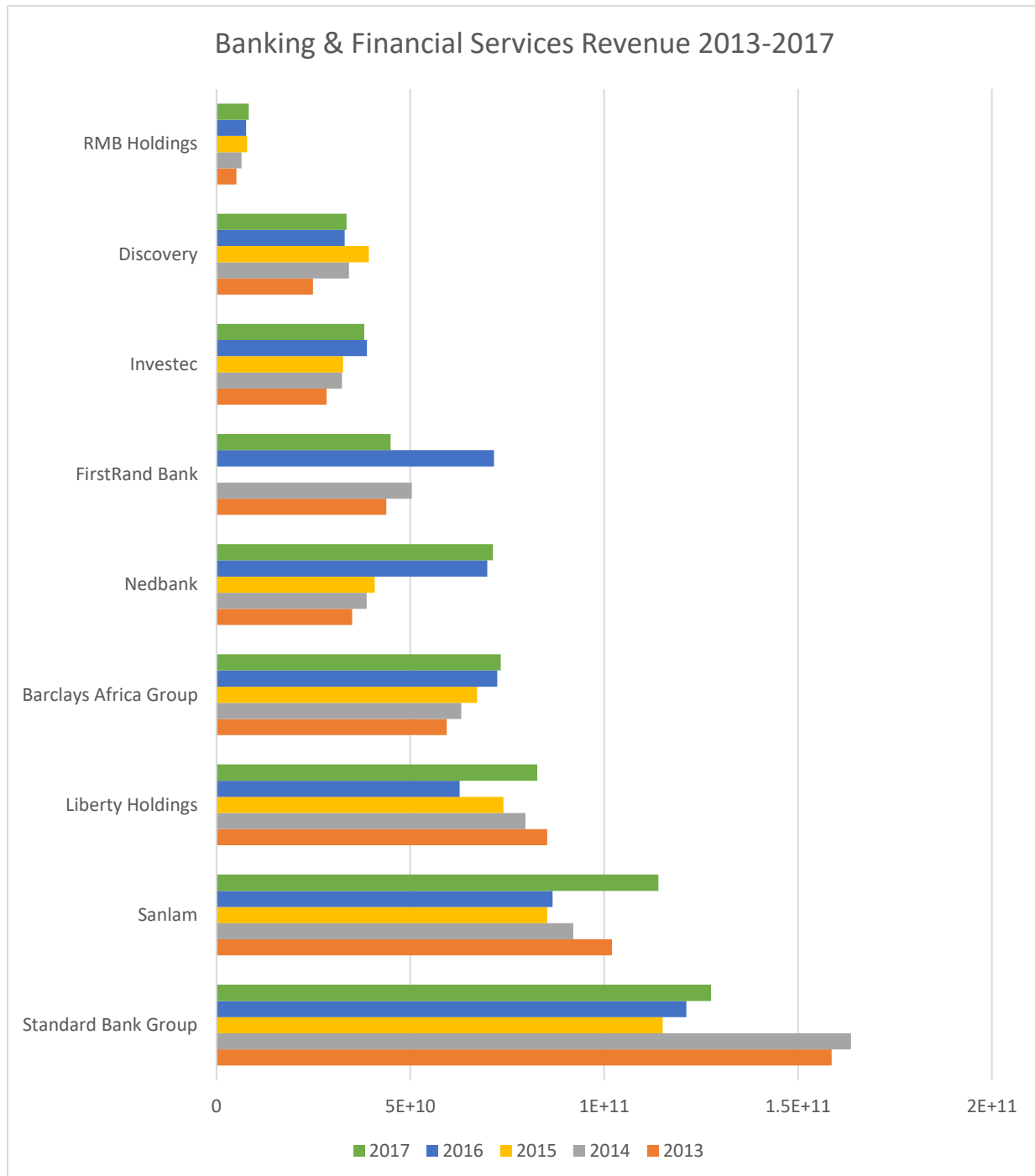


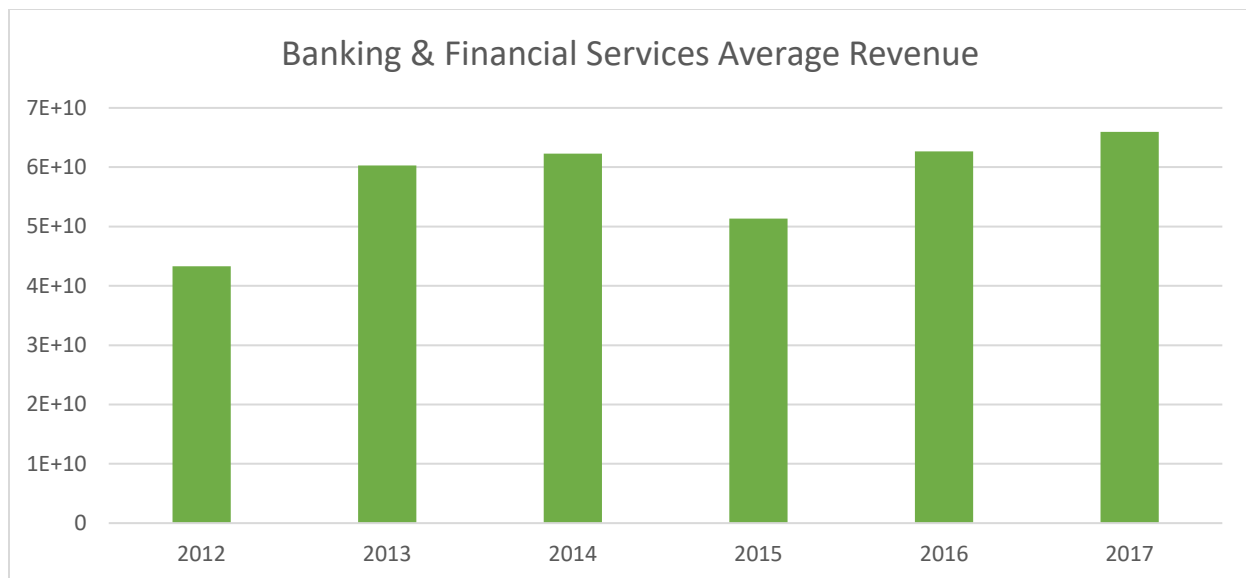


## Banking & Financial Services: Revenue & Profit

### Revenue

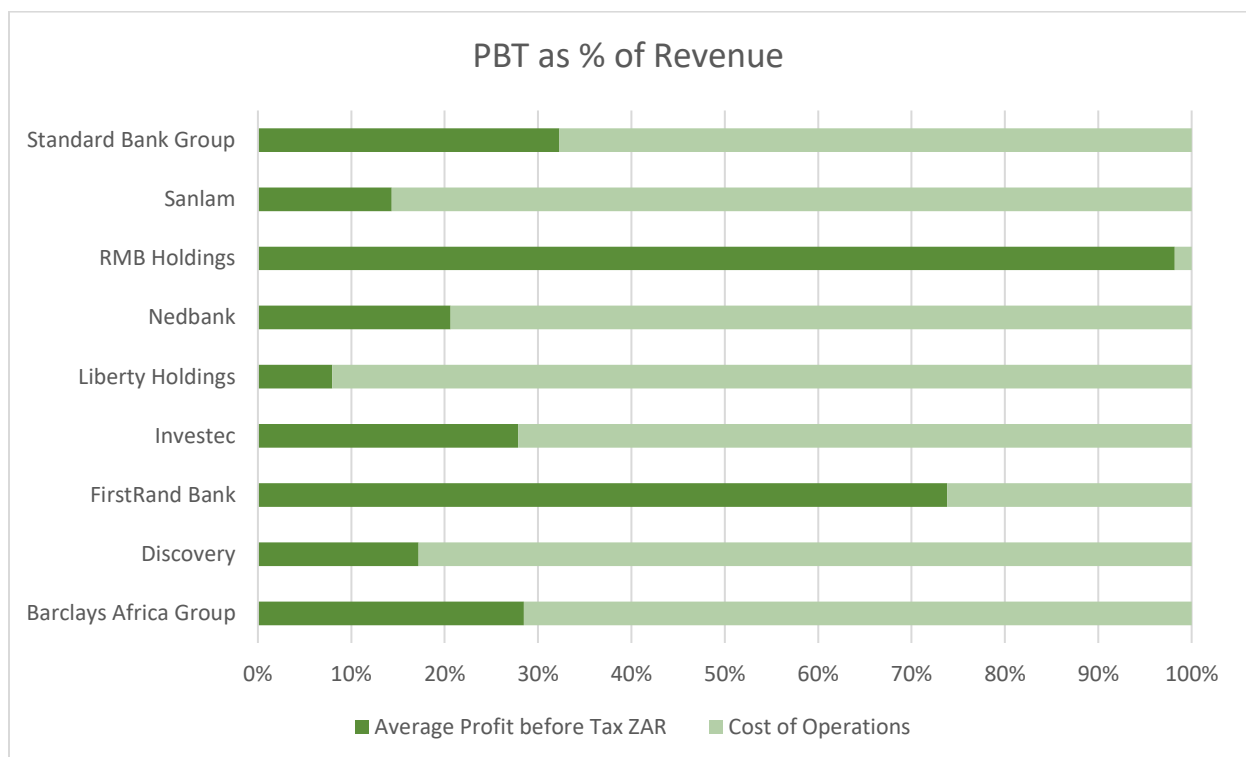
The banking and financial sector has shown positive growth in revenue since 2007 despite a slight decrease in 2015. The revenue growth rate for 2016 – 2017 was, on average, just over 5%. Sanlam and Liberty Holdings bank have both shown considerable increases in revenue between 2015 and 2016.

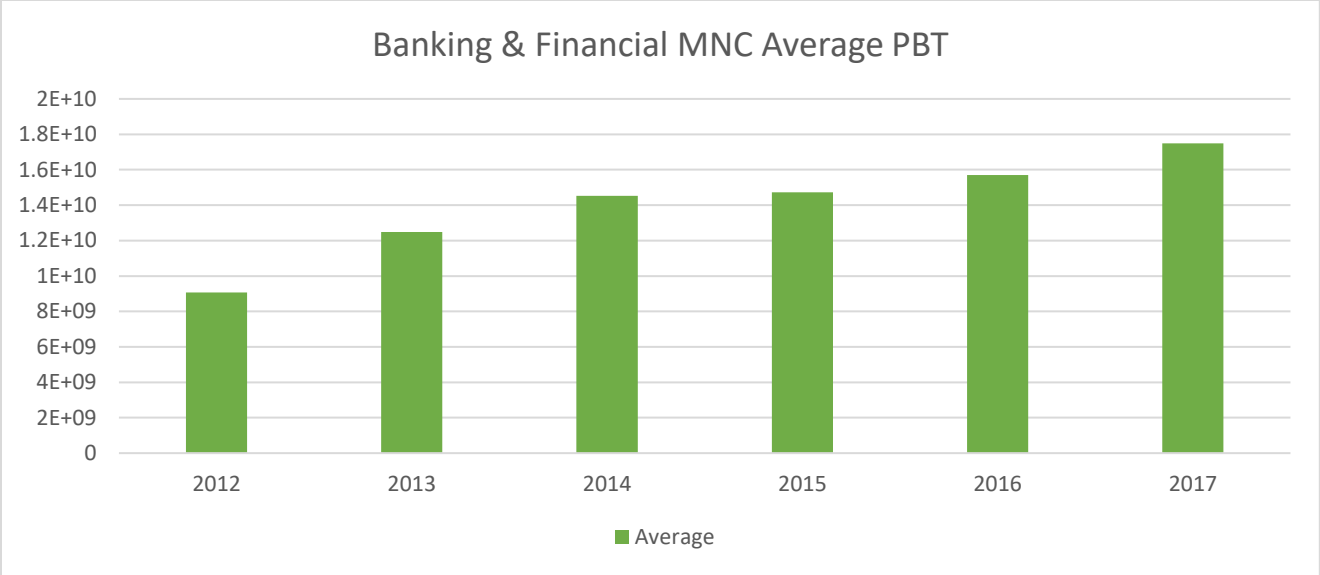




## Profit

All the companies in the banking and financial services sector had positive PBT levels and there was an average overall increase of 11.45%. Barclays Africa saw a small decrease in profit of around 3.7%, while Liberty Holdings grew their profit by over 66%.

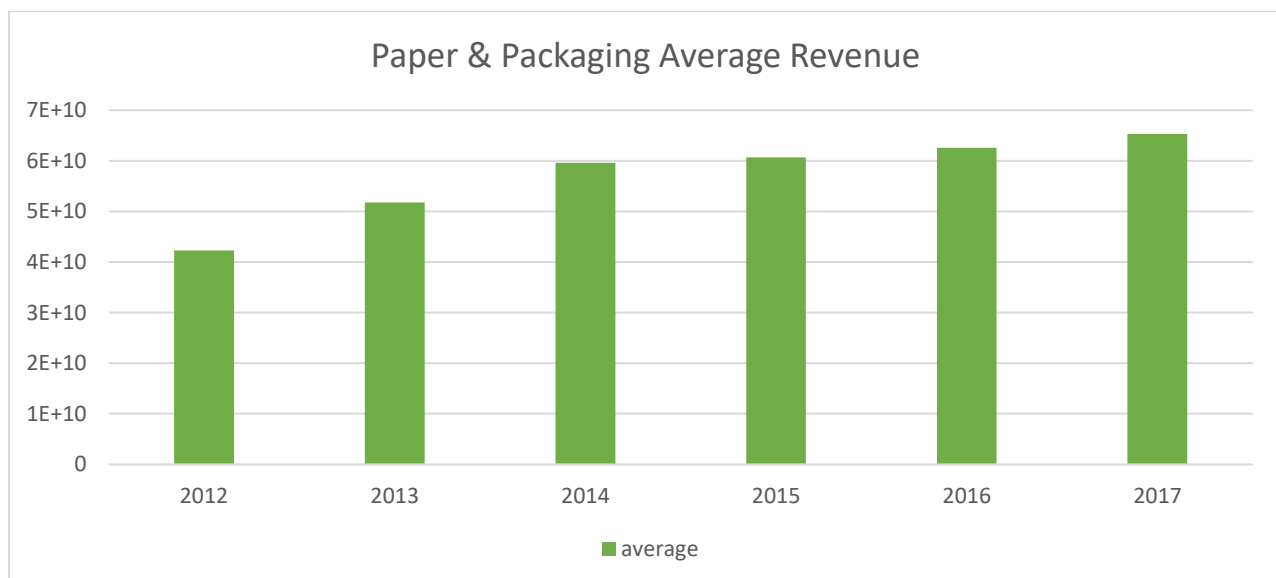
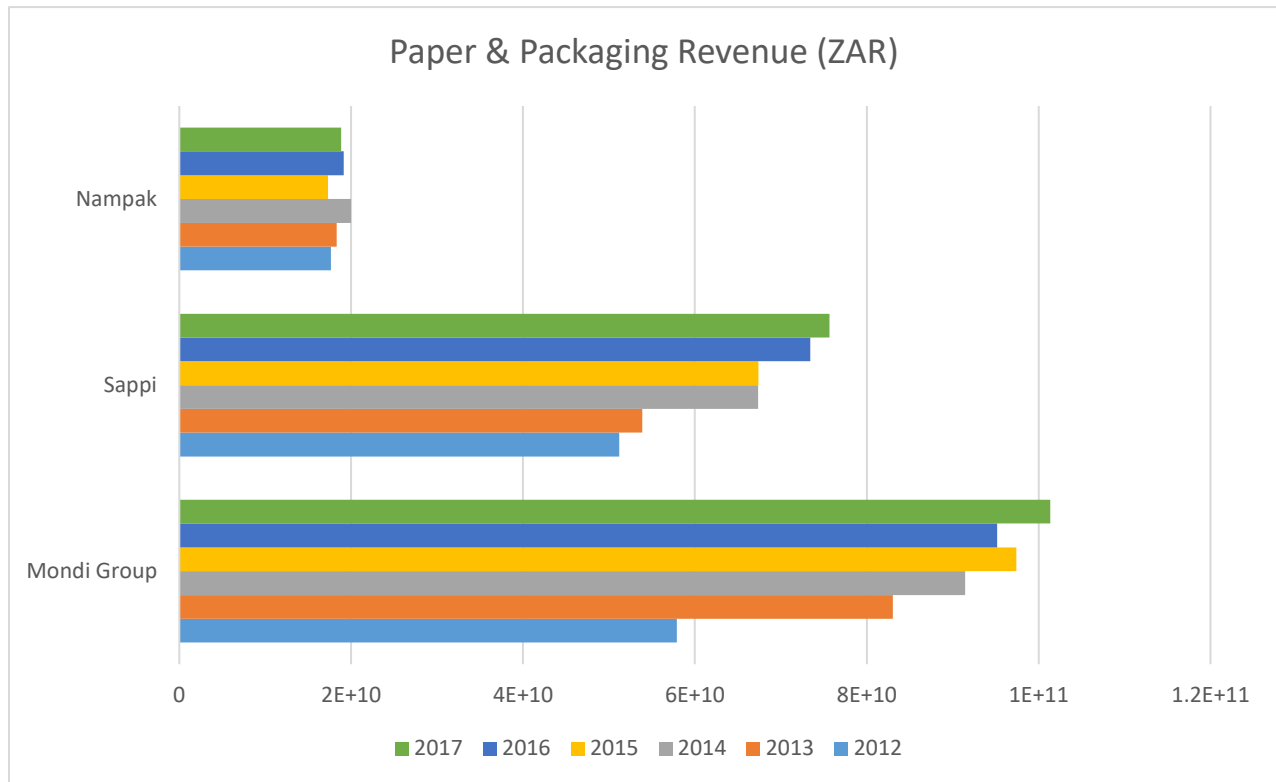




## Paper & Packaging Sector: Revenue & Profit

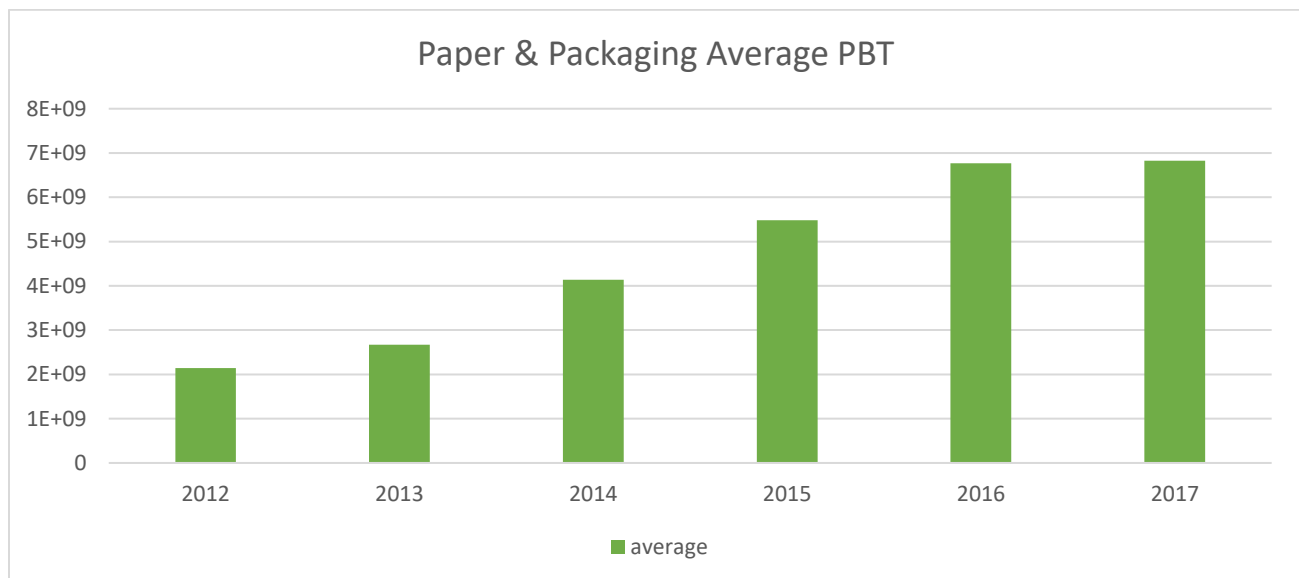
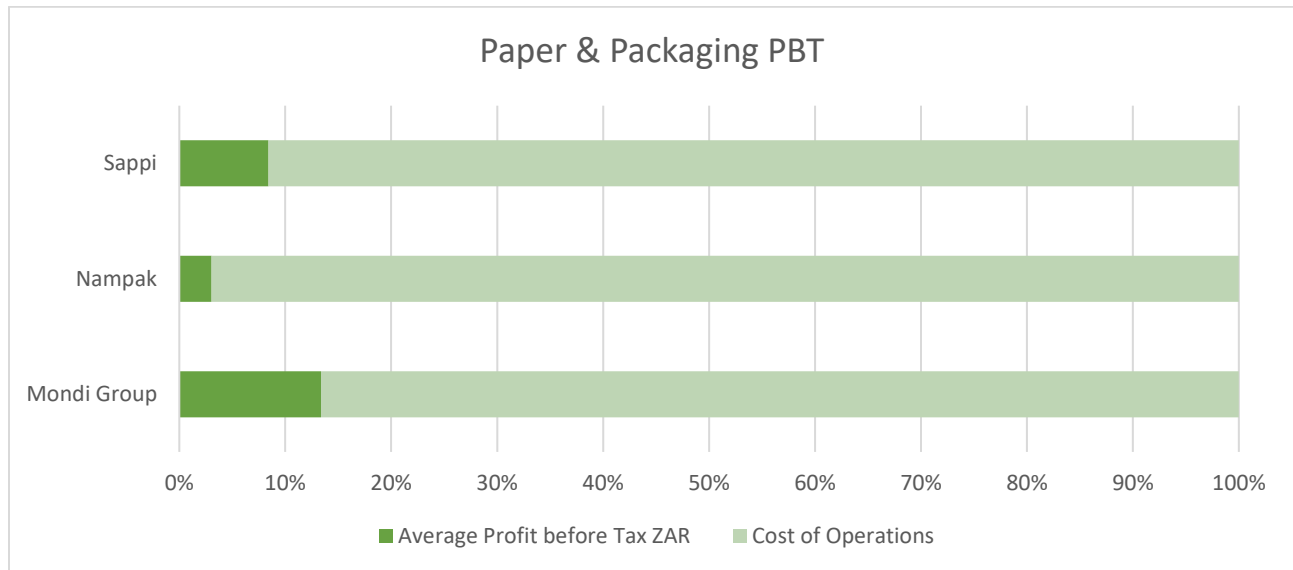
### Revenue

In the paper and packaging sector, Mondi Group showed the highest revenue growth in the time period, growing by 6.51%. It's further noted that there has been an overall 4% increase in average revenue between 2016 and 2017. This increase builds on the increasing revenue levels experienced since 2008.



## Profit before Tax

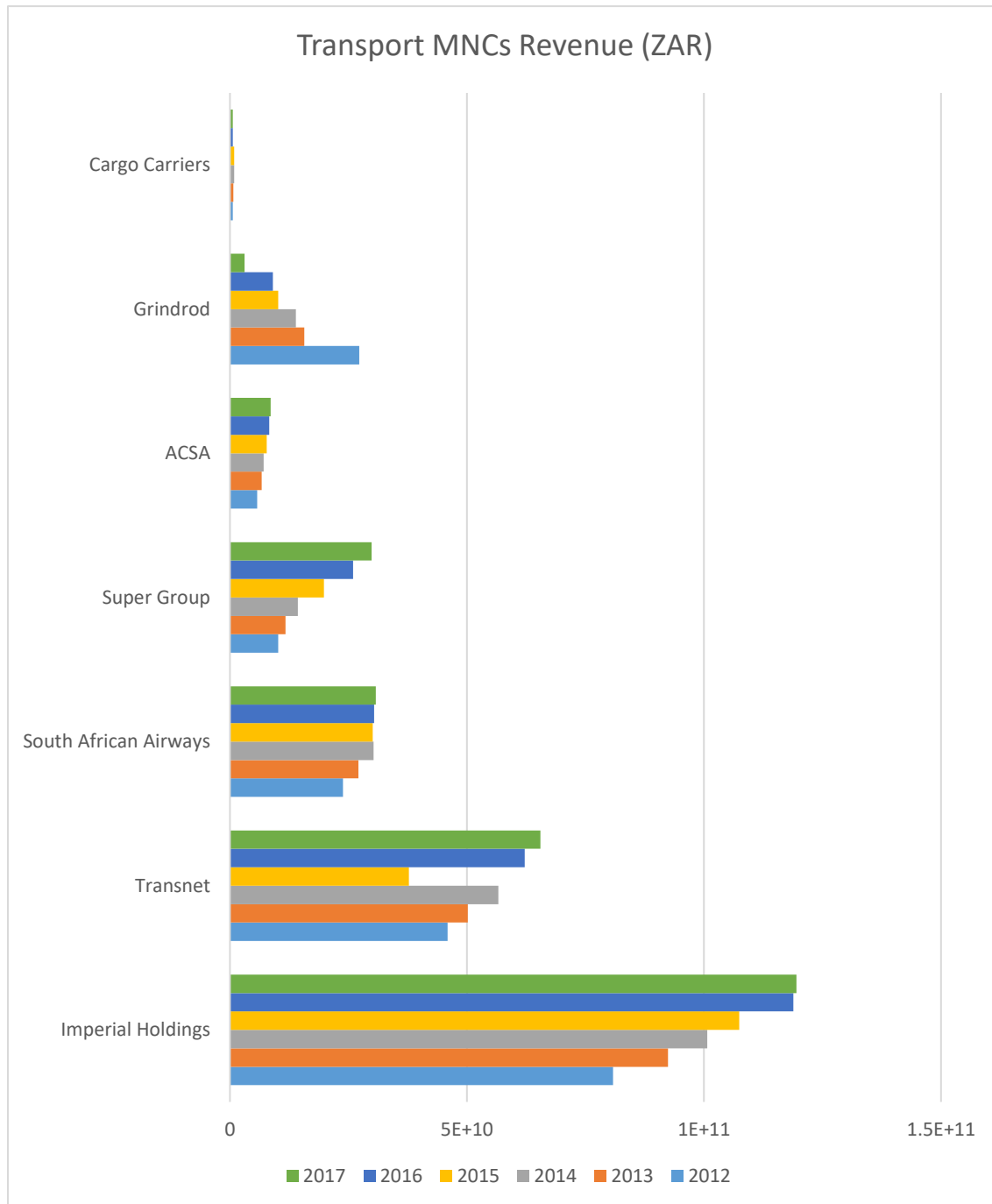
The PBT in the Paper and Packaging sector slowed down growth in 2017, increasing by 0.88% on average. However, this is largely due to Nampak seeing a decrease of over 66% in PBT.

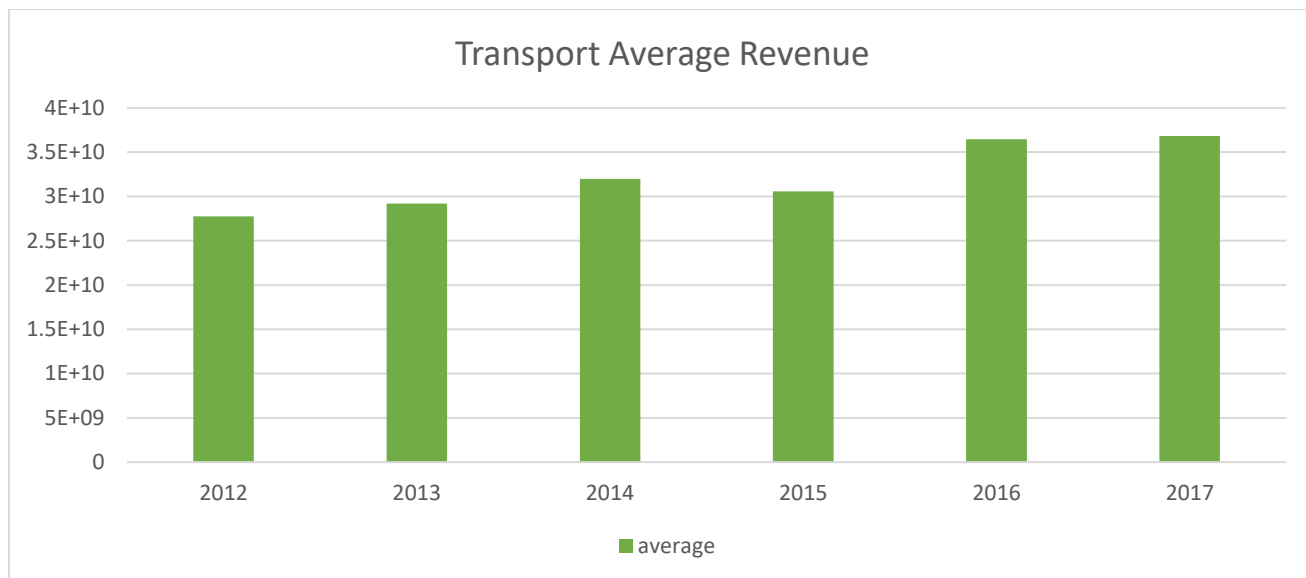


## Transport Sector: Revenue & Profit

### Revenue

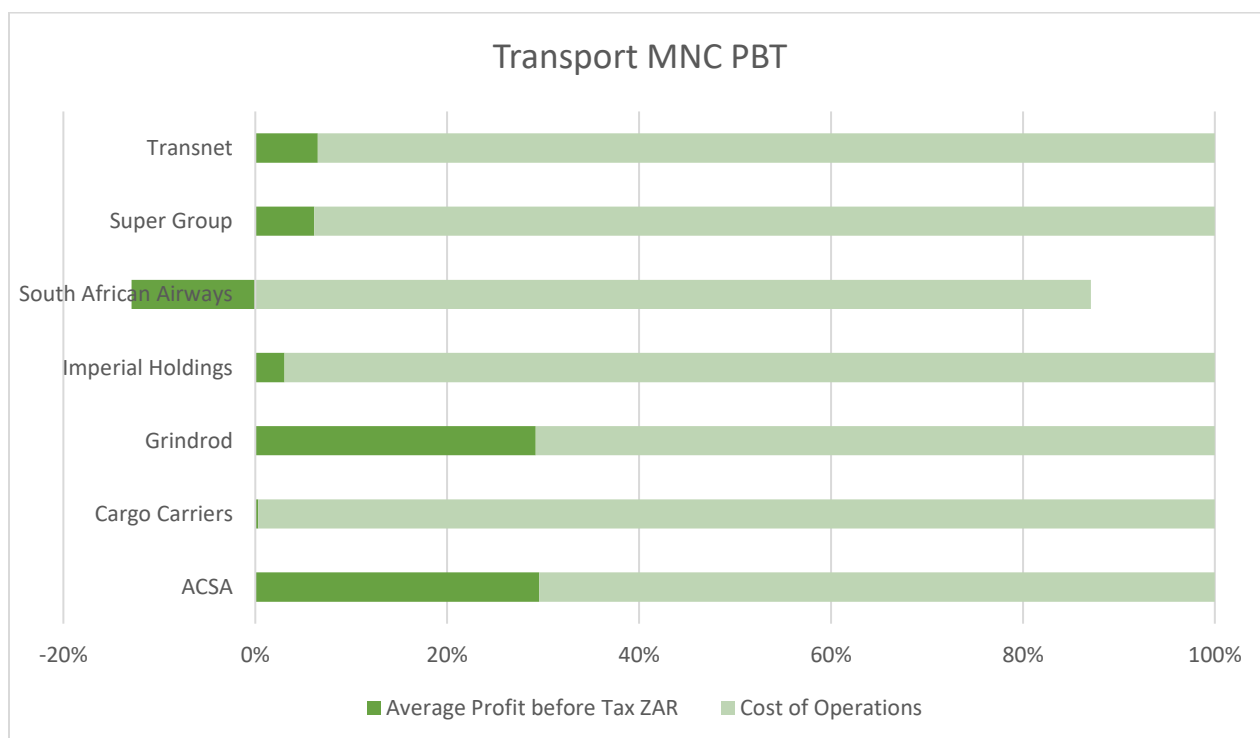
Average revenue in the transport sector has been increasing steadily since 2007. In the 2016/17 period, a 1% increase in the revenue growth rate took place. On an individual basis, the only company that experienced a decrease in revenue was Grindrod, sustaining more losses in 2016.

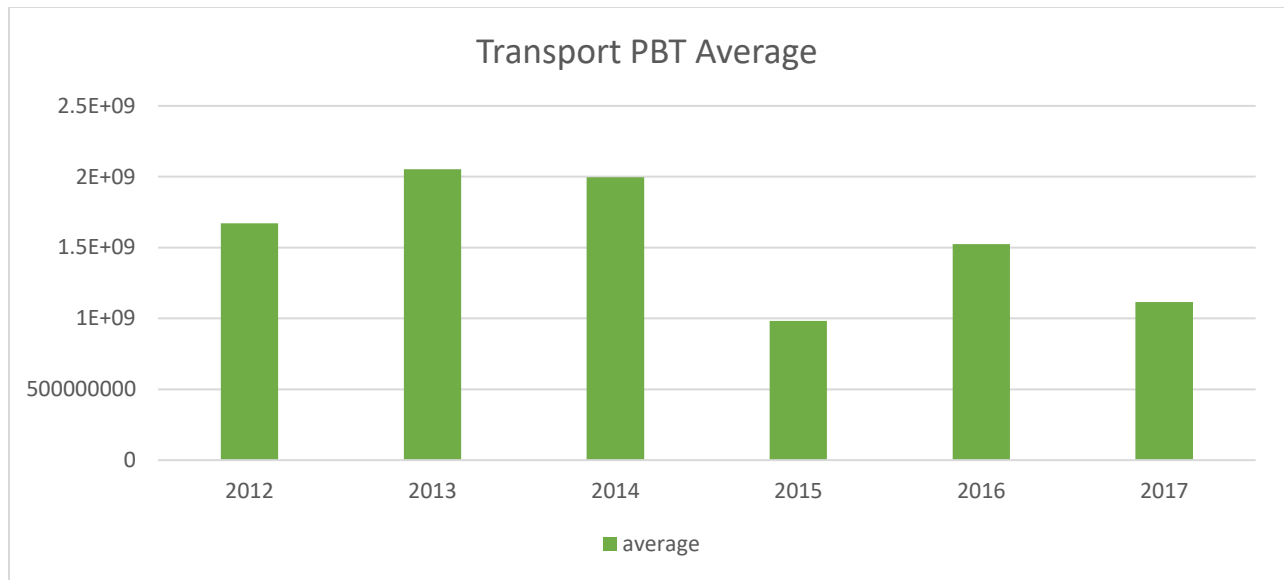




## Profit

The overall PBT within the MNCs sampled in the transport sector has shown a decrease of 26%. This is largely due to the fact that South African Airways (SAA) decreased their PBT by almost 300%. Transnet and Super Group are the only MNCs that increased their PBT from 2016 to 2017.





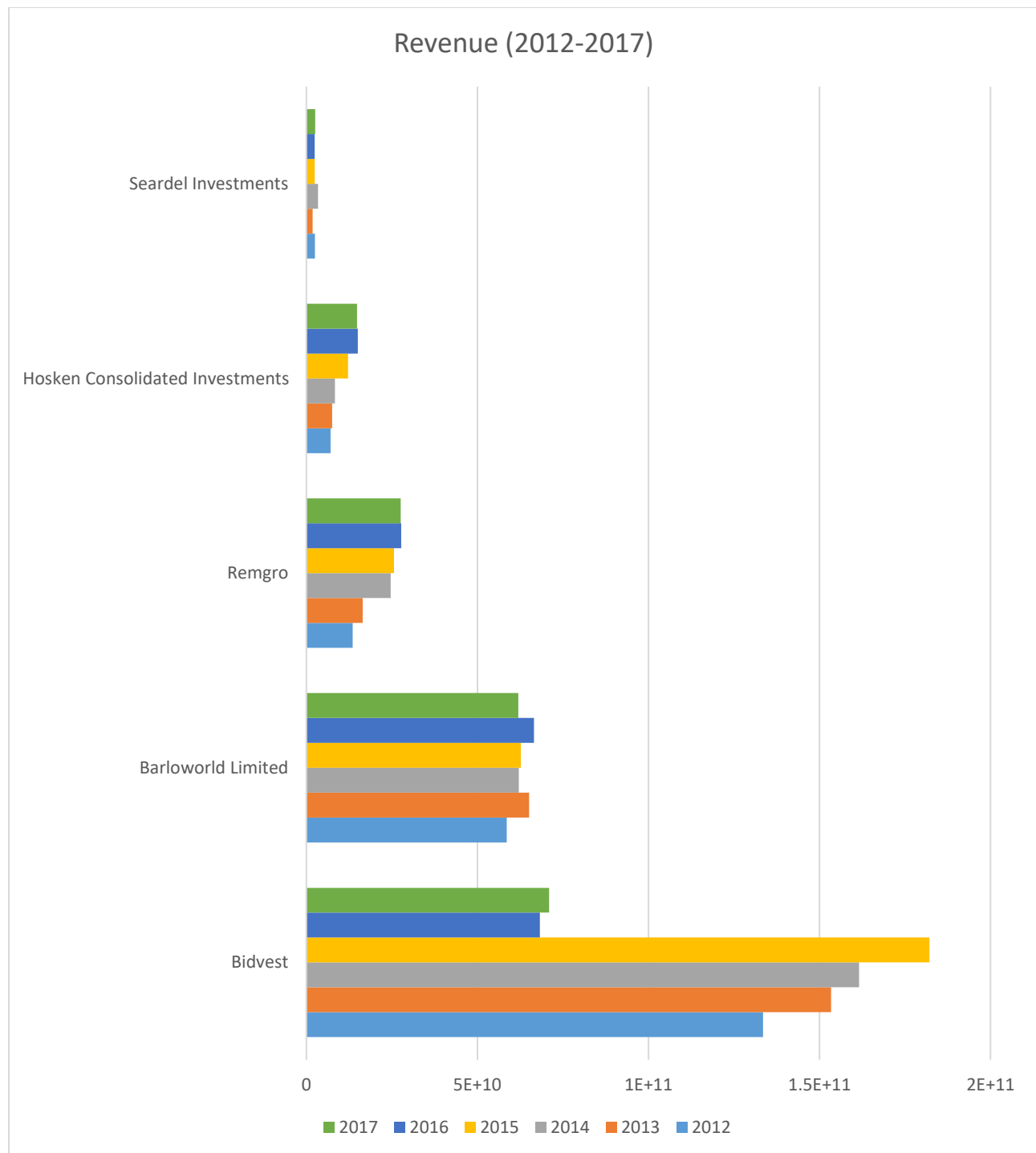


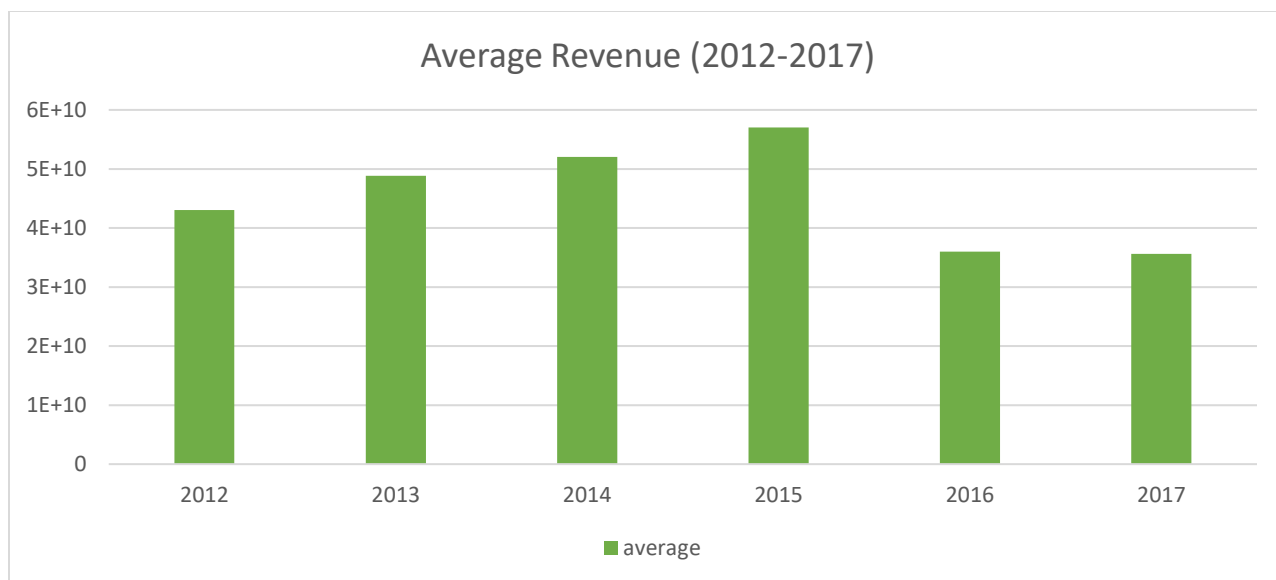
## Diversified Holdings Sector: Revenue & Profit

### Revenue

On average the companies within the diversified holdings sector experienced a revenue decrease of 1.11%. Both Bidvest and Seardel investments saw 4% and 6% revenue increase respectively, while the other companies in this group saw small losses.

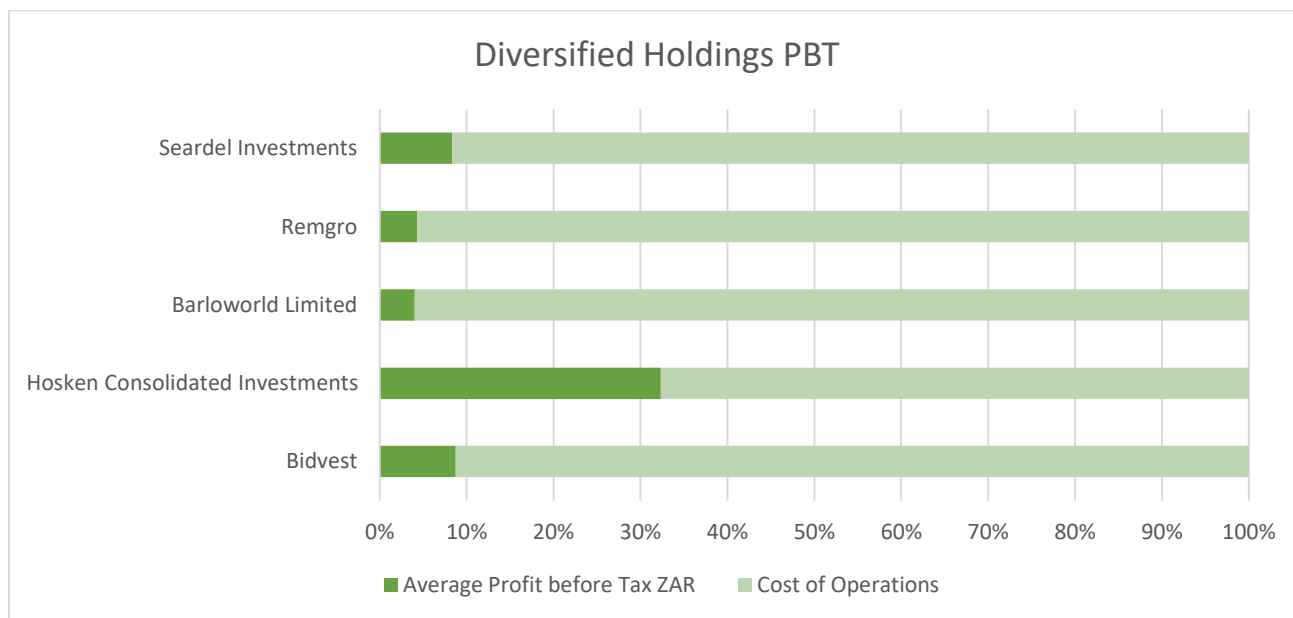
\*The group of companies studied this year does not include Steinhoff due to irregularities.

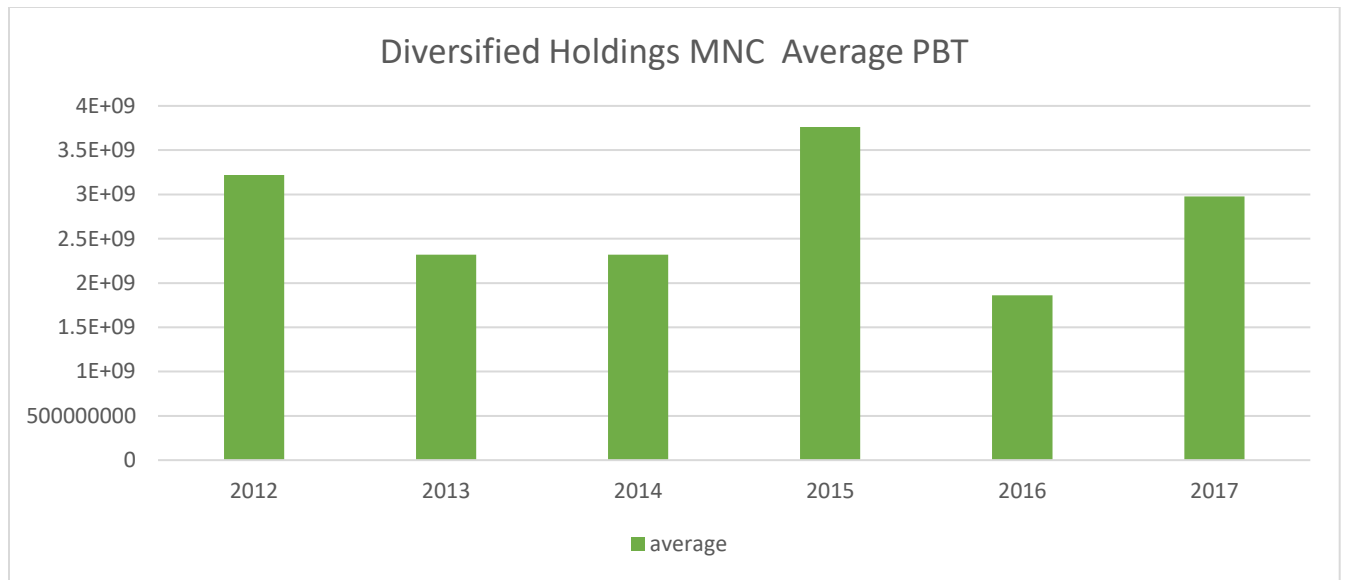




## Profit

PBT of companies within the diversified holdings sector increased by over 60% on average. This is partly due to Remgro's significant PBT growth from negative growth to over ZAR 1.1 billion. Both Bidvest and Hosken Consolidated Investments grew, while Seardel investments and Barloworld limited lost 4.49% and 11.20% respectively.

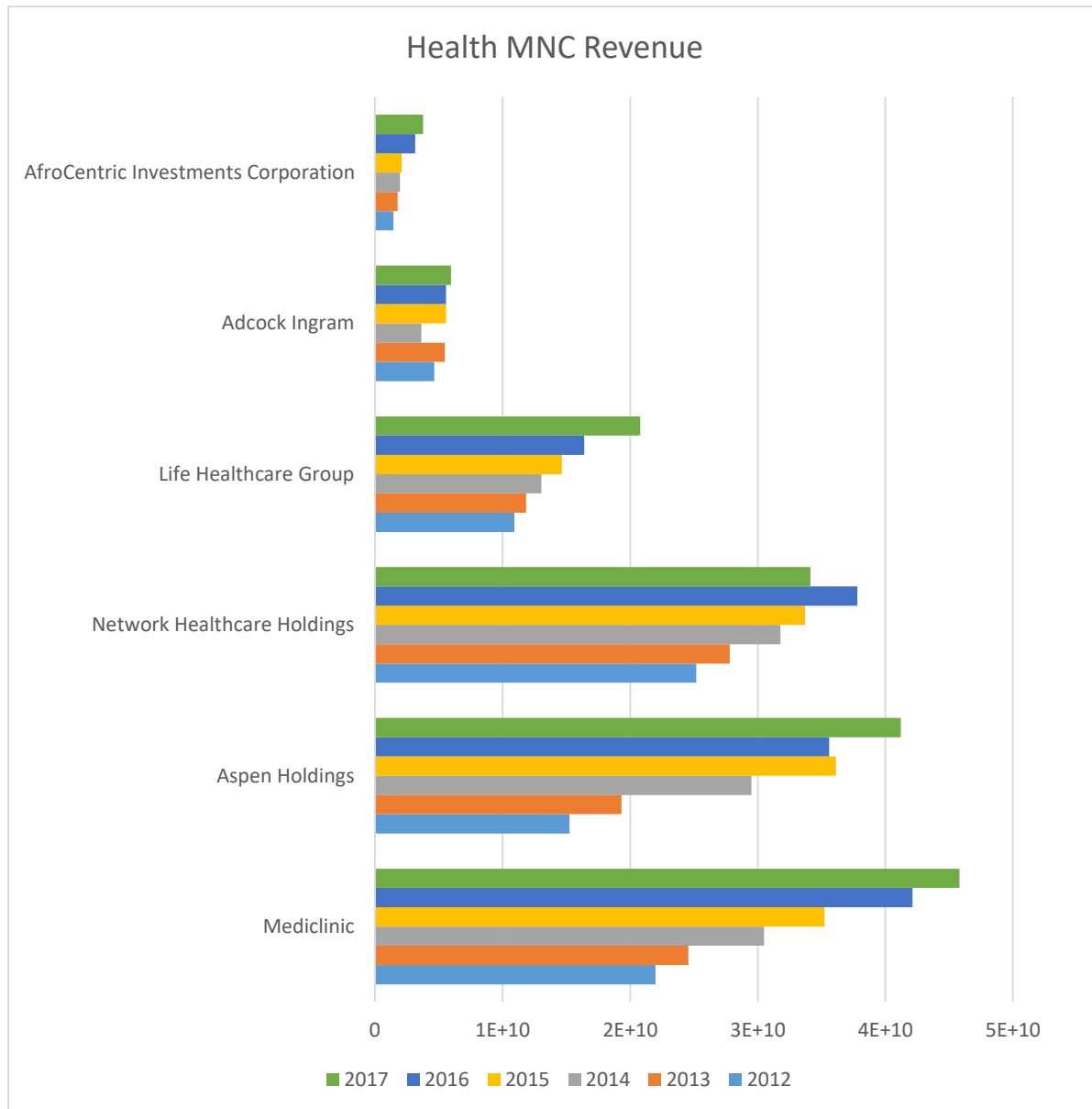


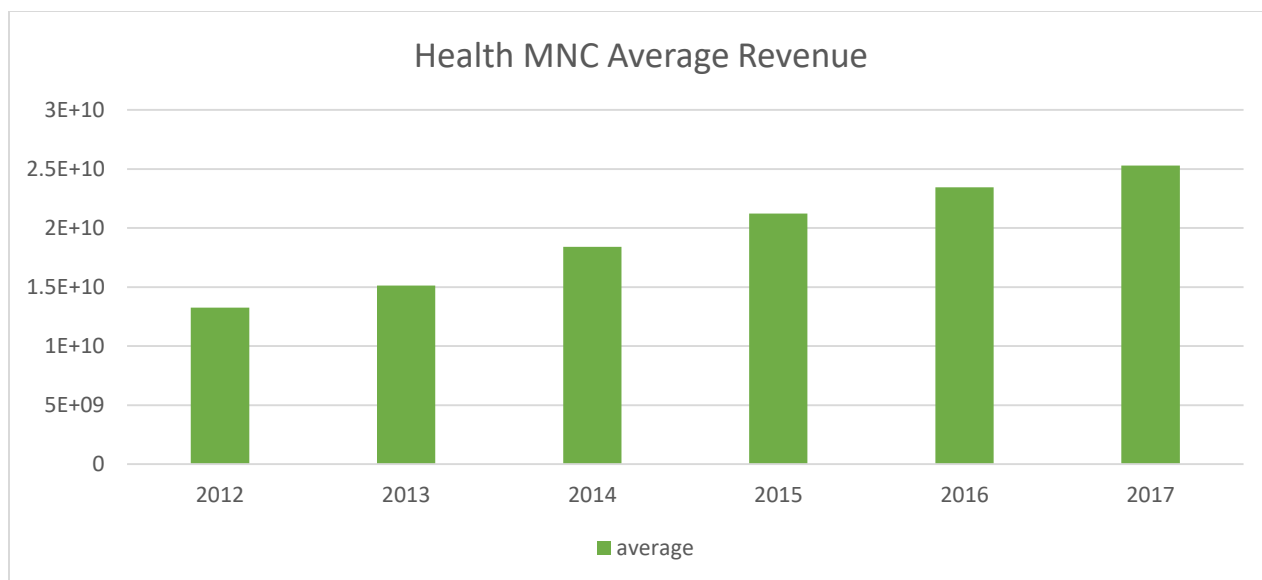


## Health

### Revenue

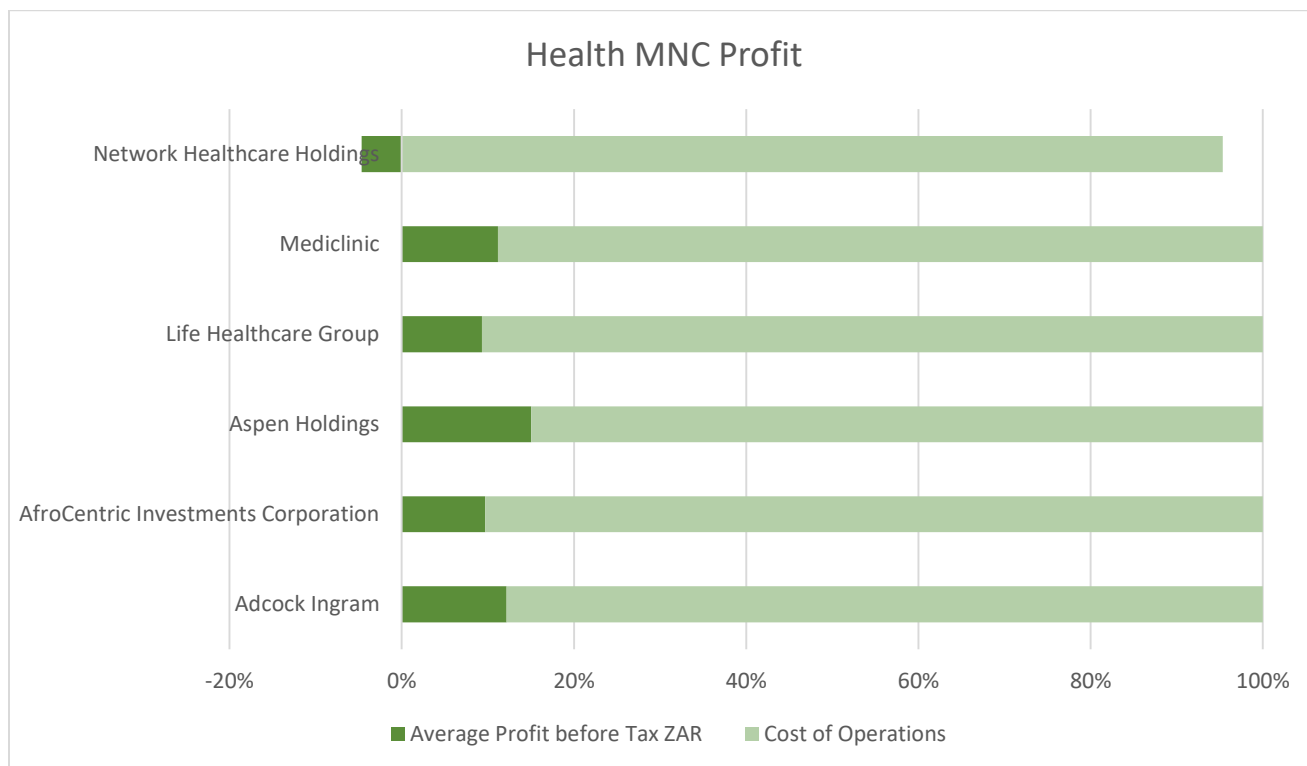
In the health sector, Mediclinic showed the highest revenue margins. There has been an average increase in revenue of 20.22%. This increase builds on the increasing revenue levels experienced since 2007. Network Healthcare Holdings lost just over 9% in revenue, the only MNC in this sector to do so.

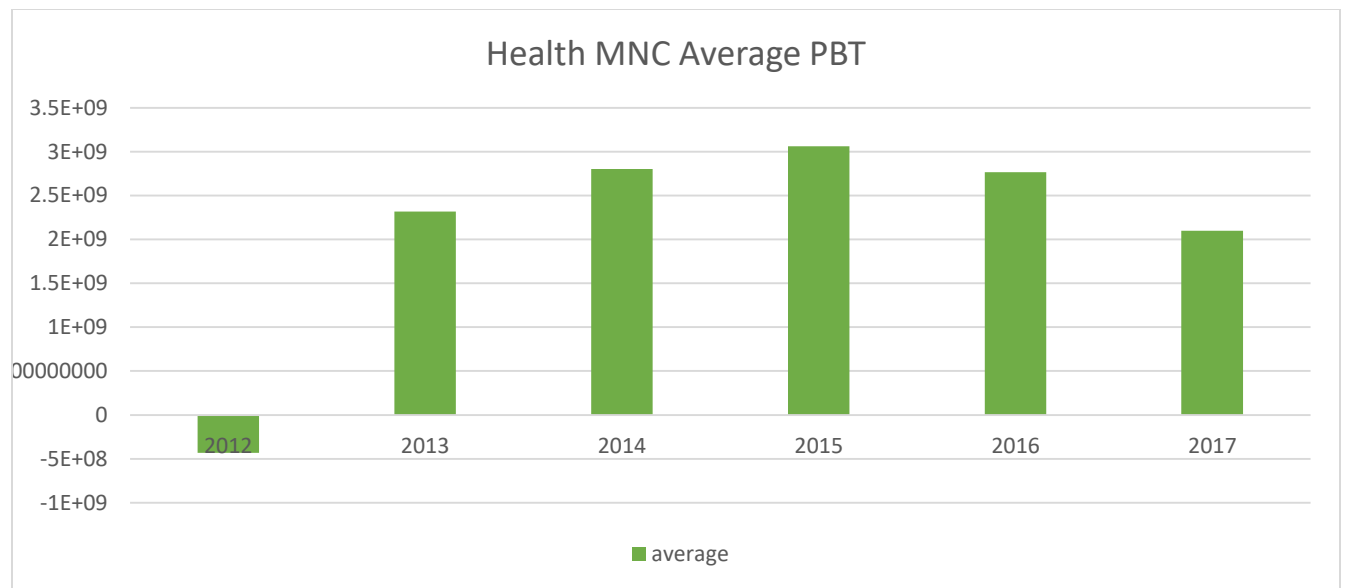




## Profit

During 2012 there was a sharp decrease in the average profit made in this sector as a result of Network Healthcare Holdings making a ZAR 11 billion loss in this year. Both Life Healthcare and Network Healthcare Holdings made significant losses to profit in 2017, which makes the average PBT loss from 2016 to 2017 24.1%.

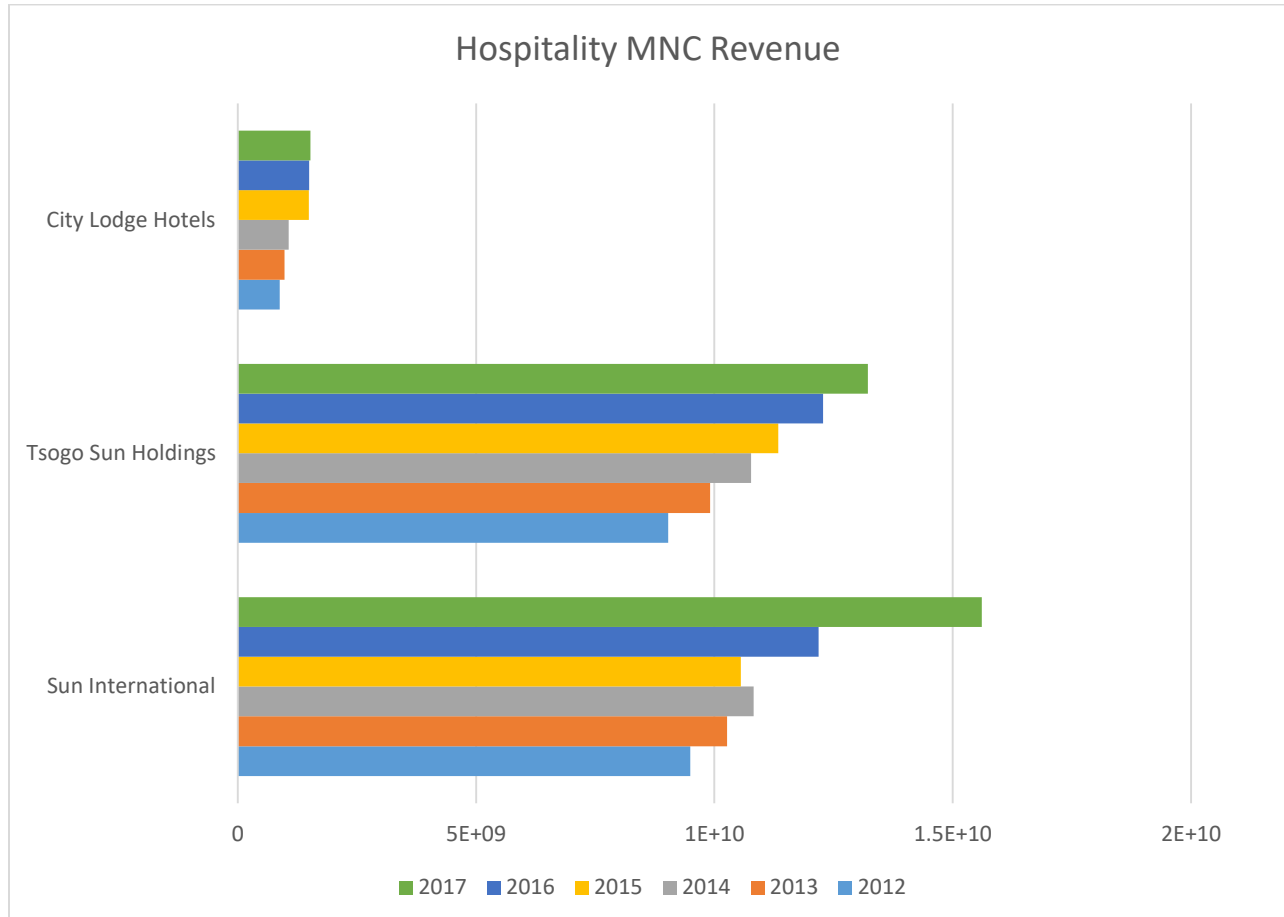




## Hospitality

### Revenue

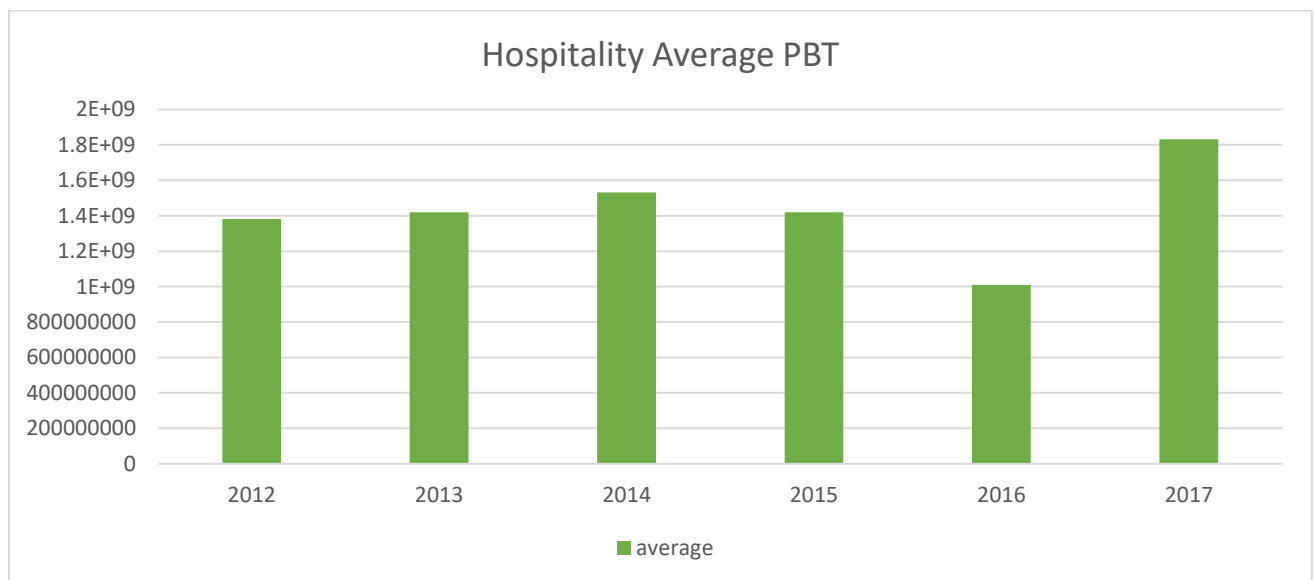
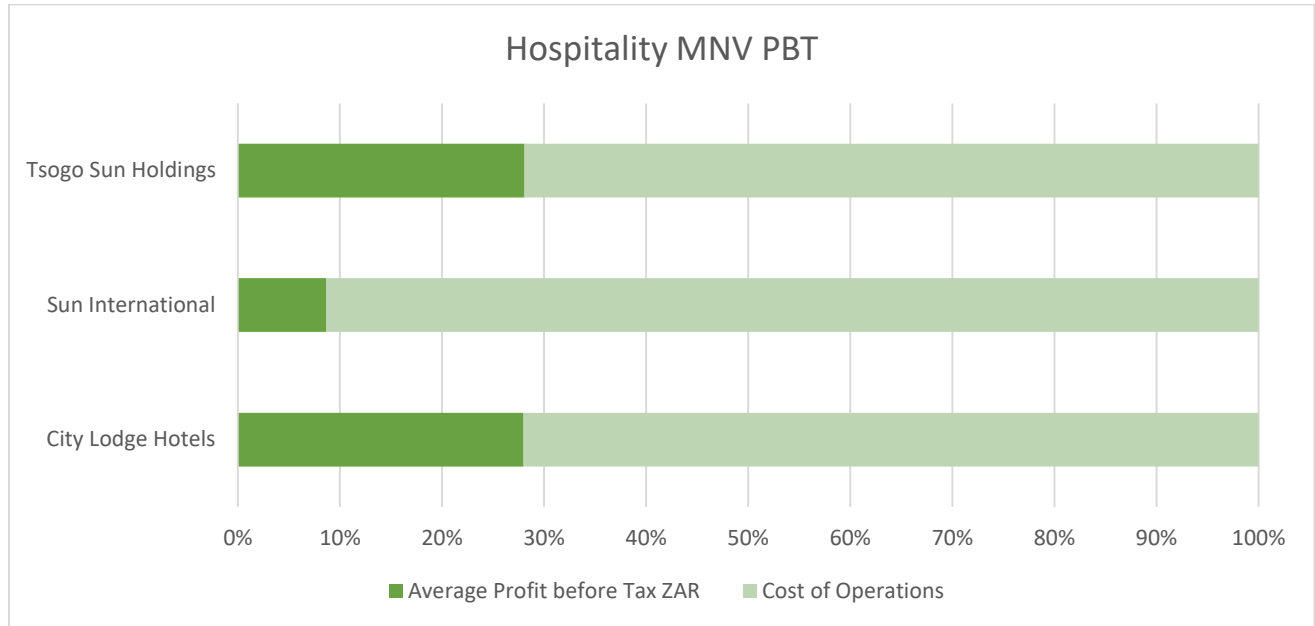
In this sector, on average, revenue grew by 16.91%. Sun International grew an impressive 28.09% in revenue, while Tsogo Sun Holdings and City Lodge Hotels grew by 7.64% and 1.82% respectively.





## Profit

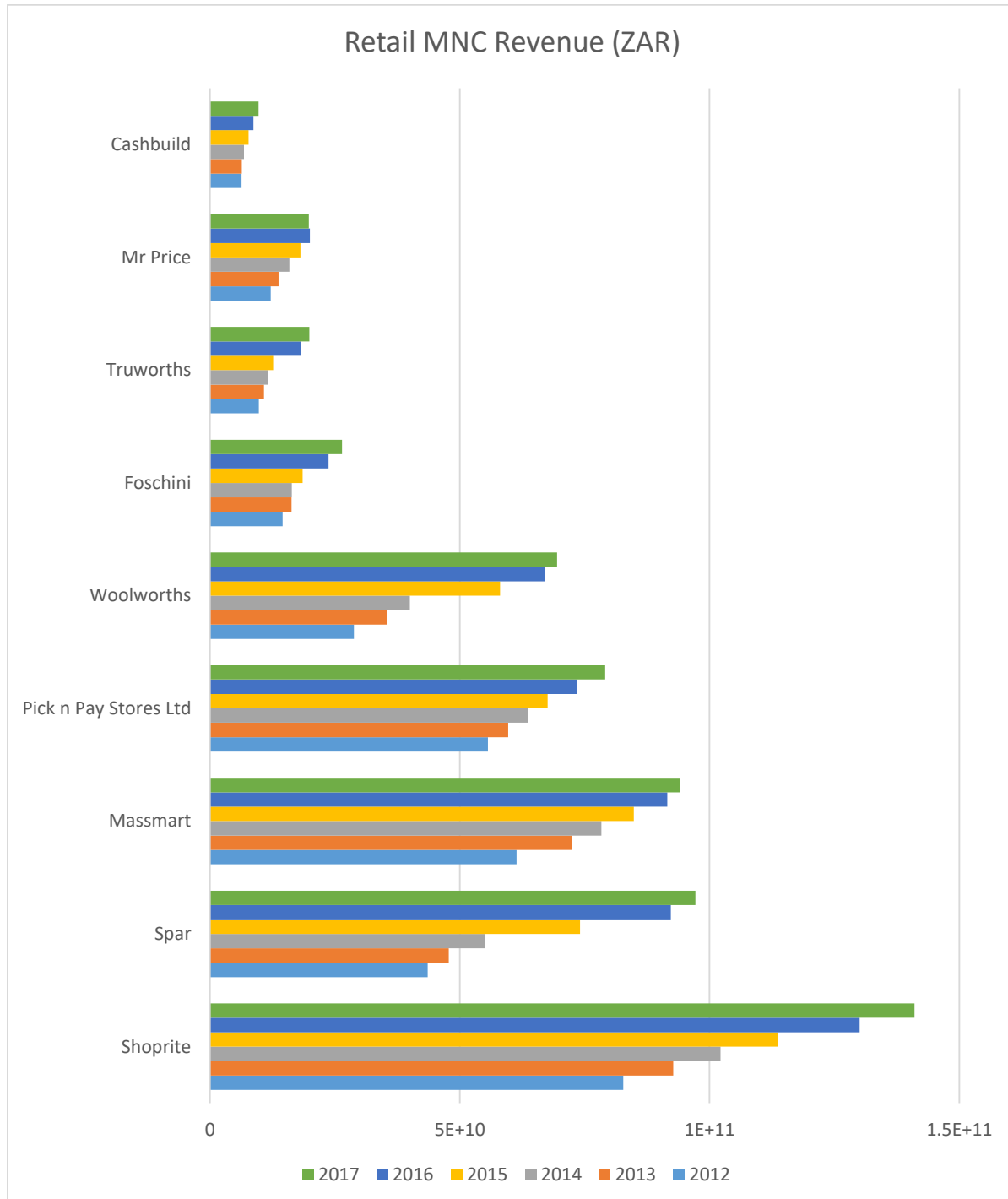
Sun International operated at a loss in 2016 but regained significant ground on PBT in 2017, making over ZAR 1.3 billion in PBT in 2017. City Lodge Hotels lost around 6% in PBT, while Tsogo Sun Holdings increased its PBT by 43.96%.

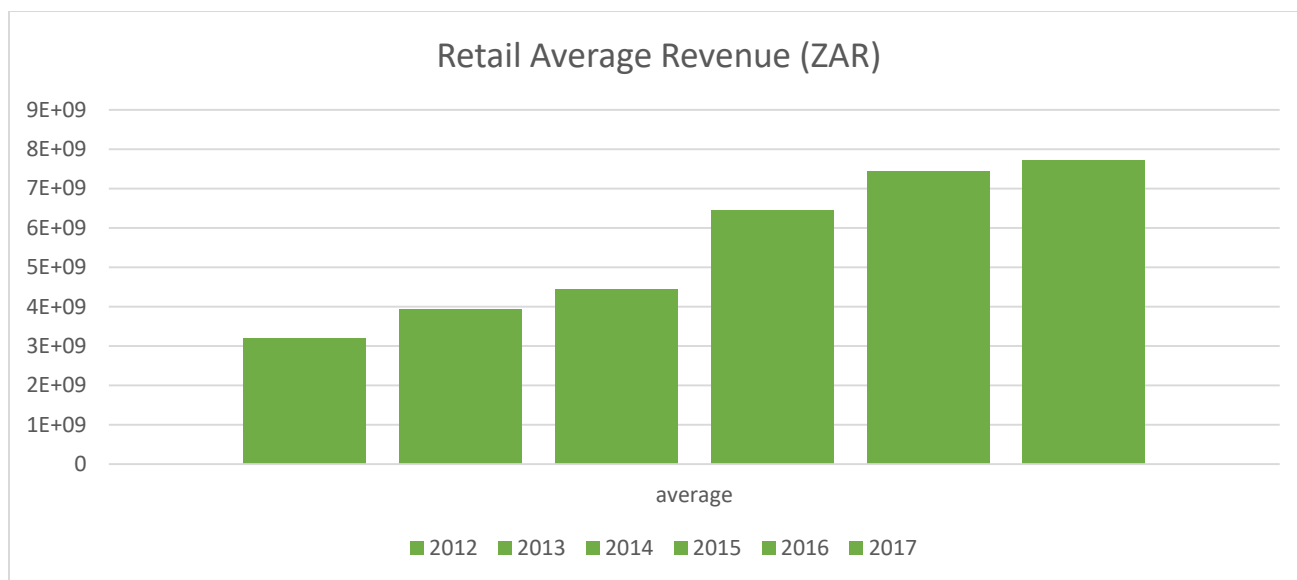


## Retail Sector: Revenue & Profit

### Revenue

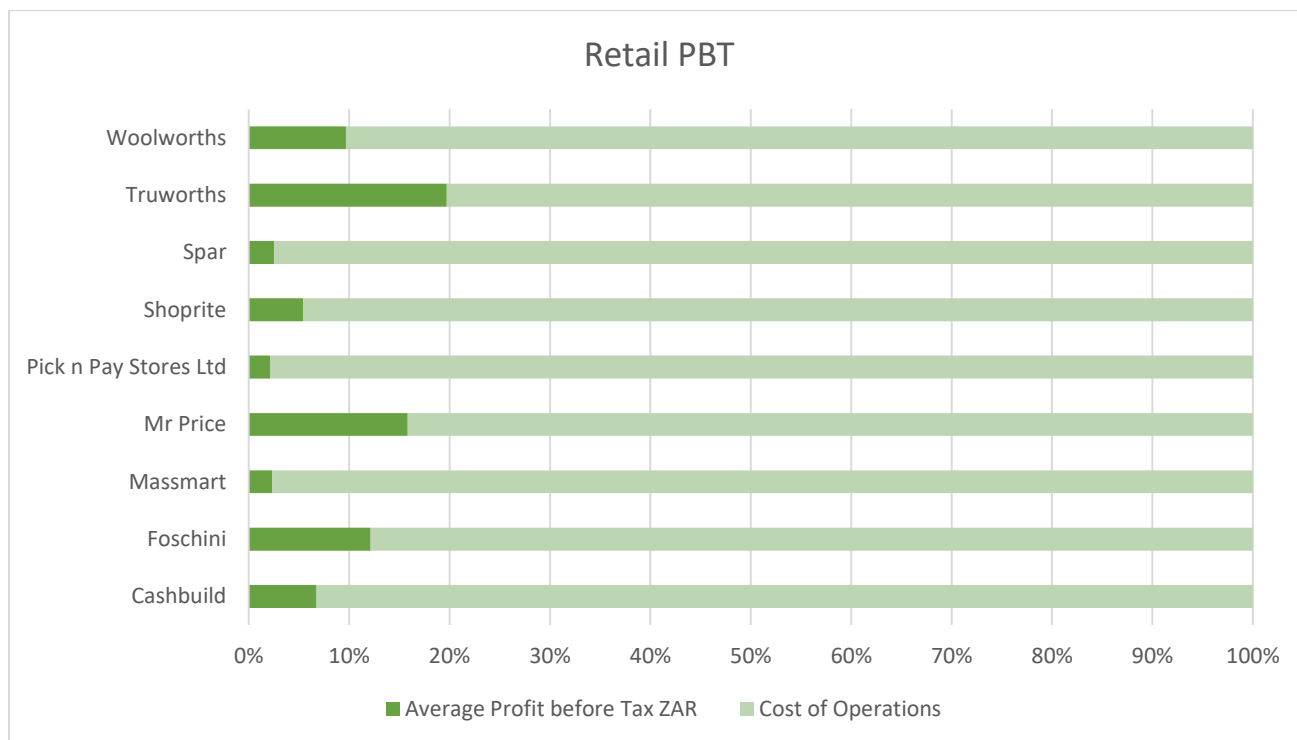
Revenue across the retail sector reflects a positive picture of growth across all companies, with the exception of Mr Price which made a revenue loss of 1.2%. Between 2016 and 2017, there was an average increase in revenue of 6.02%, building on the growth from the previous year. Shoprite continues to dominate in terms of revenue with over ZAR 141 billion and growth of 8.44%.

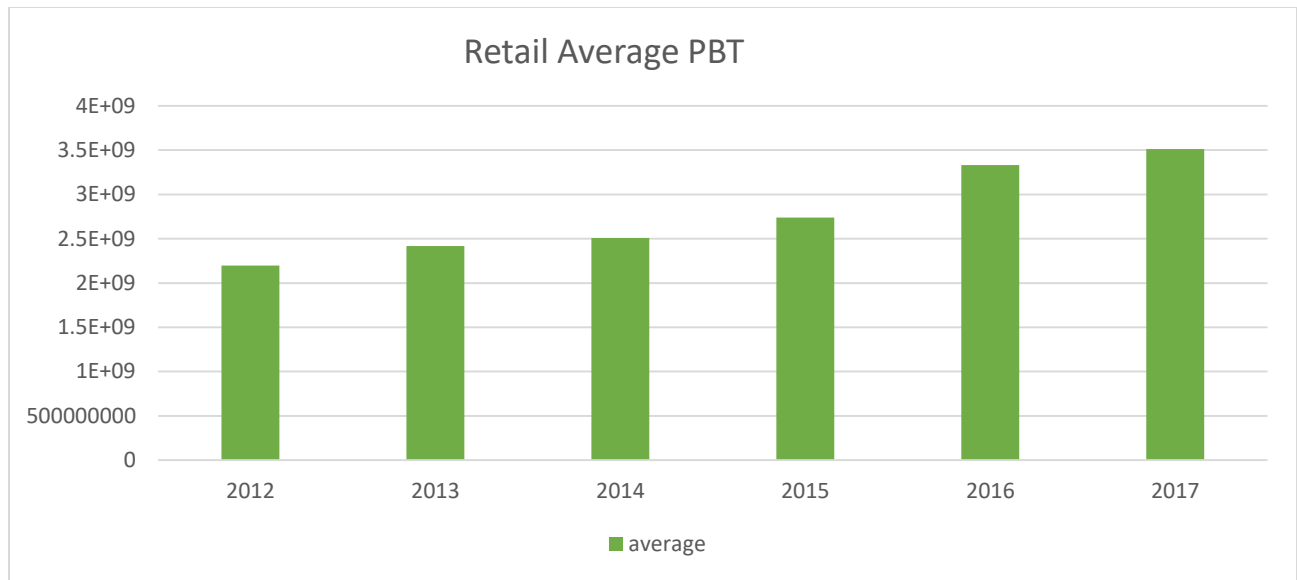




### Profit before Tax

The table below illustrates PBT as a percentage of total revenue. While Shoprite operates at a small PBT percentage, this small percentage still mean a profit of ZAR 7,615,000,000 or ZAR 7.6 billion. Mr Price and Truworths both saw small losses in PBT, while Woolworths, Shoprite, Pick & Pay and Massmart each had over 10% growth in PBT.

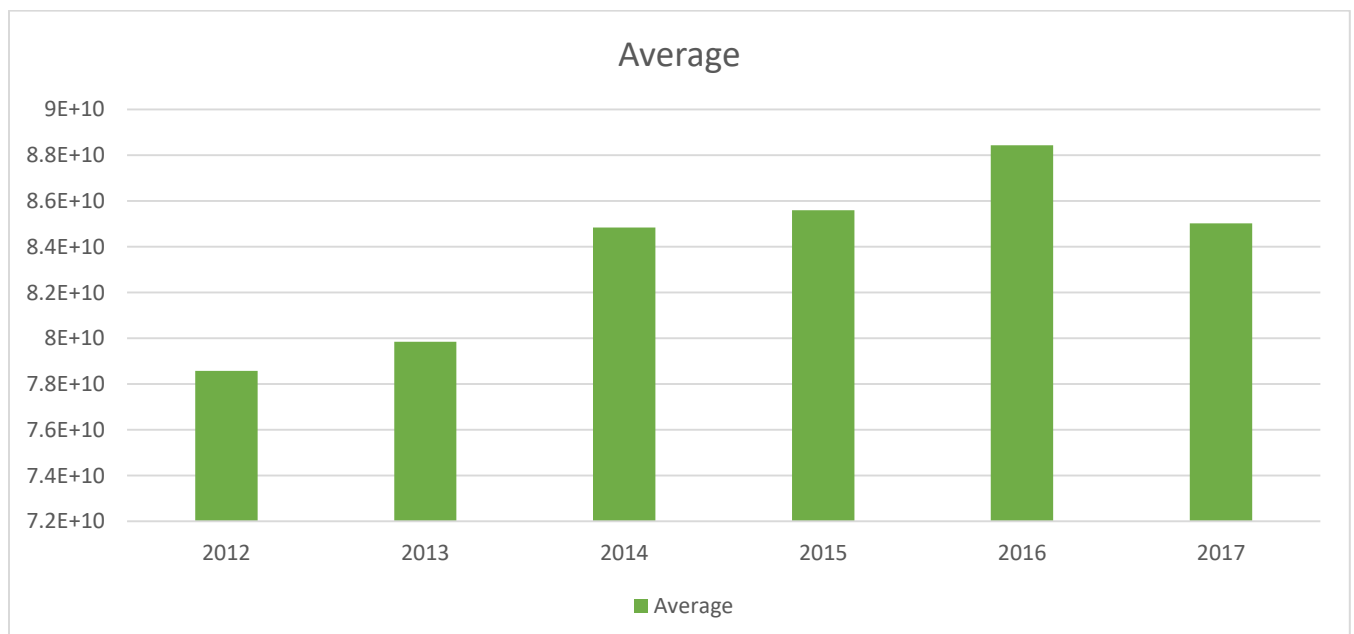
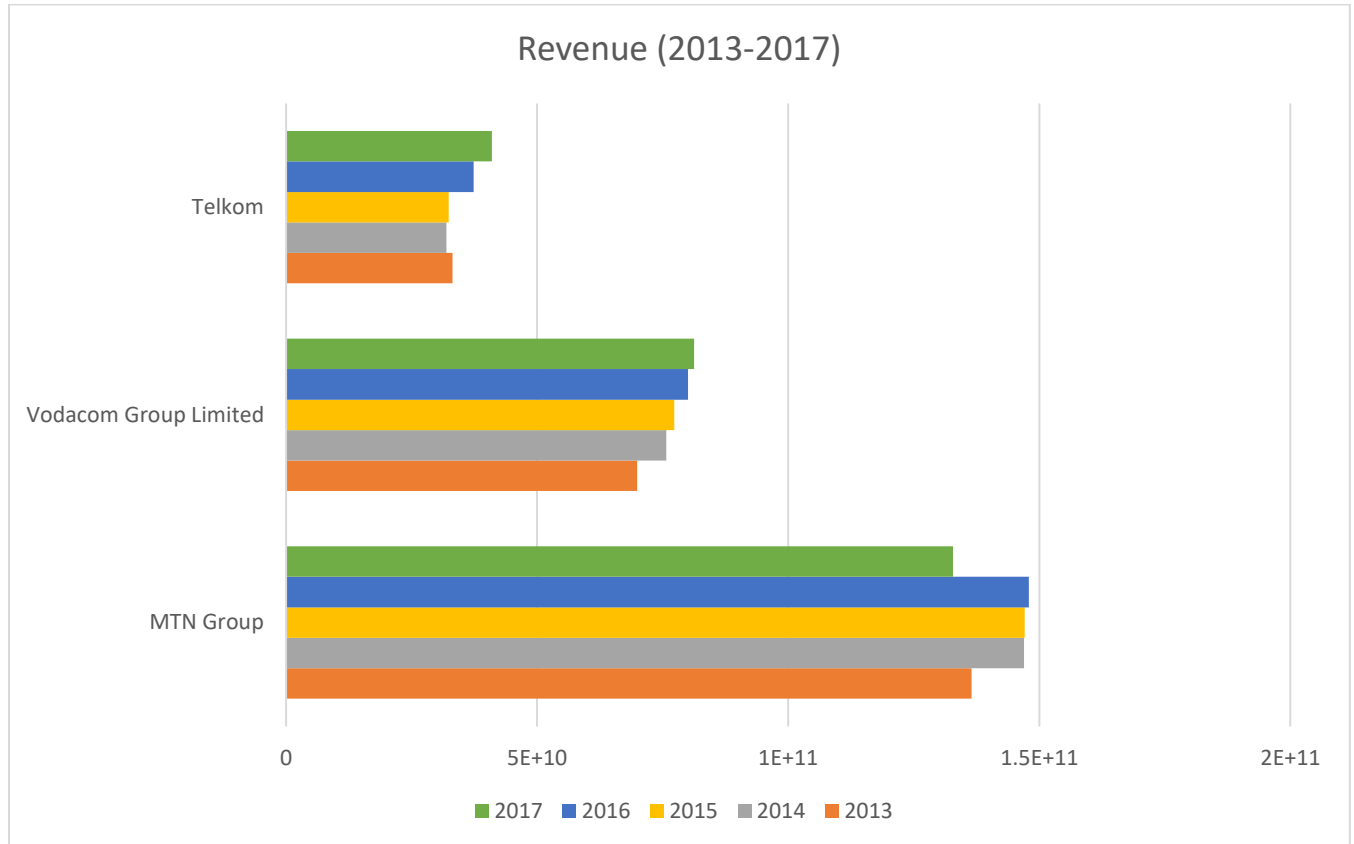




## Technology and Telecommunications Sector: Revenue & Profit

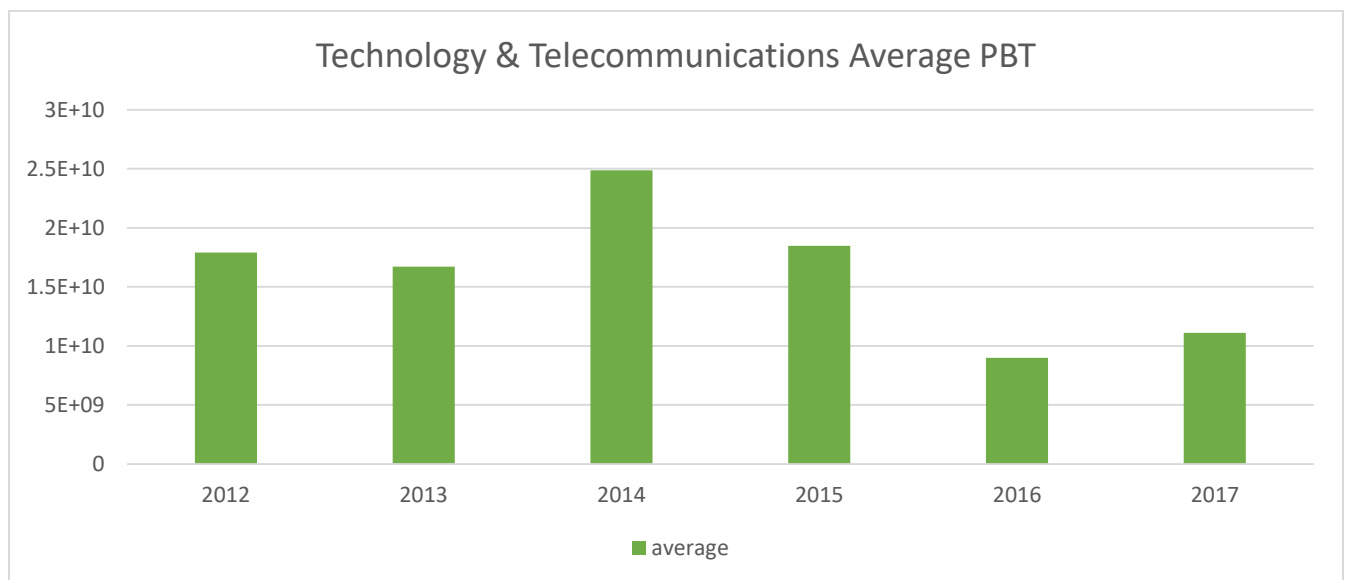
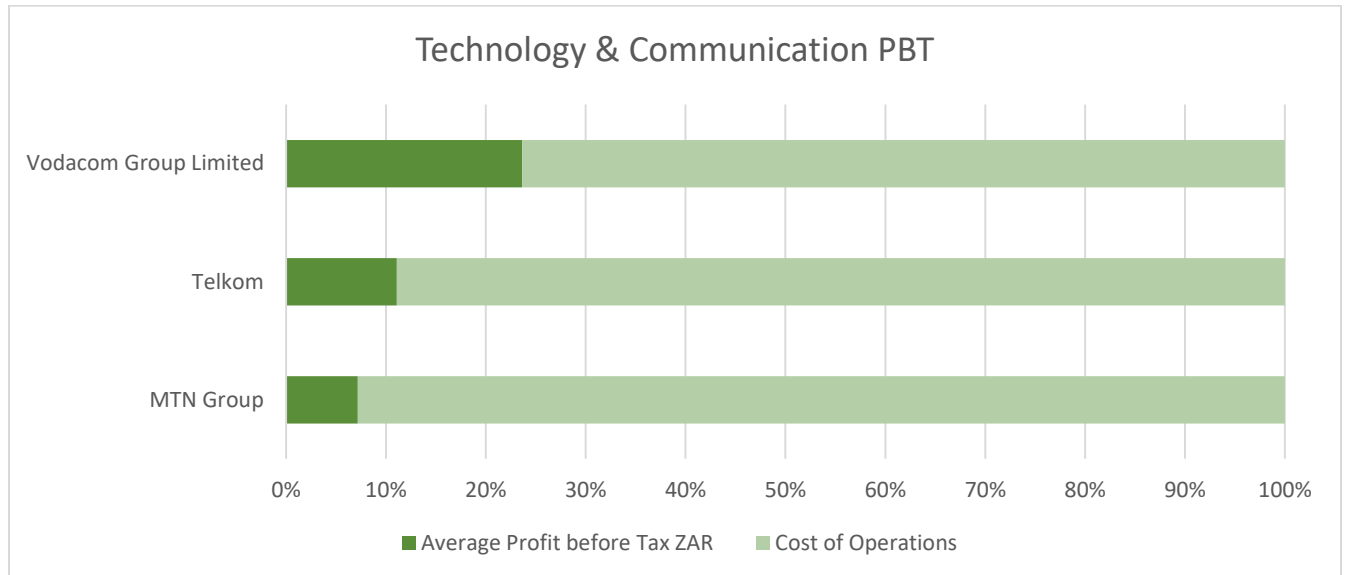
### Revenue

Average revenue growth within the technology and telecommunications sector was found to be 3% between 2015 and 2016. None of the relevant companies saw any decreases in their revenue streams.



## Profit

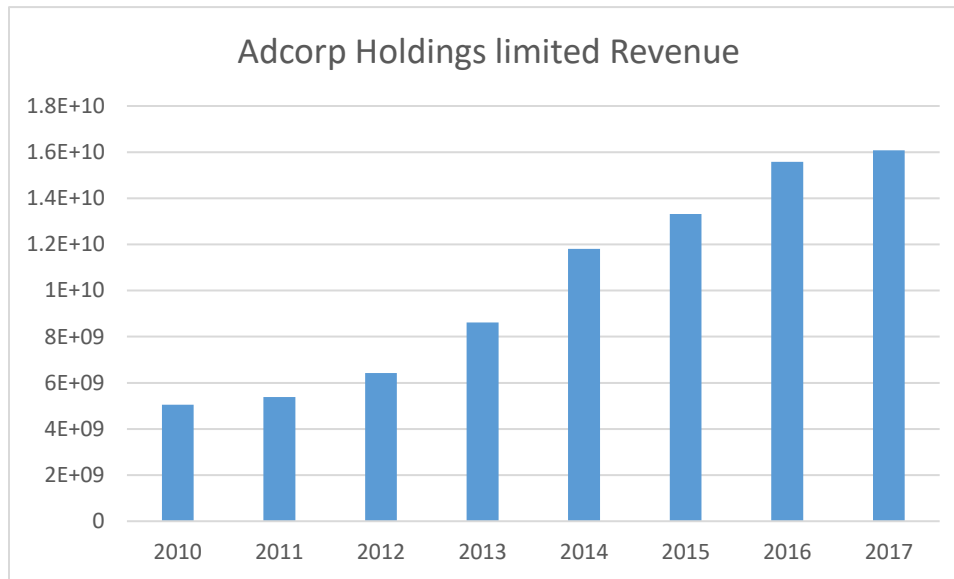
The average PBT levels in the technology and telecommunications sector reached 23.50% in 2017. All three companies have seen growth, with MTN Group most significantly increasing its PBT. In the below graph, we can see that Vodacom Group Limited takes a larger percentage of revenue as profit, and made PBT of over ZAR 19 billion in 2017. MTN Group, which took the smallest percentage of revenue as PBT, made over ZAR 9.5 billion in PBT.



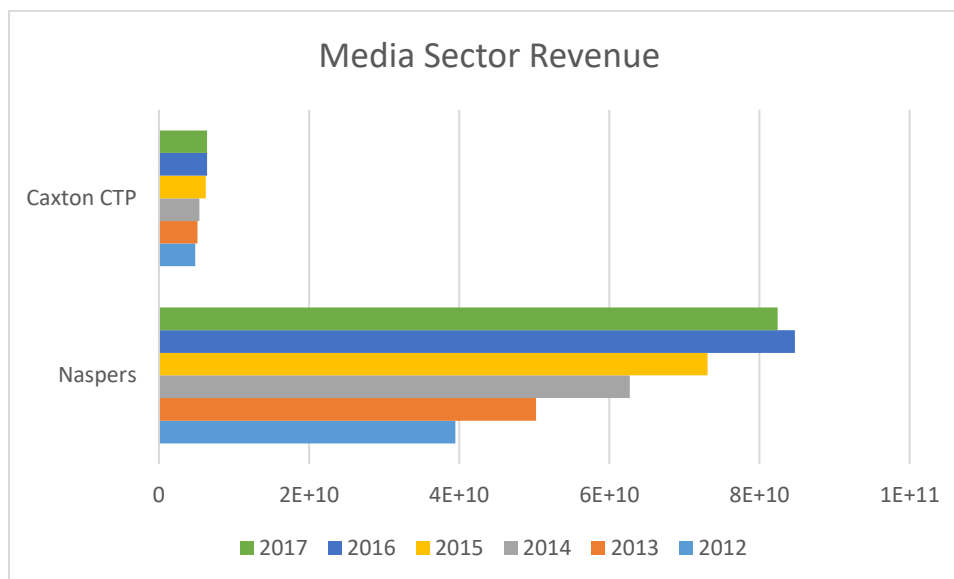
## Media Sector & Education, Bus, Training & Employment

### Revenue

The only company currently in the Education, Bus, Training & Employment sector, Adcorp Holdings Limited, continues to see year on year revenue growth. From 2016 to 2017, the company's revenue grew by 3.13%.

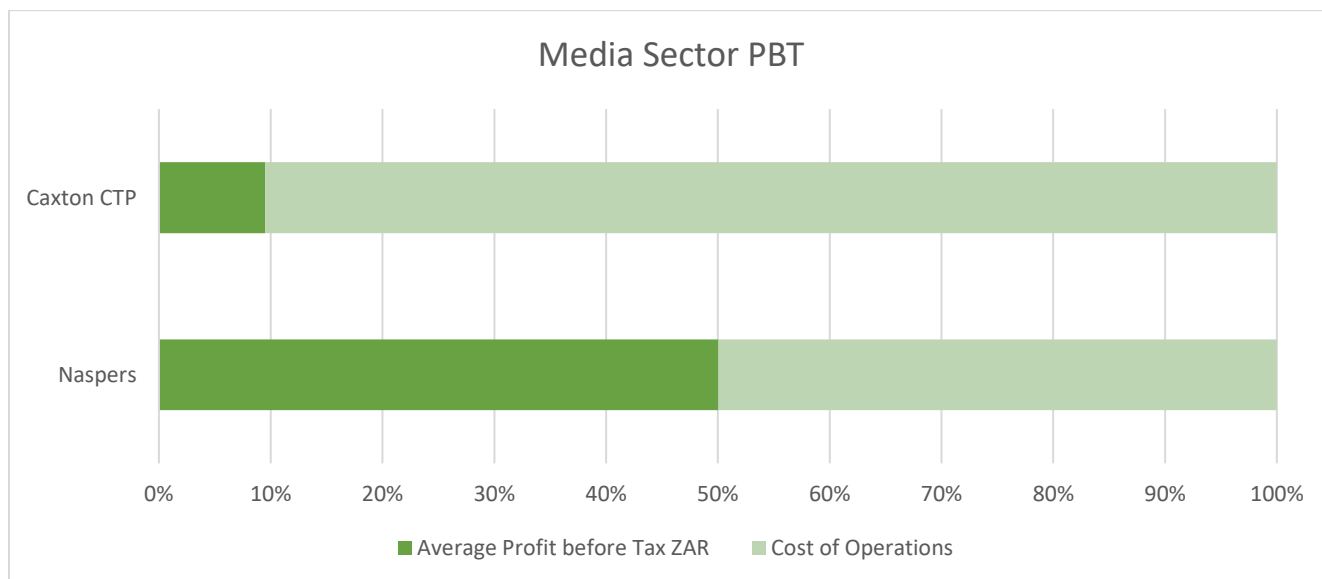
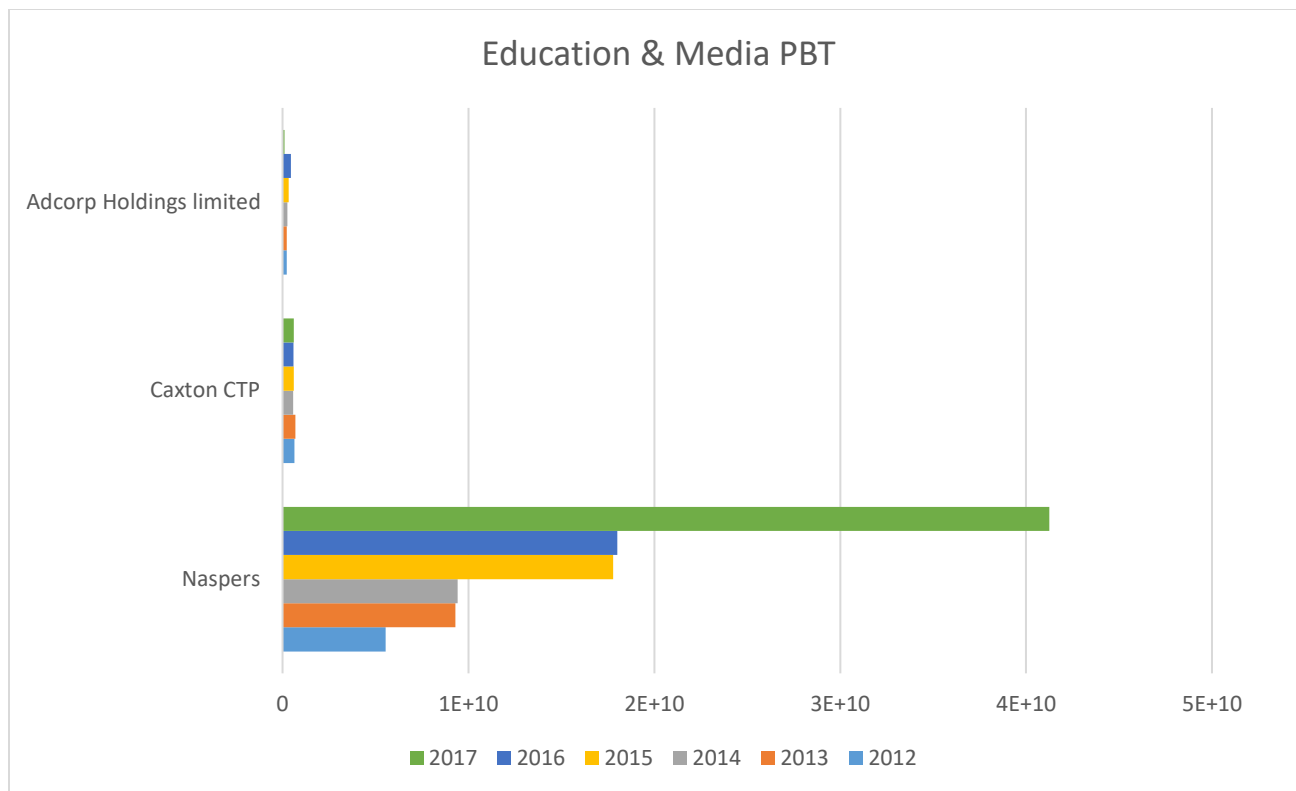


Of two companies in the media sector, Naspers by far exceeds Caxton CTP in revenue. Naspers saw a marginal loss of 2.73% in revenue, while Caxton grew by a marginal 0.03%.



### Profit

Naspers has increased their PBT by more than 128% - resulting in PBT of over ZAR 41 billion. This far exceeds its competitor Caxton CTP of ZAR 610 million. Adcorp operated at a PBT loss of 76.04%.





## Directors' Remuneration

The largest part of directors' remuneration is made up of additional benefits – contrary to how workers get paid. These benefits include pension, medical aid, car allowances and also bonuses linked to performance. Performance bonuses are usually in the form of short-term incentives (STIs) or long-term incentives (LTIs). STIs and LTIs are linked to financial performance – this could include metrics like earnings per share, profit, and revenue or market performance. LTIs are often hard to determine for an outsider as there is a lack of transparency associated with this kind of payment. These kinds of payments can be hidden in longer term share incentives. Some companies exclude LTIs from remuneration packages.

LTIs often make a large percentage of directors' total remuneration. Companies increasingly use bonuses as long-term retention plans where a portion of the bonus earned is deferred, or increase after a certain amount of years (as well as linked to performance conditions). The reporting on this is not clear, and this could prohibit the public as well as unions from seeing the full picture of directors pay.<sup>1</sup>

Similar to 2016, few companies report adequately if at all on the remuneration of employees. This makes it difficult to determine the wage gap between the higher levels (directors) and workers. This section takes a closer look at director remuneration, removing some of the guesswork for each sector.

### KING IV Continued

The previous MNC Trend Report took a closer look at King IV – the set of principles guiding reporting for listed MNCs in South Africa: *The King Report on Corporate Governance is a ground-breaking booklet of guidelines for the governance structures and operation of companies in South Africa (MNC Report, 2017).*

*Remuneration of directors is one of the most debated topics in the corporate governance arena, due to the tension between stakeholders demanding to understand directors' remuneration and the directors' desire for the privacy of their financial affairs. In line with international developments, remuneration is receiving far greater prominence in King IV (Institute of Directors Southern Africa, 2016).*

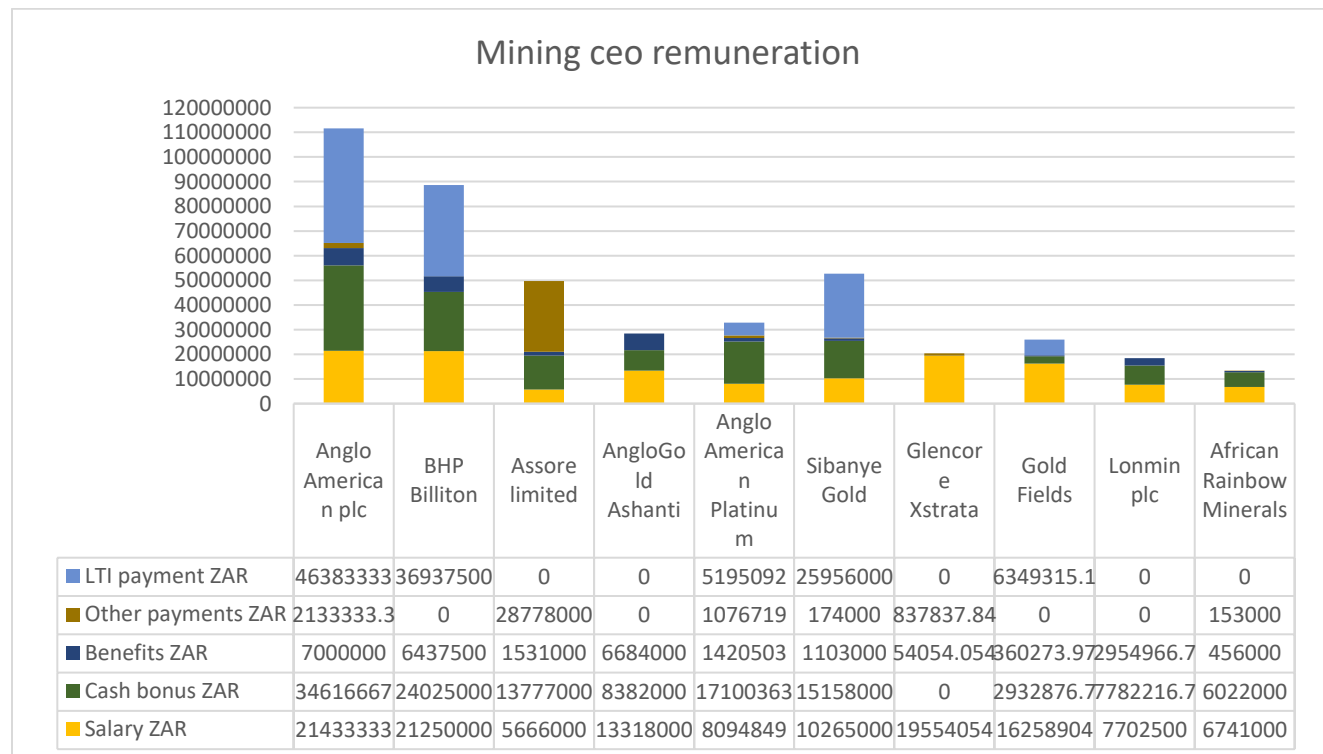
King IV specifically notes the gap between executive directors' remuneration and that of workers. King IV compels companies to address this gap, noting that executive remuneration should be 'fair and responsible'.

---

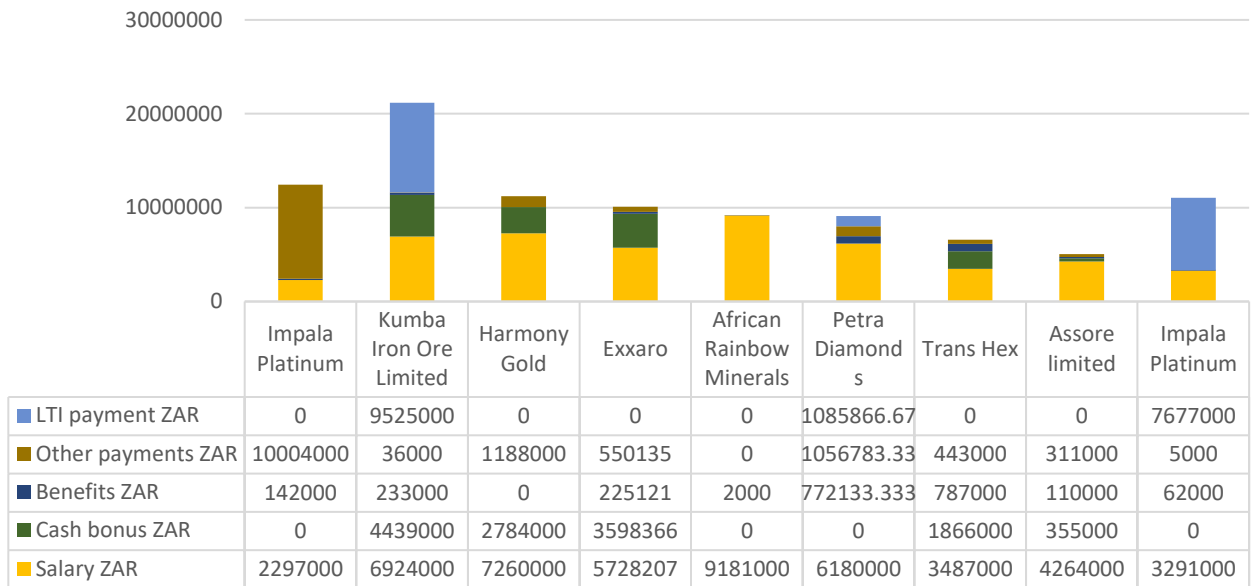
<sup>1</sup> METHODOLOGICAL NOTE: *Within this report, remuneration is considered including and excluding LTI. This is done given the fact that LTIs are not exercised to the same extent in every year and could, therefore, distort the true nature of remuneration packages and trends.*

## Mining Sector

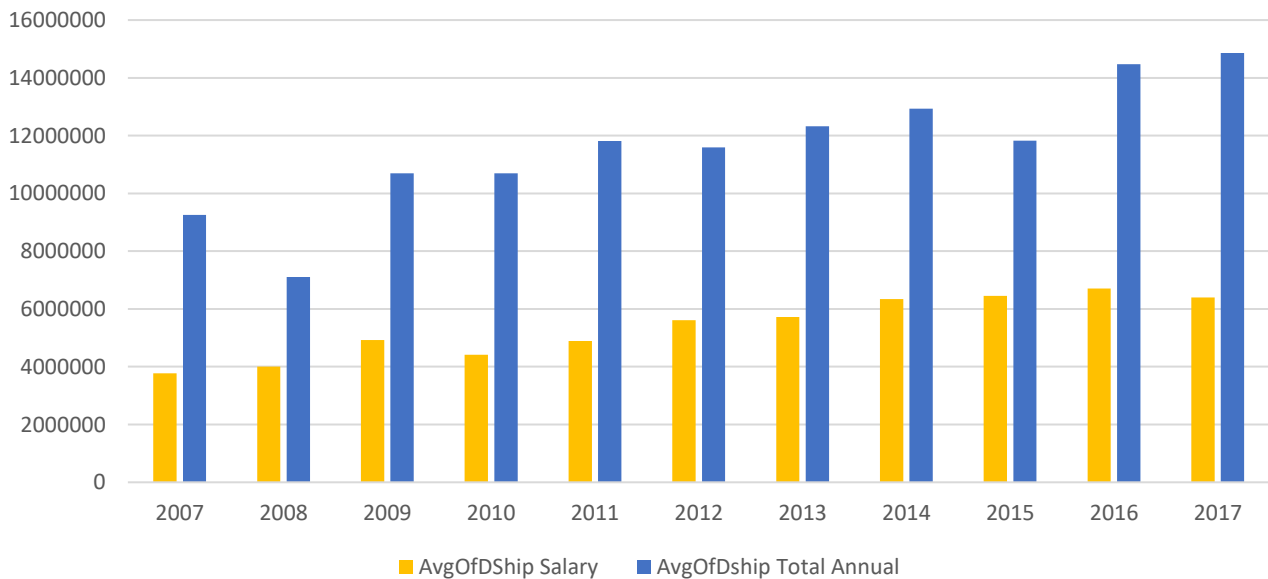
In the mining sector, executive salary on average decreased by 4.73%, while total remuneration increased by 2.65%. Non-Executive salaries decreased on average by just over 10%, however total annual salaries decreased by only 2.51%. Anglo American plc CEO Mark Cutifani is the highest paid CEO in this sector, with over ZAR 111 million as total remuneration package, ZAR 46 million of which was paid as an LTI. BHP Billiton CEO Andrew Stewart Mackenzie's annual remuneration package came to over ZAR 51 million. Mackenzie was also paid an LTI of ZAR 36.9 million, making him the second highest paid in this sector. Lonmin plc, Impala Platinum, Trans Hex, Sibanye Gold, Harmony Gold and Anglo Gold Ashanti all operated at a loss, but still managed to pay their CEOs respectively: ZAR 18.4 million; ZAR 12.4 million; ZAR 65 million; ZAR 52.6 million; ZAR 11 million; and ZAR 28 million.

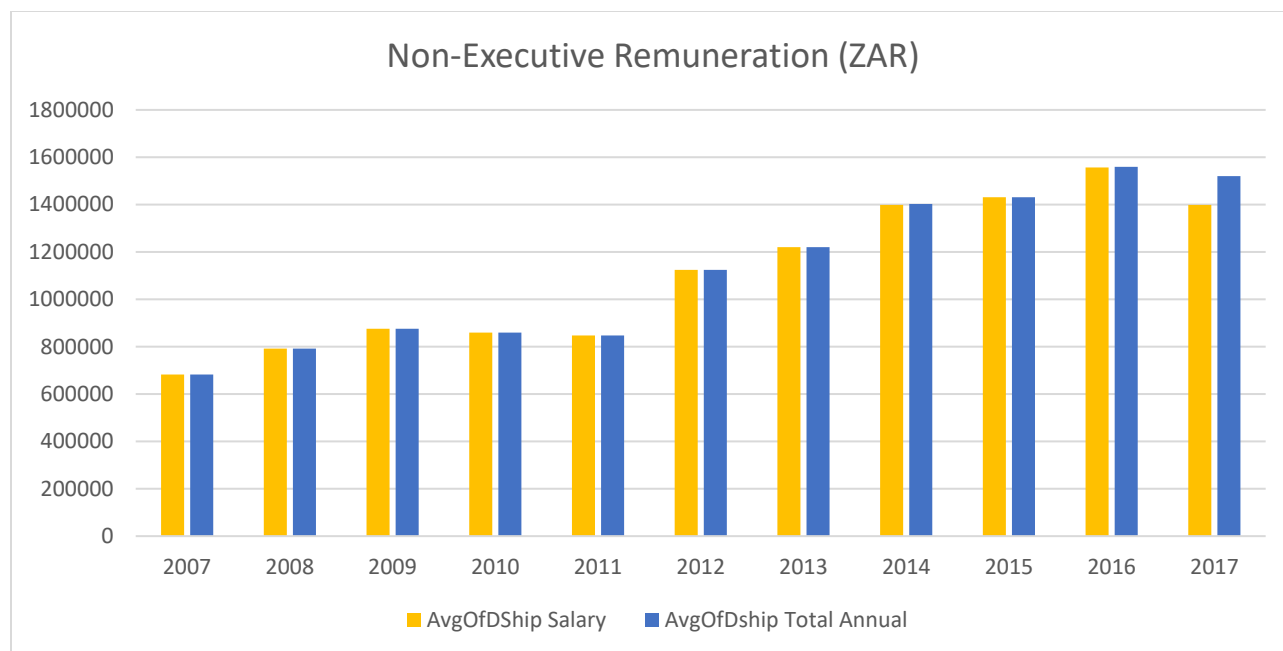


## Mining ceo Remuneration



## Executive Remuneration (ZAR)



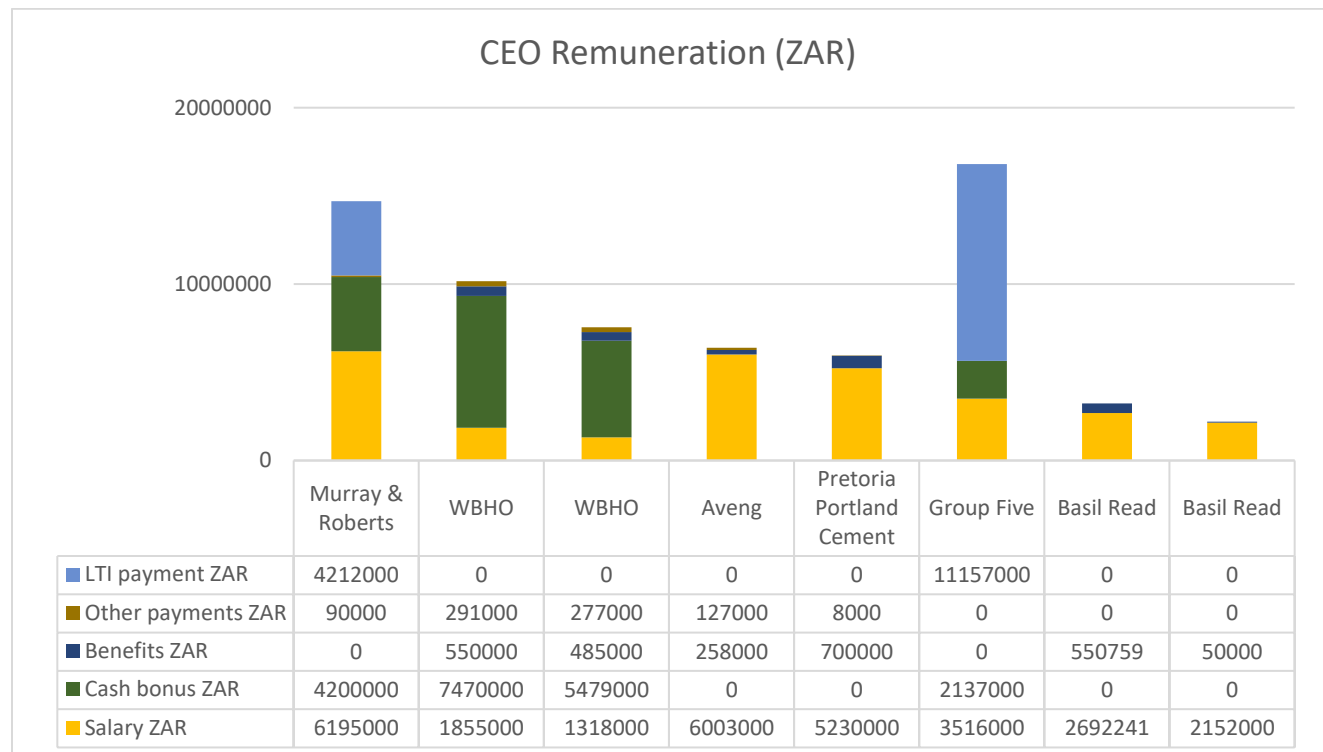


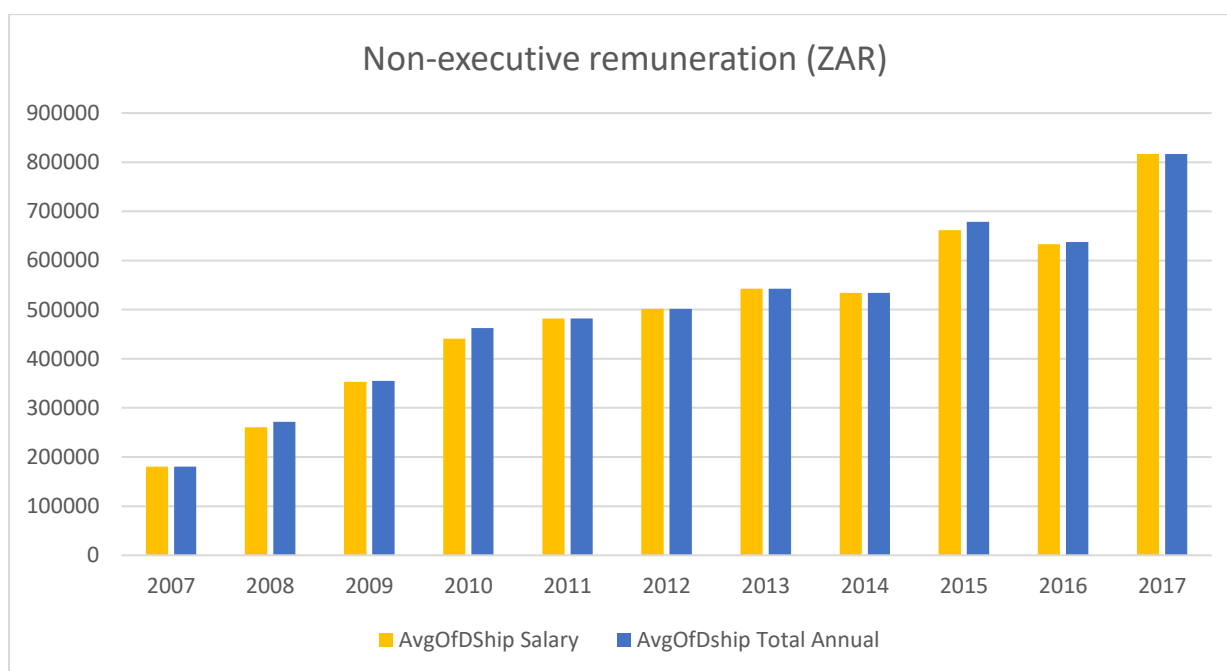
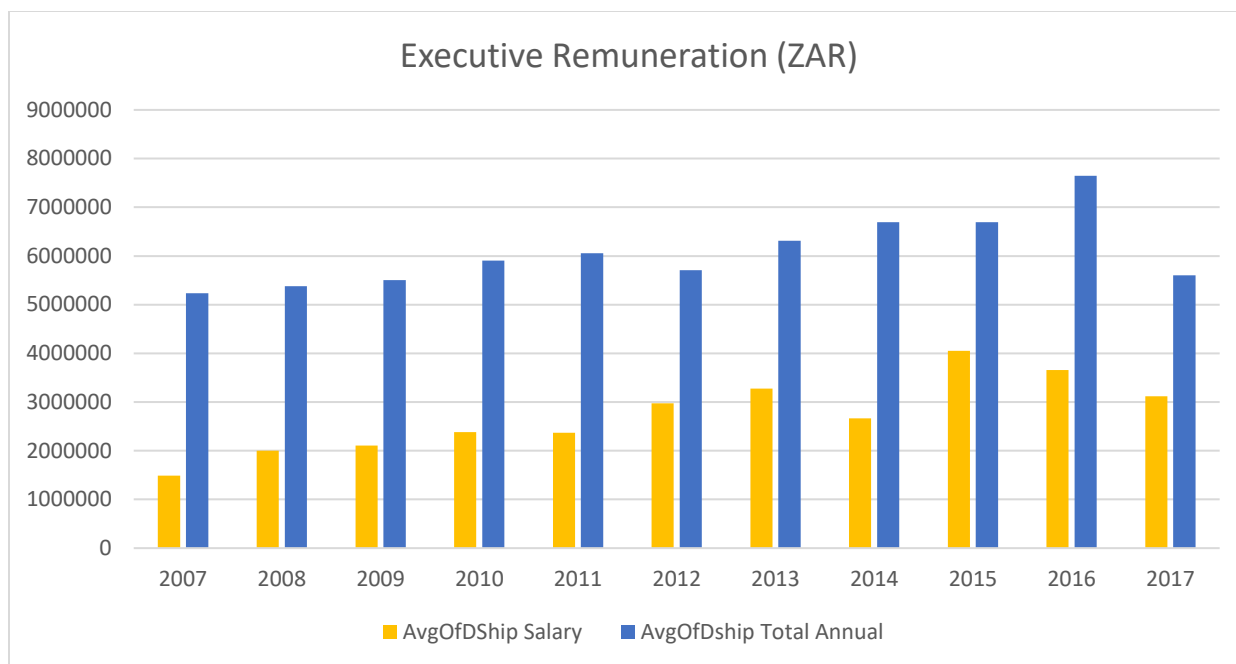
## Construction

The highest paid CEO in this sector was Eric Vemer of group Five, at ZAR 16,810,000. His salary is mostly made up of an LTI of over ZAR 11 million. Only CEOs in this sector received LTIs – Vemer of Group Five, and Henry Johannes Laas of Murray & Roberts who received an LTI of ZAR 4 million on top of his annual remuneration package of ZAR 10.4 million.

Construction sector Non-Executive Directors: 29% average increase in year-on-year total remuneration growth rate between 2016 and 2017.

Construction sector Executive Directors: -26% average decrease in year-on-year total remuneration growth rate between 2016 and 2017.

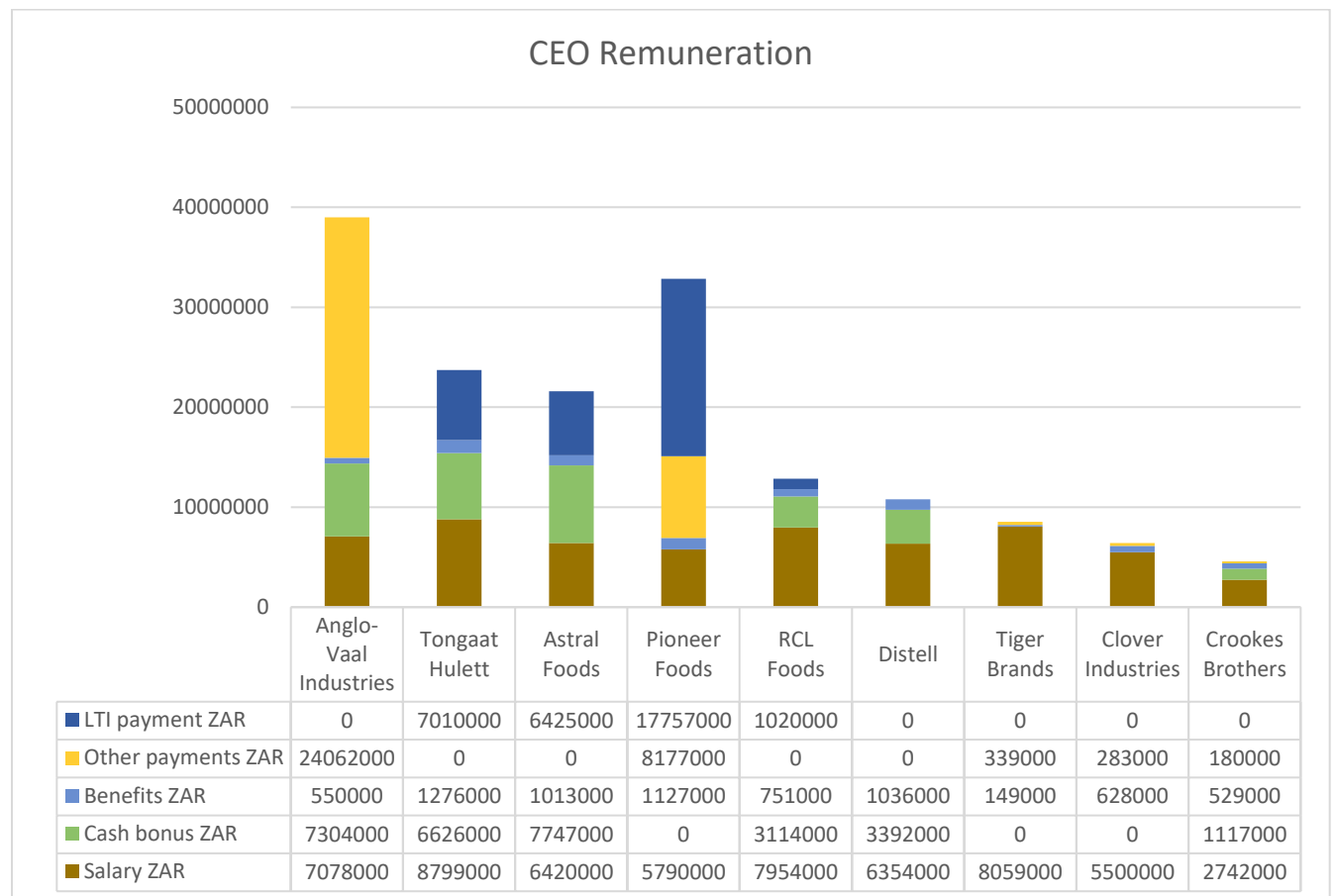


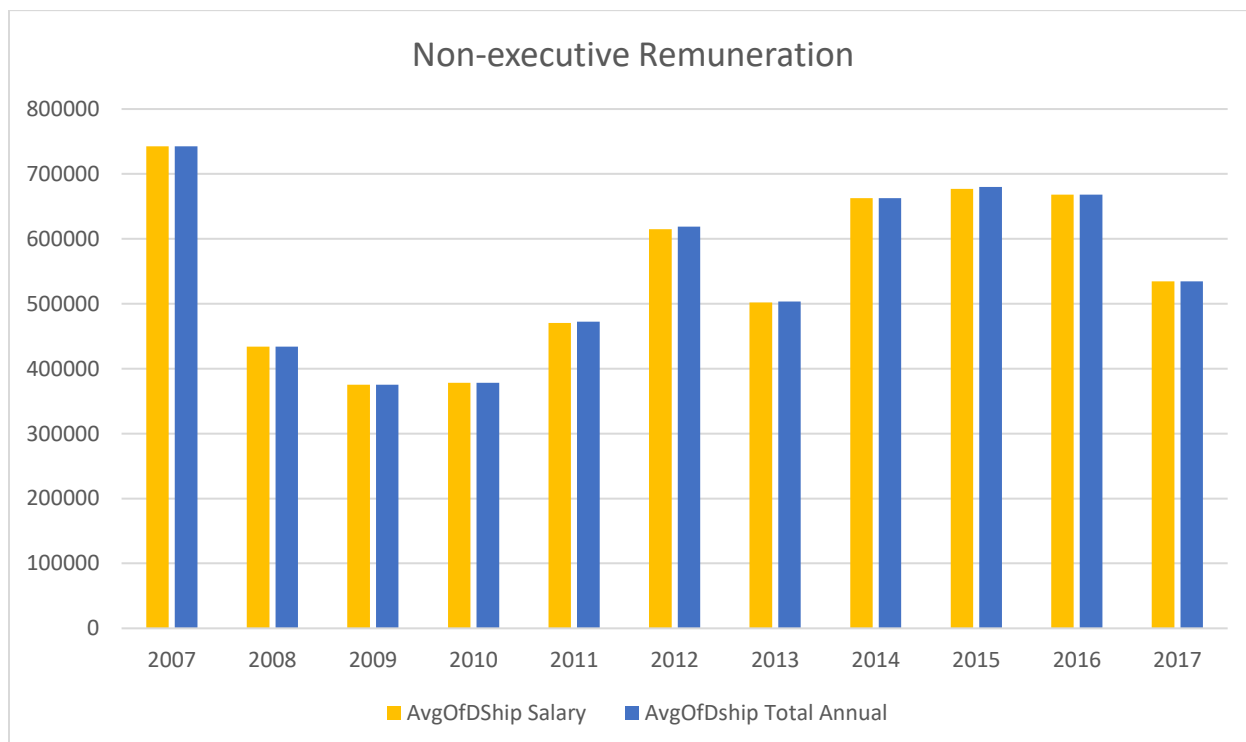
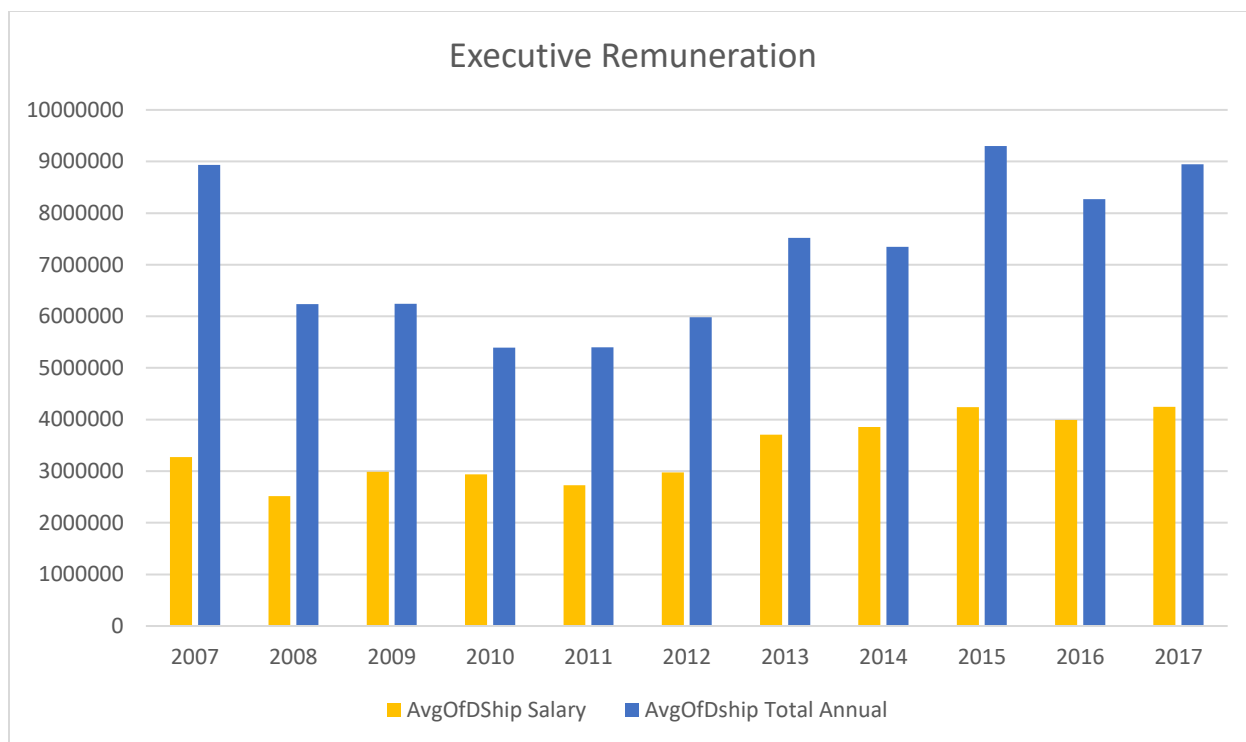


## Food and Beverage

Non-executive total remuneration decreased by 20% from 2016 to 2017. Executive remuneration, in turn, increased by just over 8%.

All CEOs in this sector served a full year in 2017, and Anglo-Vaal Industries CEO Simon Crutchly was the highest paid at a total remuneration package of ZAR 38.9 million. Crutchly was not paid an LTI, but rather received non-itemised 'other payments' of over ZAR 24 million.





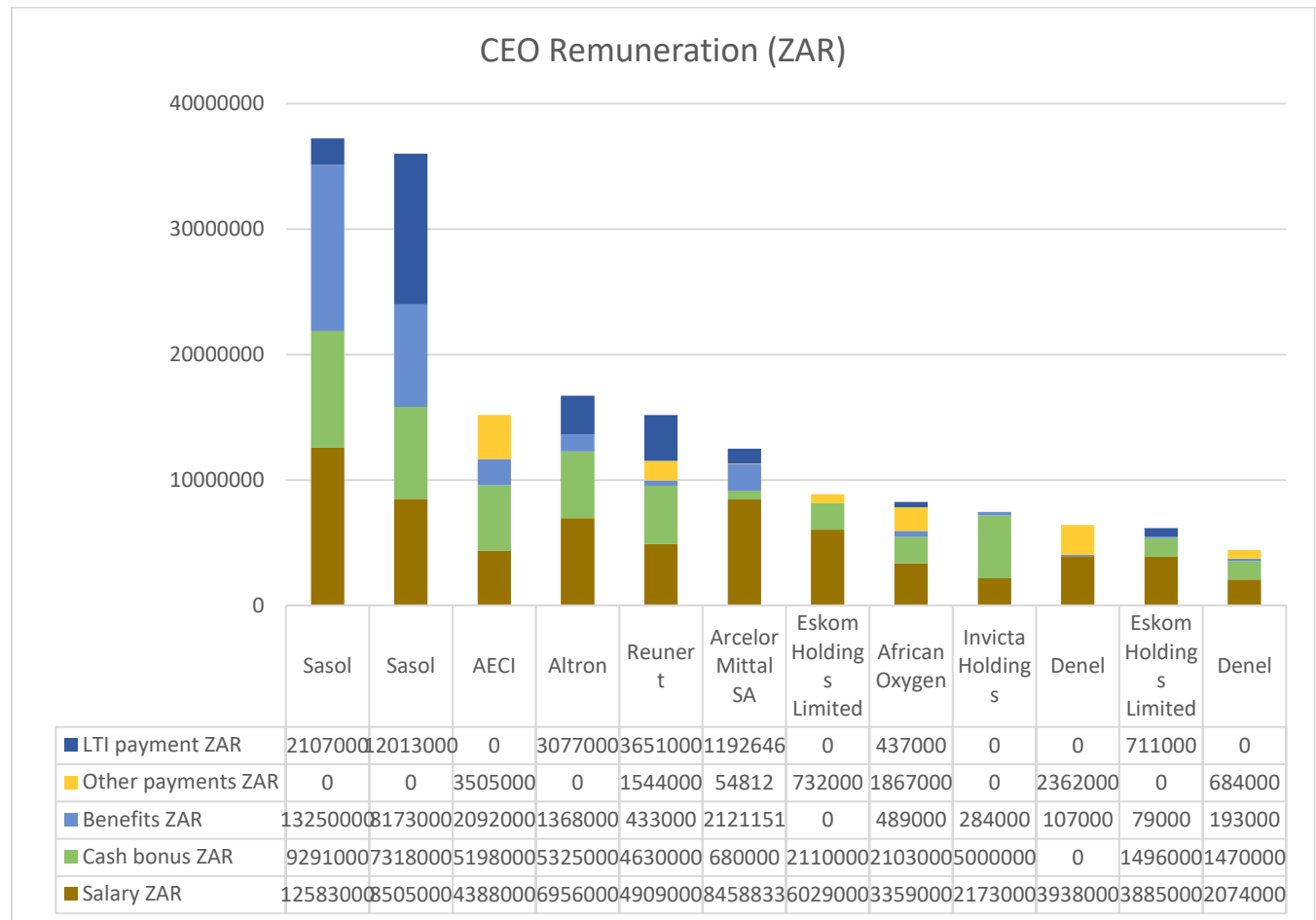


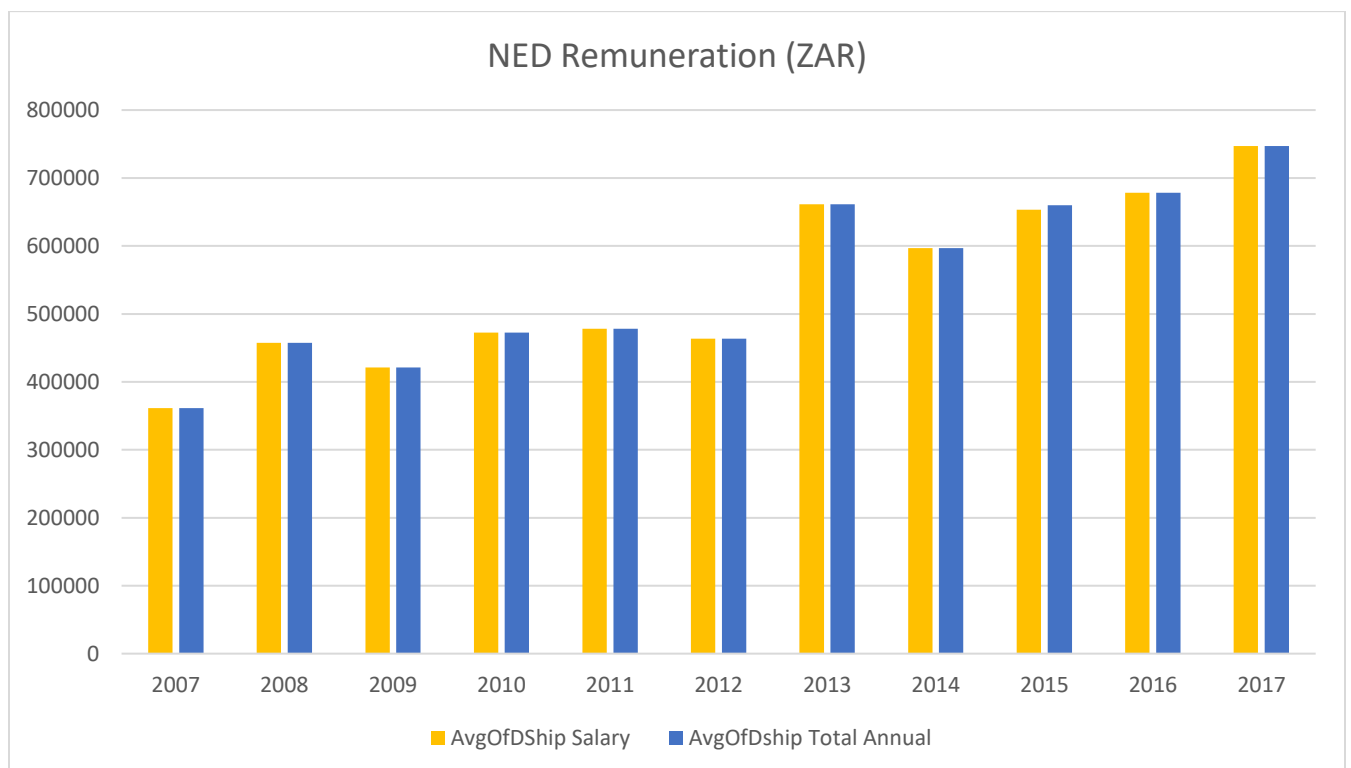
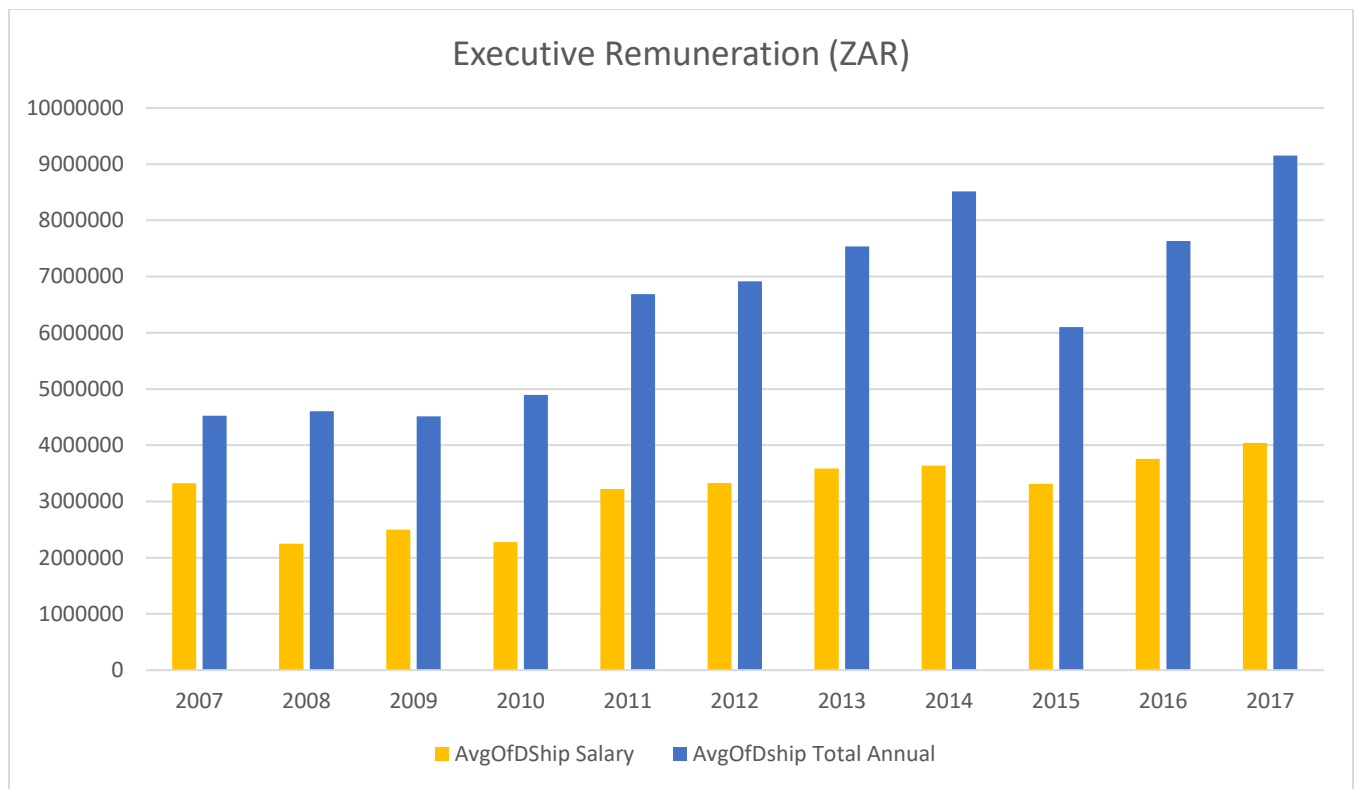
## Industrial

Executive and Non-Executive Director's total remuneration increased 19% and 10% respectively between 2016 and 2017.

The highest remuneration package (excluding and including LTIs) was awarded to the Sasol CEO, Stephen Cornell, who only served for part of the year, to the amount of ZAR 37,231,000. This includes an LTI payment of ZAR 2 million.

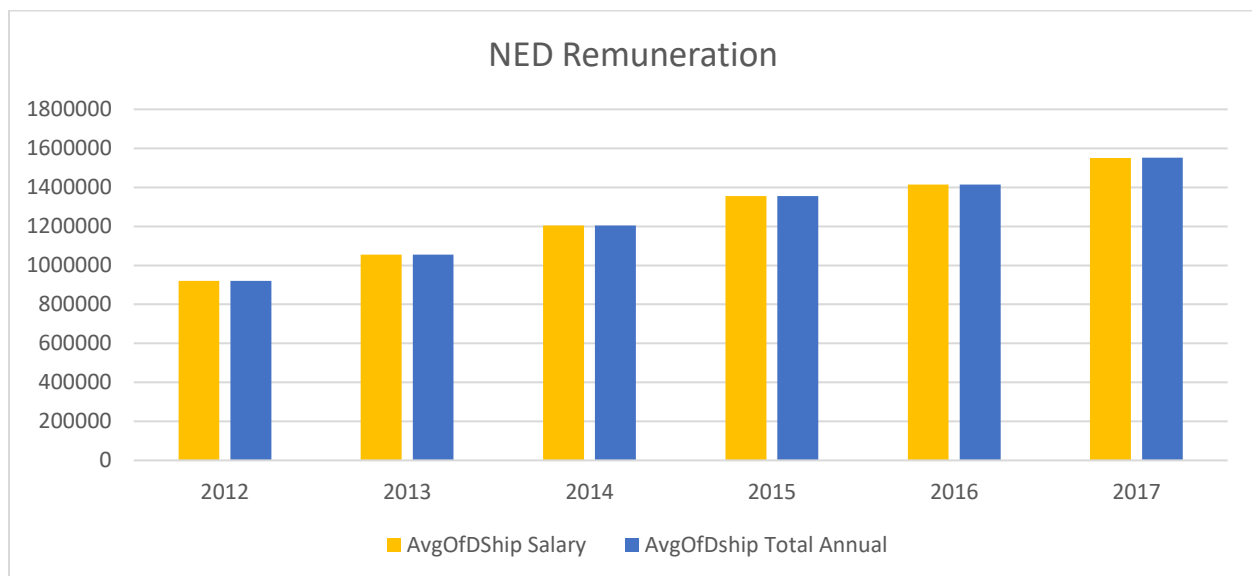
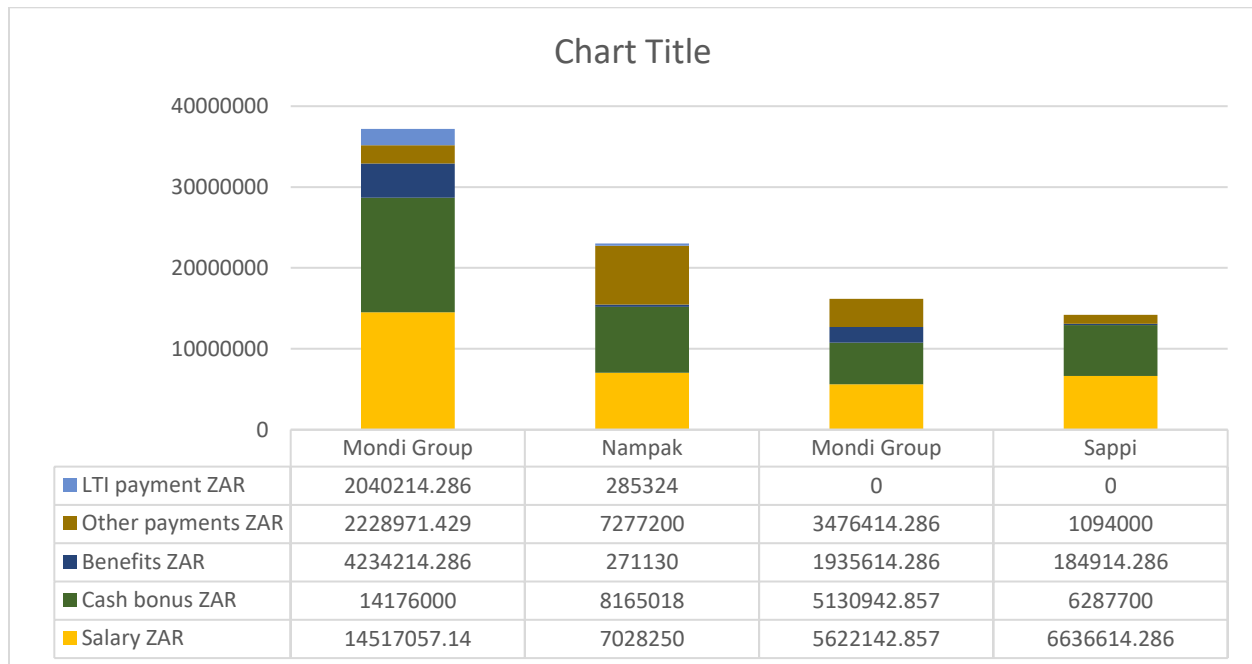
Sasol, Denel and Eskom Holdings Limited changed CEO's in the year under review.

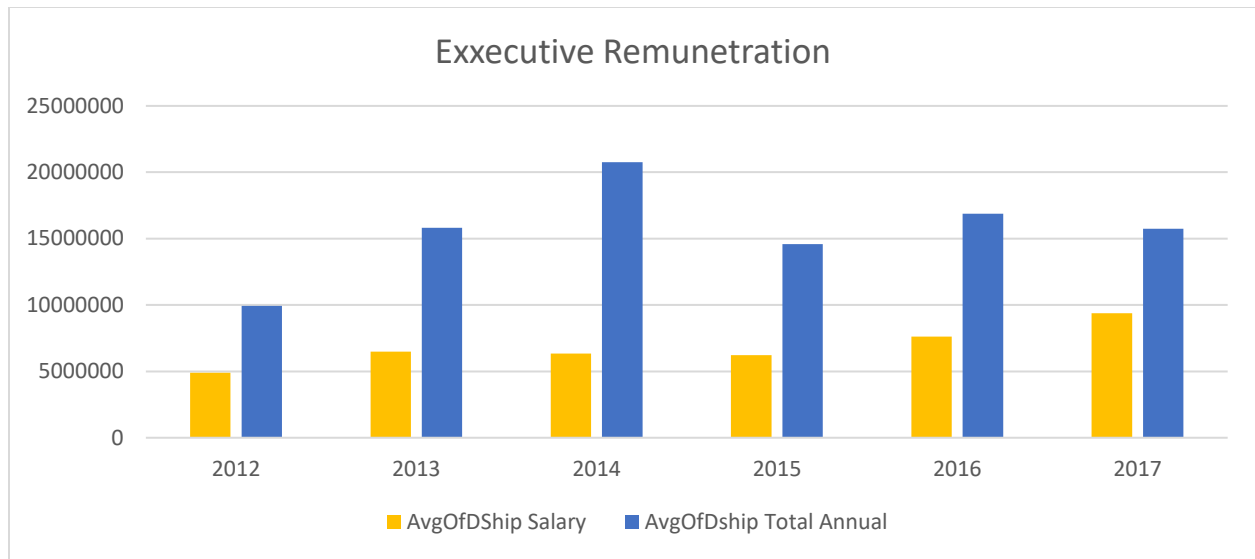




## Paper & Packaging

Peter Oswald of Mondi Group earned the top spot in total remuneration in this sector. He earned over ZAR 37 million, including an LTI of ZAR 20.4 million. He did not serve a full year.

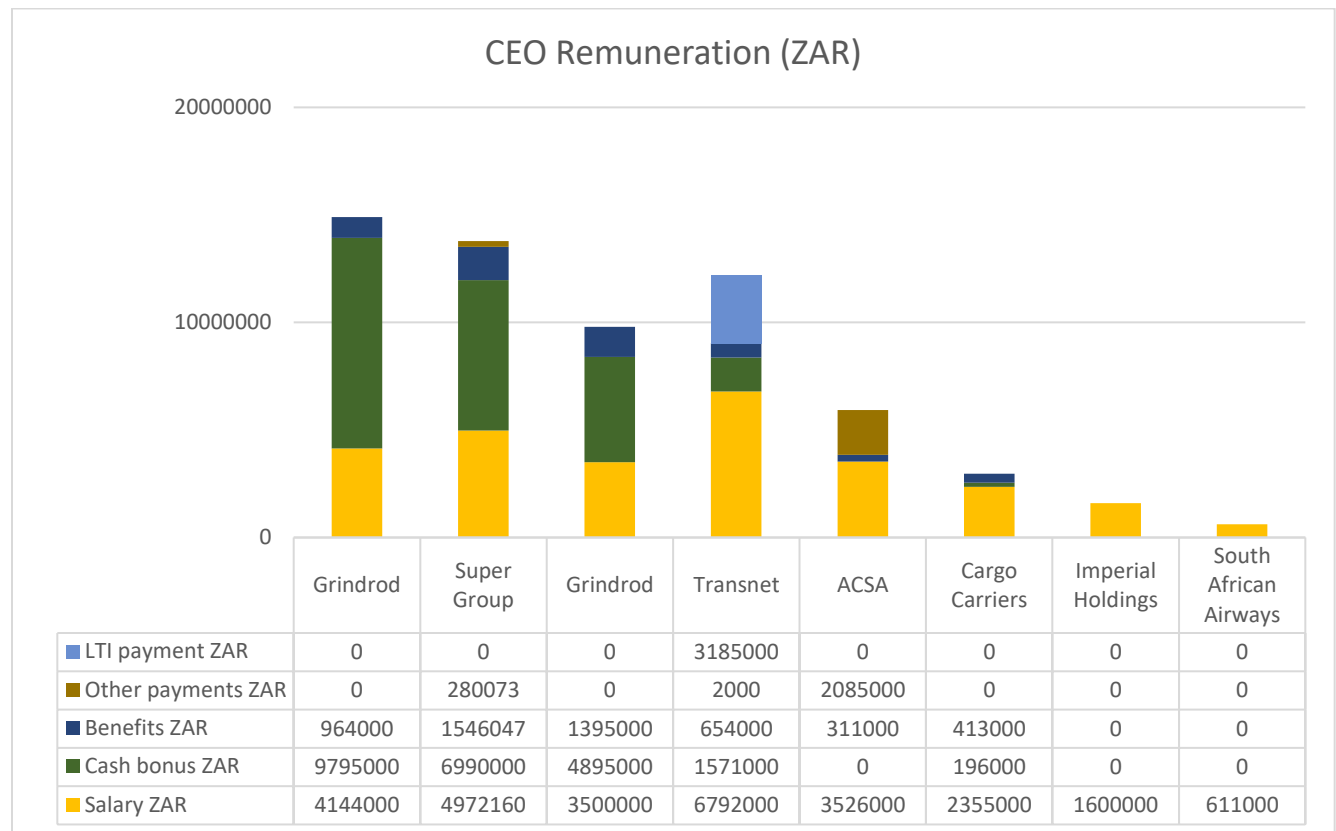


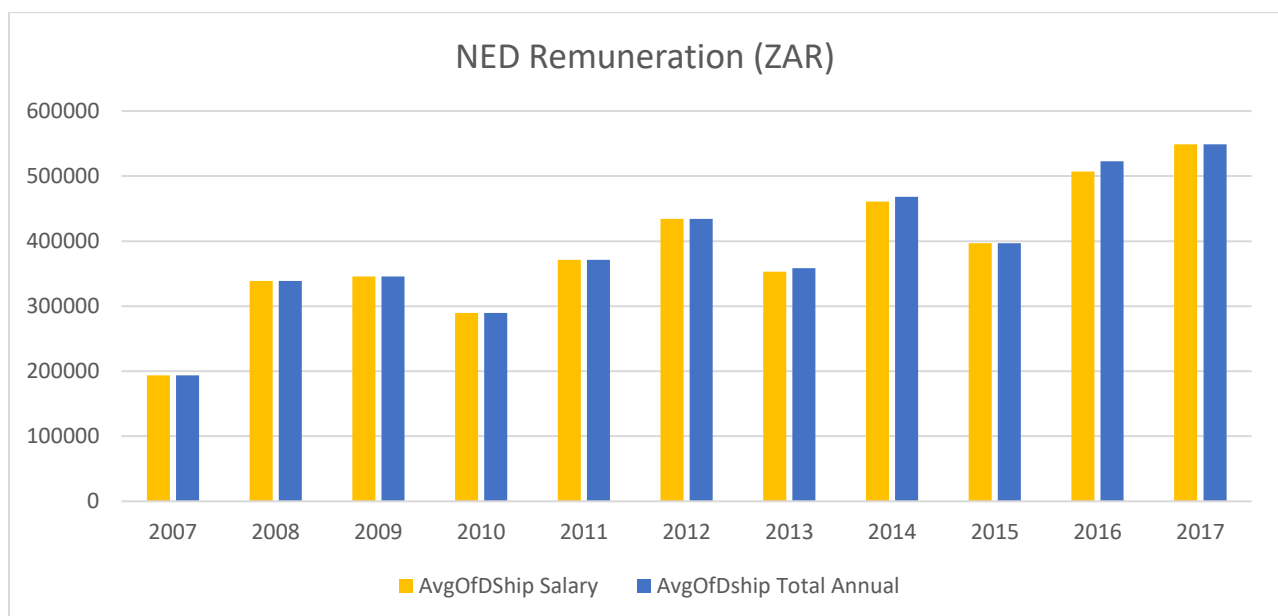
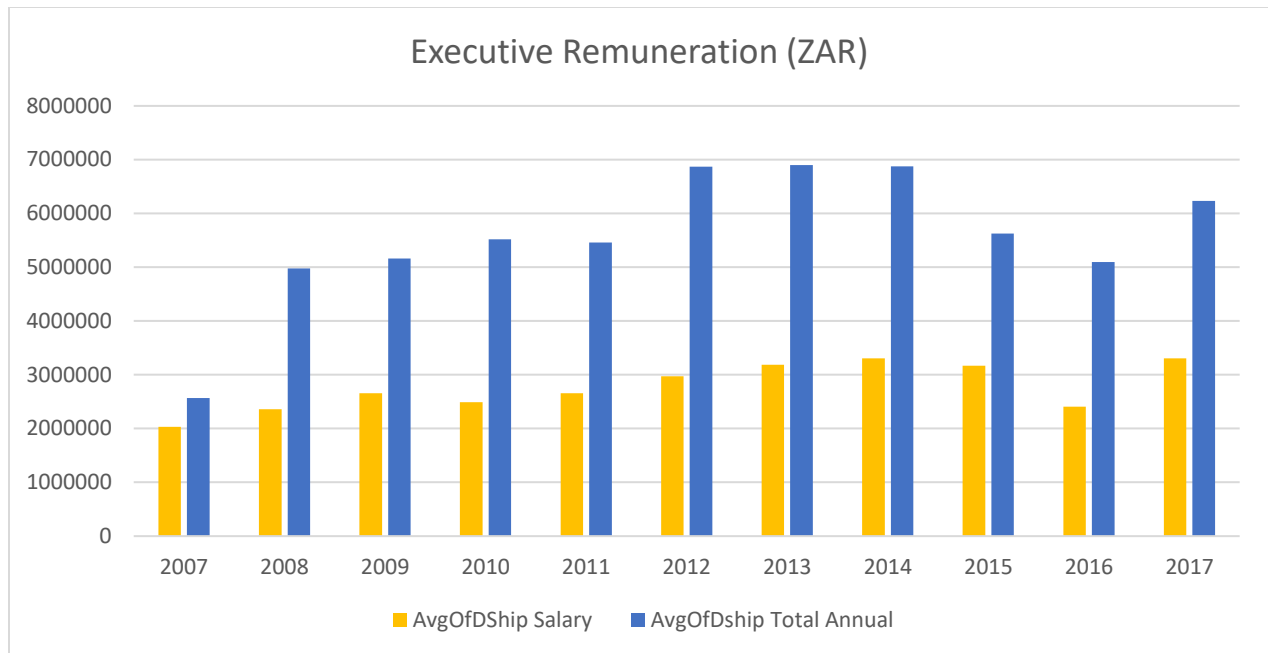


## Transport

On average, annual growth in Executive Director remuneration increased for the first time since 2014 by 22.3%. Non-Executive remuneration increased between 2016 and 2017 (4.94%).

The highest remuneration package was awarded to Grindrod CEO, Alan Olivier, to the amount of R 14,903,000. Olivier took early retirement in July 2017. The only reported LTI payment was made to the CEO of Transnet who received ZAR 3 million. In the case of Imperial Holdings, it was reported that CEO Mark Lamberti was paid in total ZAR 16 million, with no information on particulars (however, this is an improvement from not disclosing any CEO remuneration information in 2016. SAA also had no clear indication of any payments aside from salary.



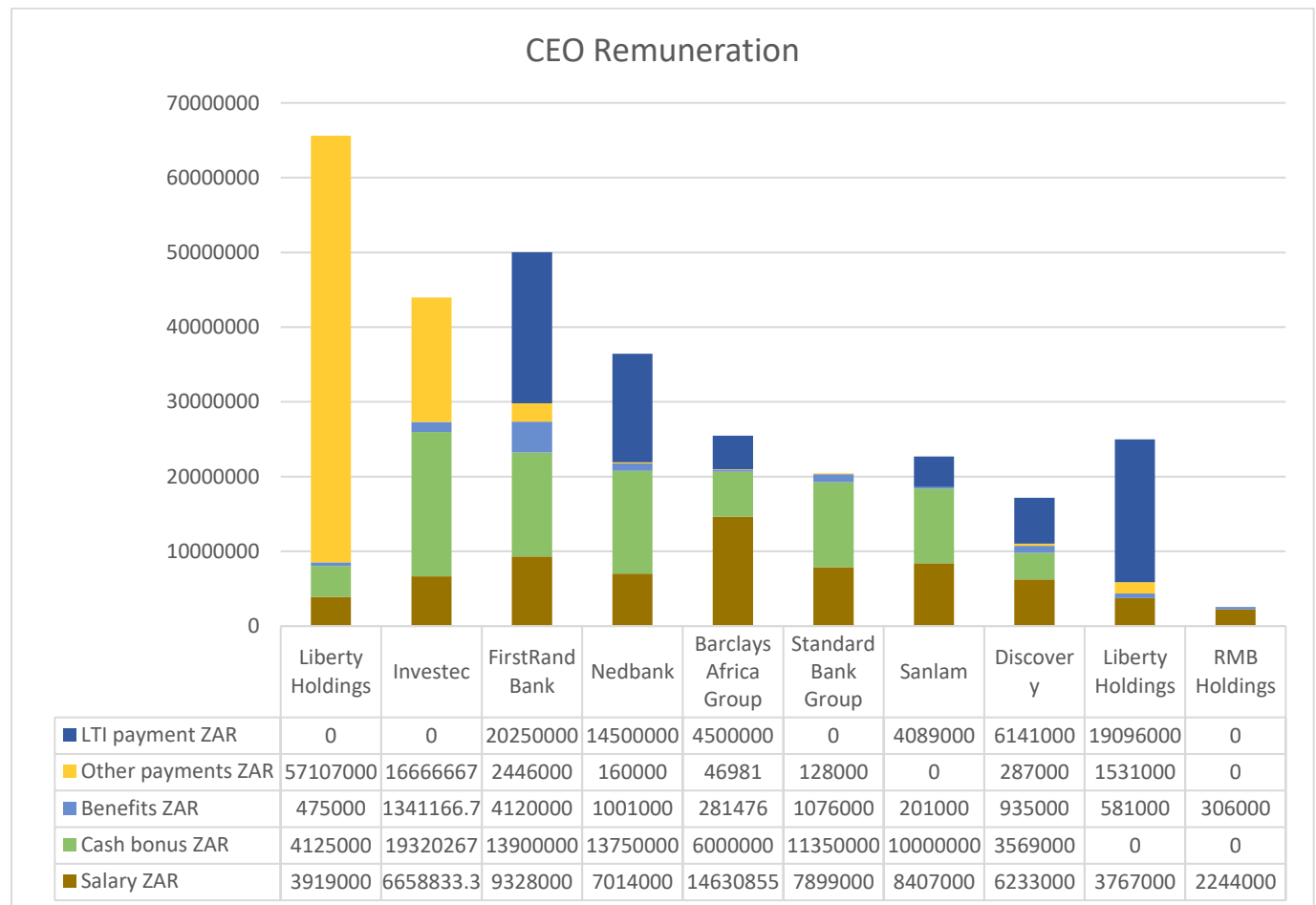


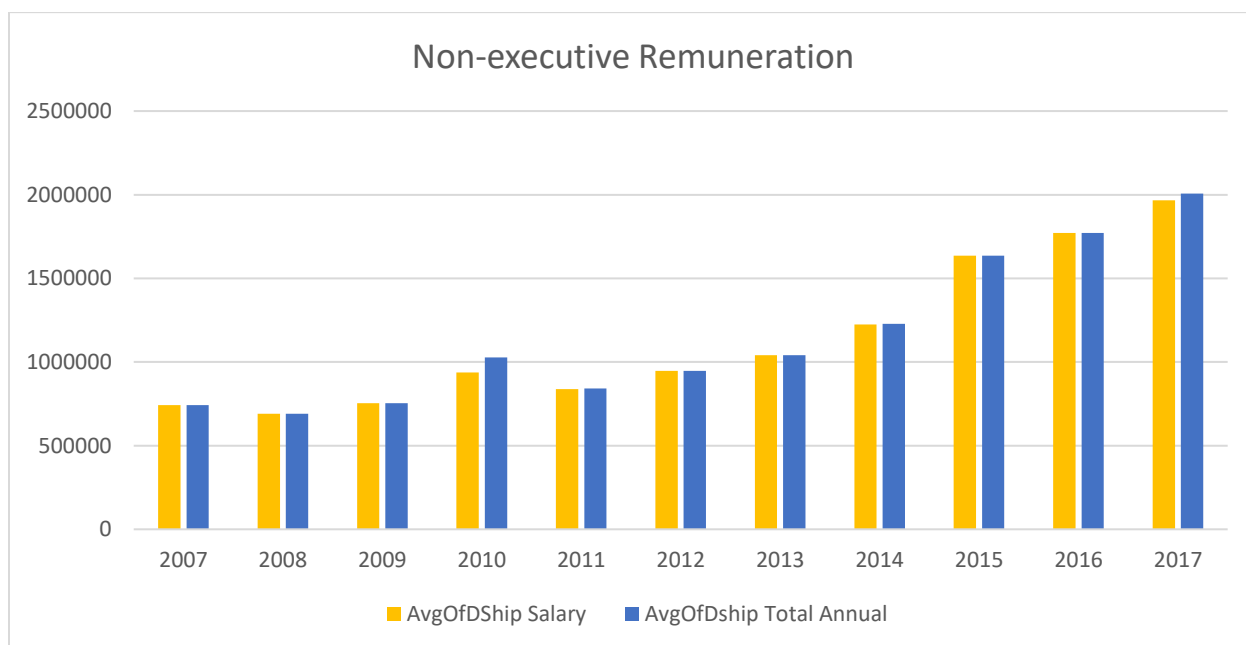
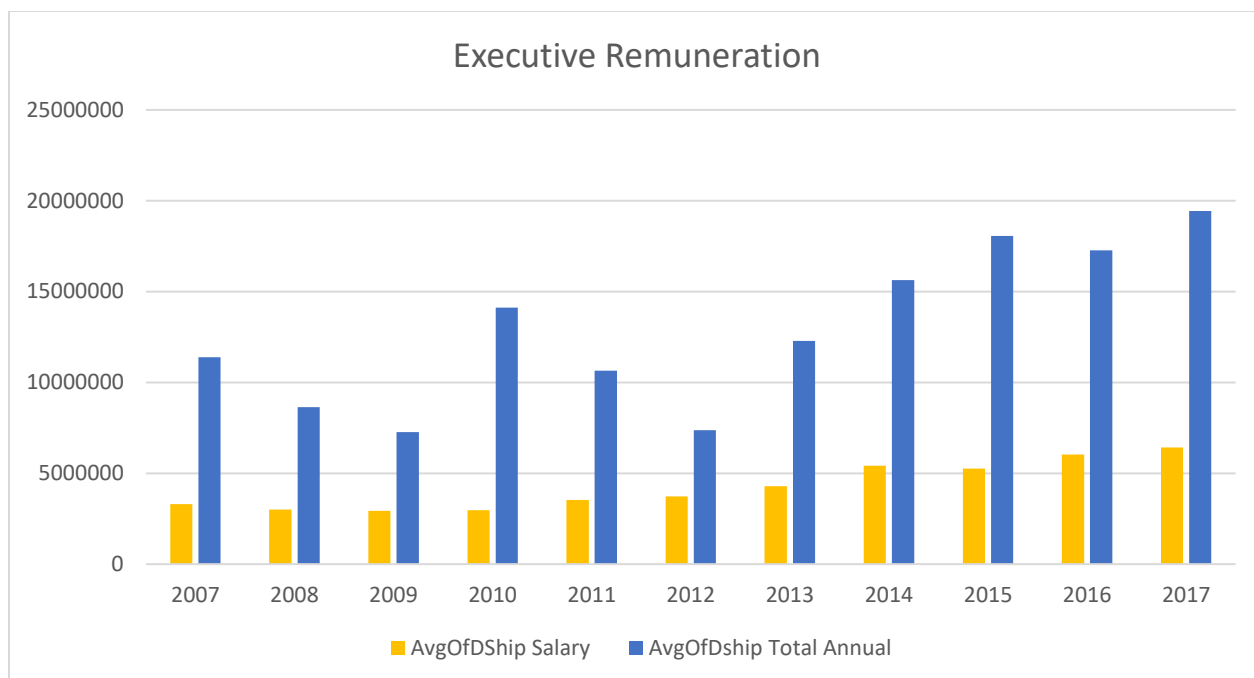
## Banking & financial Services

Banking and financial services sector Non-Executive Directors: 13.27% increase in average year-on-year remuneration growth rate between 2016 and 2017.

Banking and financial services sector Executive Directors: 12.47% increase in average year-on-year remuneration growth rate between 2016 and 2017.

Liberty Holdings changed CEO during the year. CEO Thabo Dloti resigned with immediate effect in May 2017 and was replaced by David Munro. David Munro was the highest paid CEO of 2017 with ZAR 65,626,000 in total remuneration. In this sector, FirstRand's CEO Johan Burger (set to retire in 2018) received the biggest LTI at ZAR 20 million.



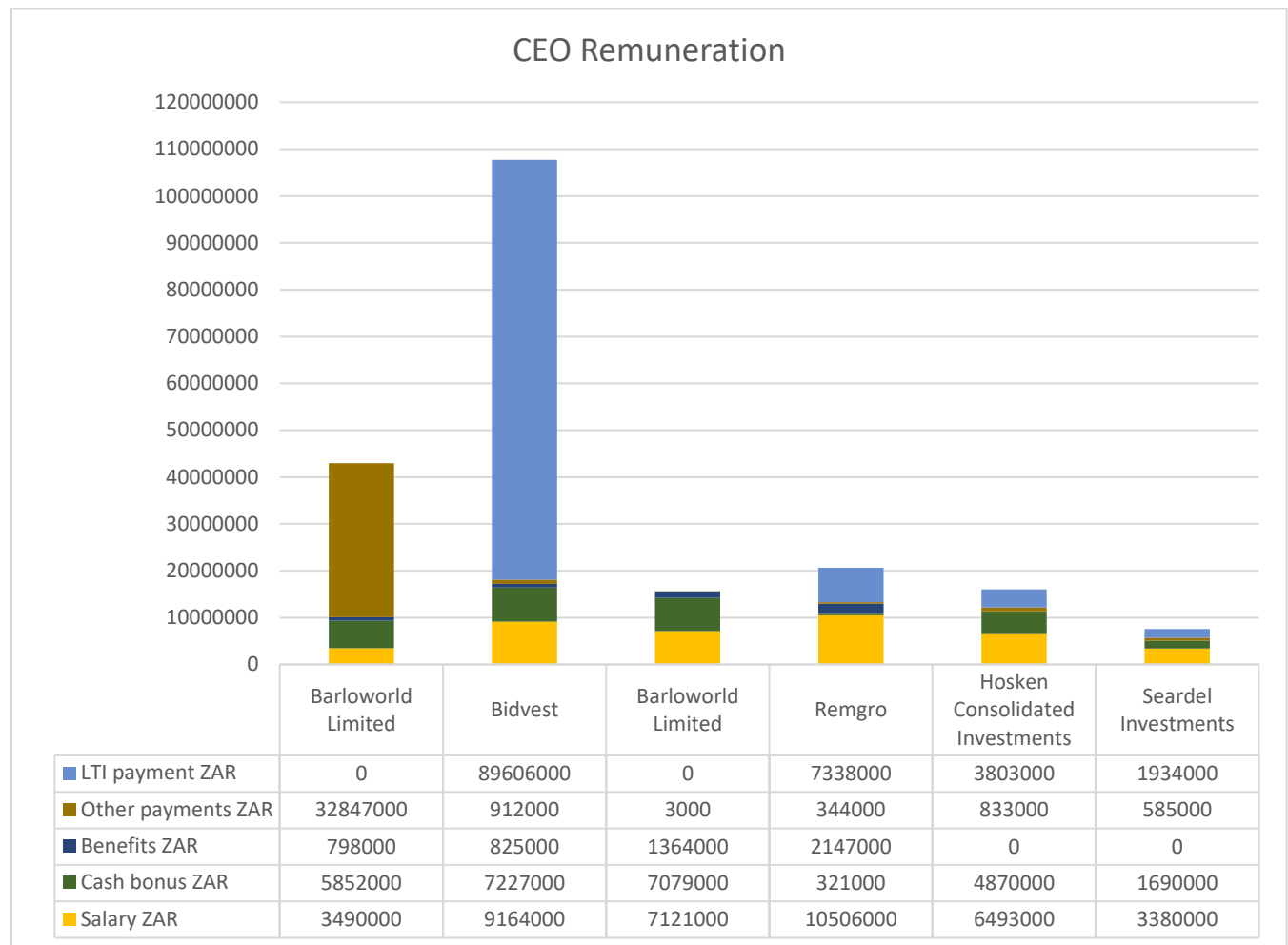


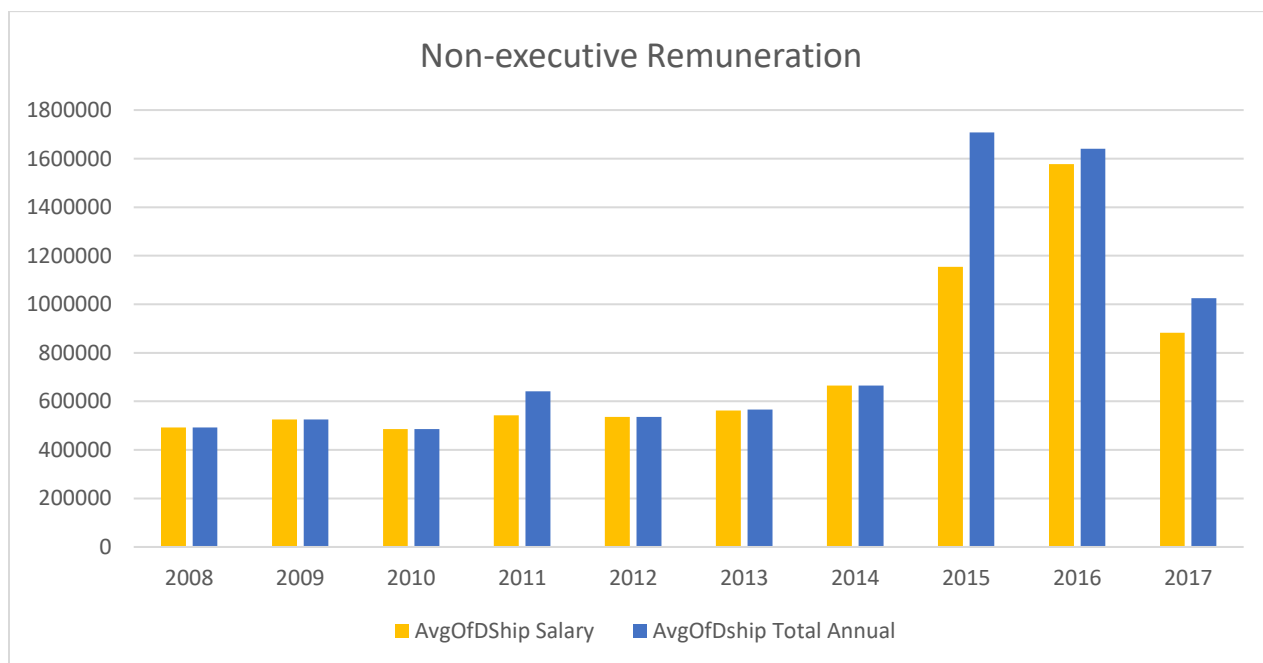
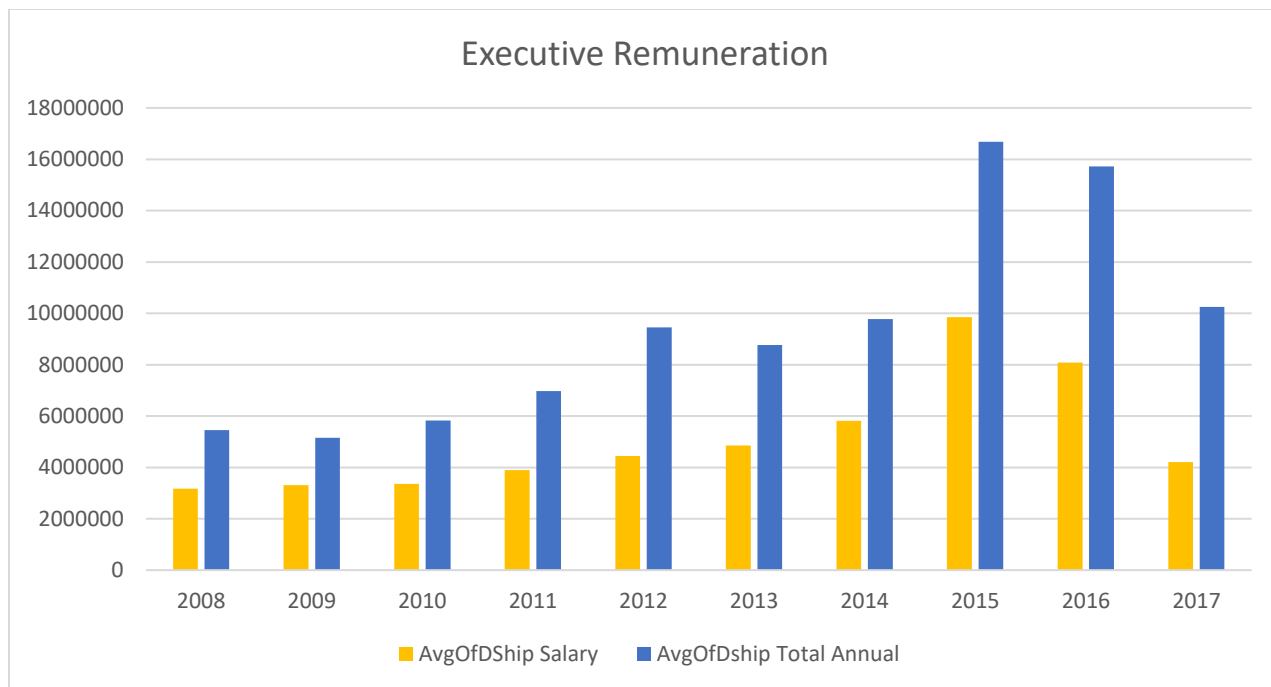


## Diversified Holdings

The highest paid CEO in this sector was Bidvest CEO, Lindsay Peter Ralphs, who was paid an LTI of ZAR 89 million, making his total annual remuneration ZAR 107,734,000. Barloworld CEO, Clive Thomson, was replaced by Dominic Sewela in March 2017. Some big LTIs were paid out in this sector, including the Remgro CEO who received an LTI of ZAR 73 million.

The average annual growth rate of Executive and Non-Executive Director's remuneration has been decreasing at -34.81% and -37.53% respectively between 2016 and 2017. This year's group of companies does not include Steinhoff due to irregularities. This has greatly affected the year on year averages and does not give an accurate reflection of the changes.



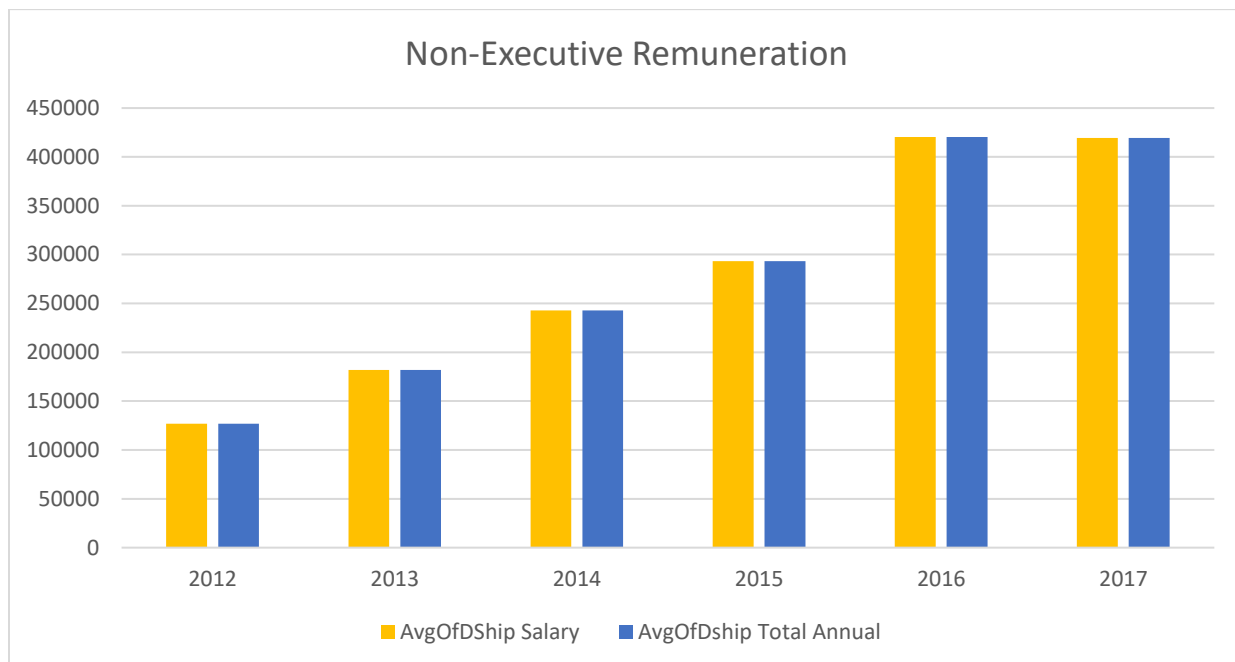
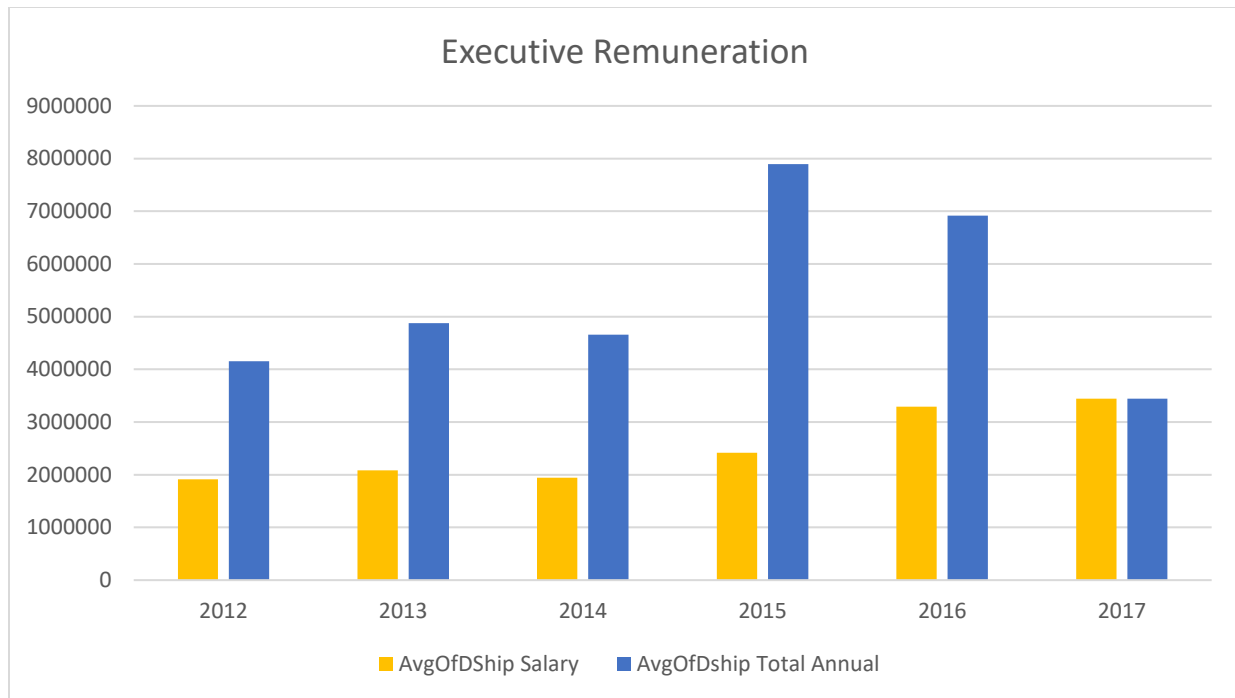


## Education, Bus, Training & Employment

Richard Pike of Adcorp Holding Limited is the only CEO in this sector. He resigned from this position in July 2017, and was replaced by acting CEO, Nelis Swart. Pike was paid a salary of ZAR 3,812,000, and total remuneration of ZAR 4,820,000.

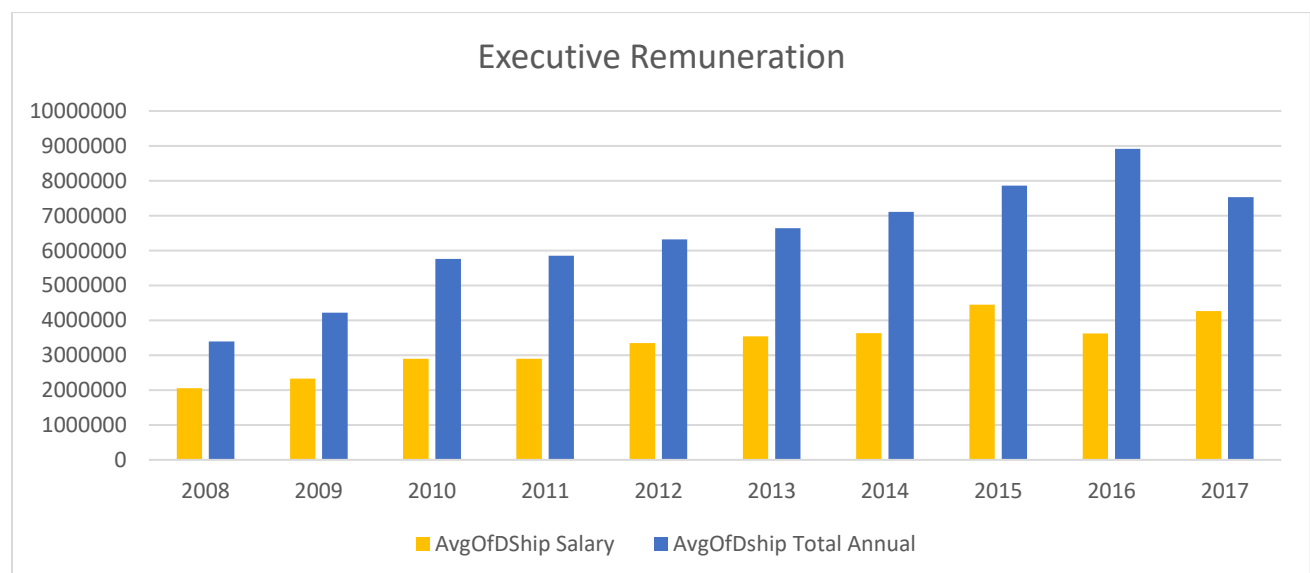
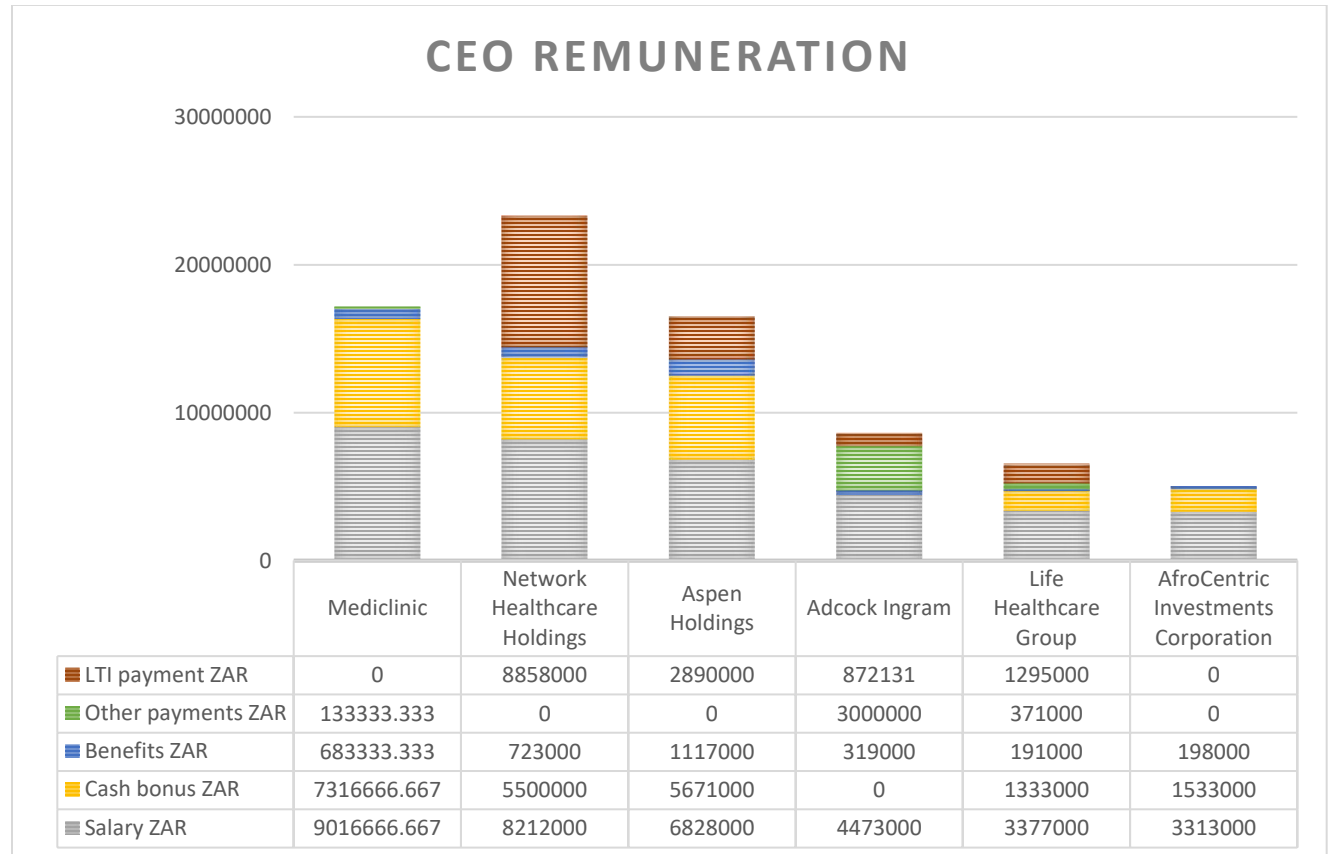
Executive Directors' remuneration in this sector decreased by 50%, while non-executive directors saw a small decrease of 0.29%.

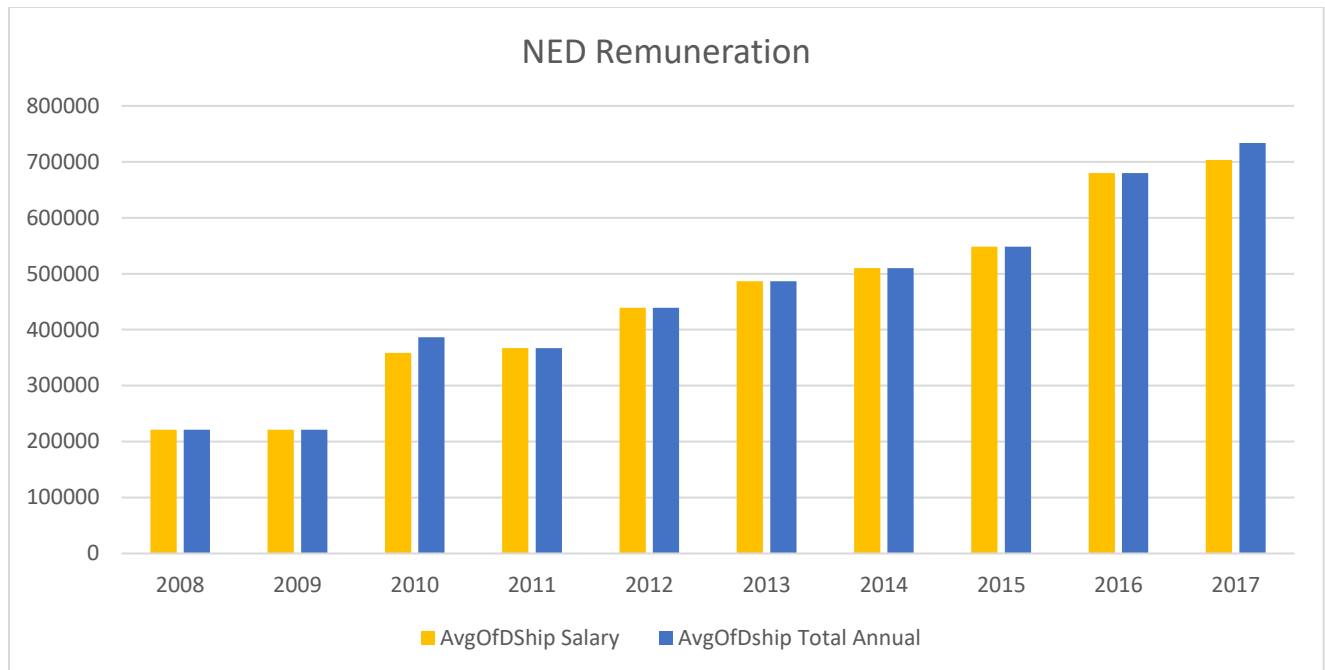




## Health

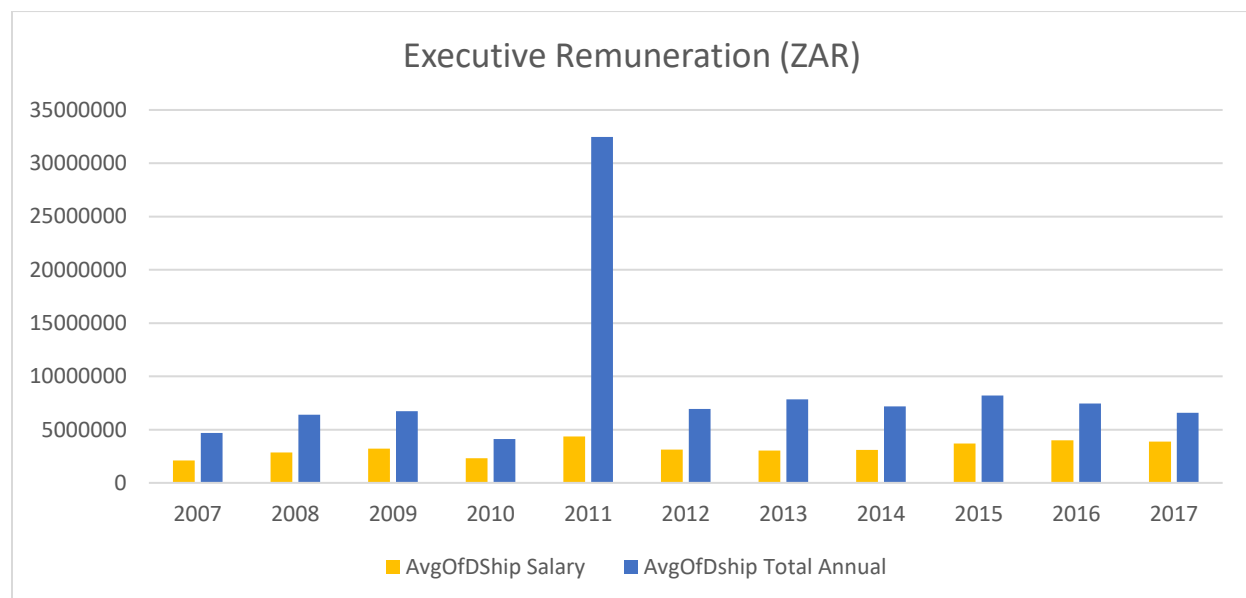
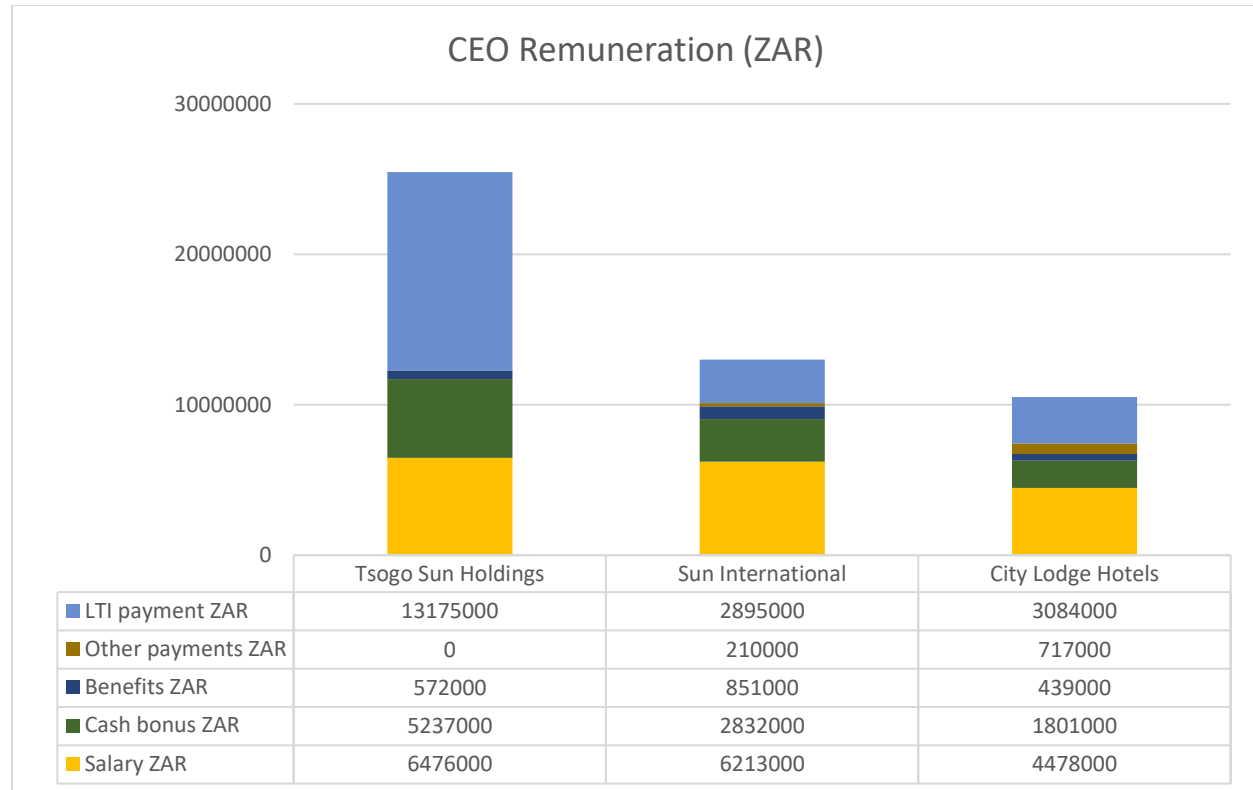
In the health sector, non-executive remuneration increased by 7.84% while executive remuneration decreased by 15.47%. The highest paid CEO in this sector was Network Healthcare Holdings CEO, Richard Friedland, who was paid in total ZAR 23,293,000, including an LTI of ZAR 8.9 million.

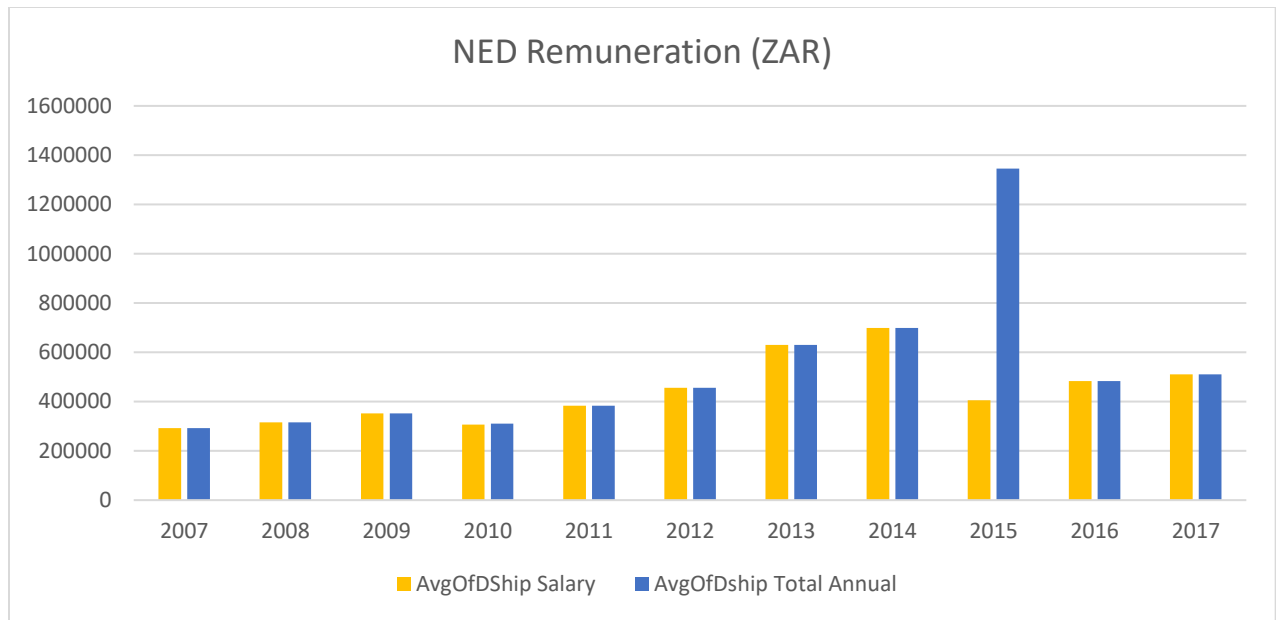




## Hospitality

In the hospitality sector, non-executive remuneration increased by just over 5%, while executive remuneration decreased by 11.64%. The highest paid CEO in this sector, Marcel von Aulock of Tsogo Sun Holdings, was paid ZAR25,460,000, which includes an LTI payment of just over ZAR 13 million.

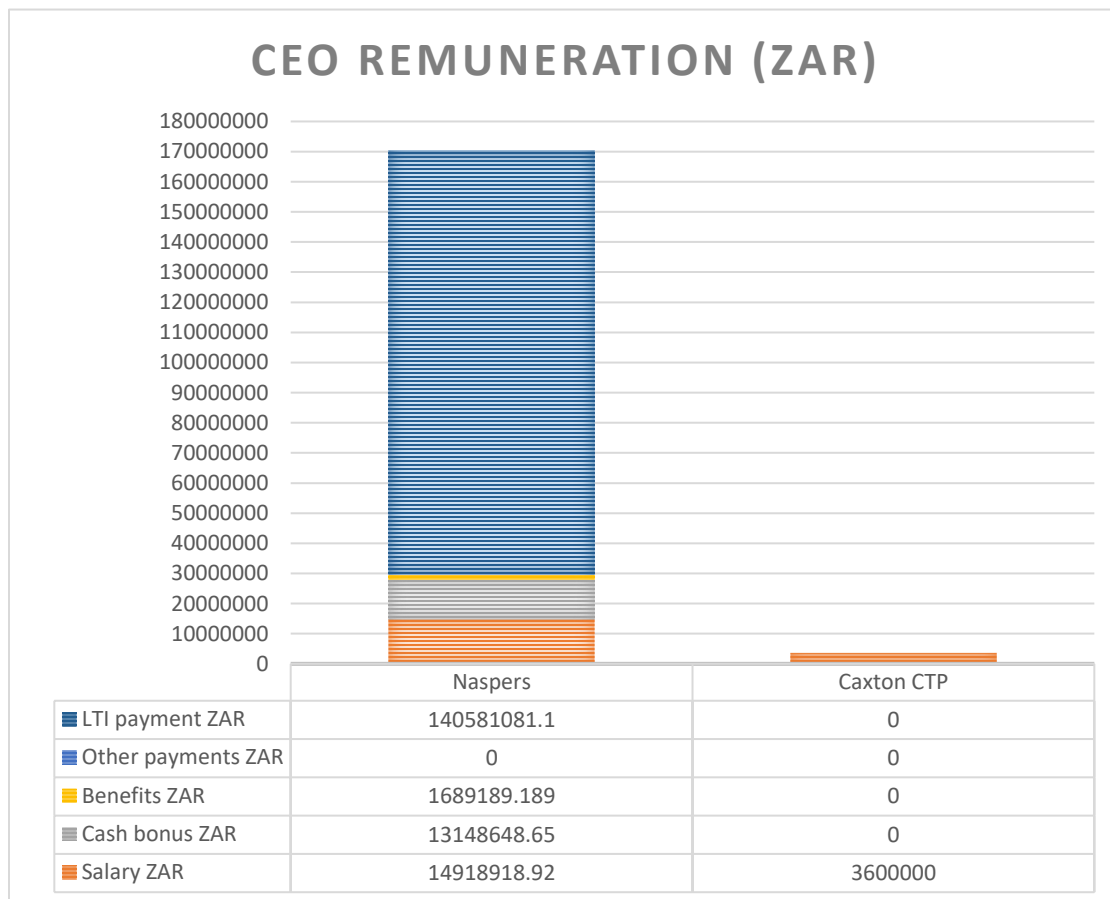


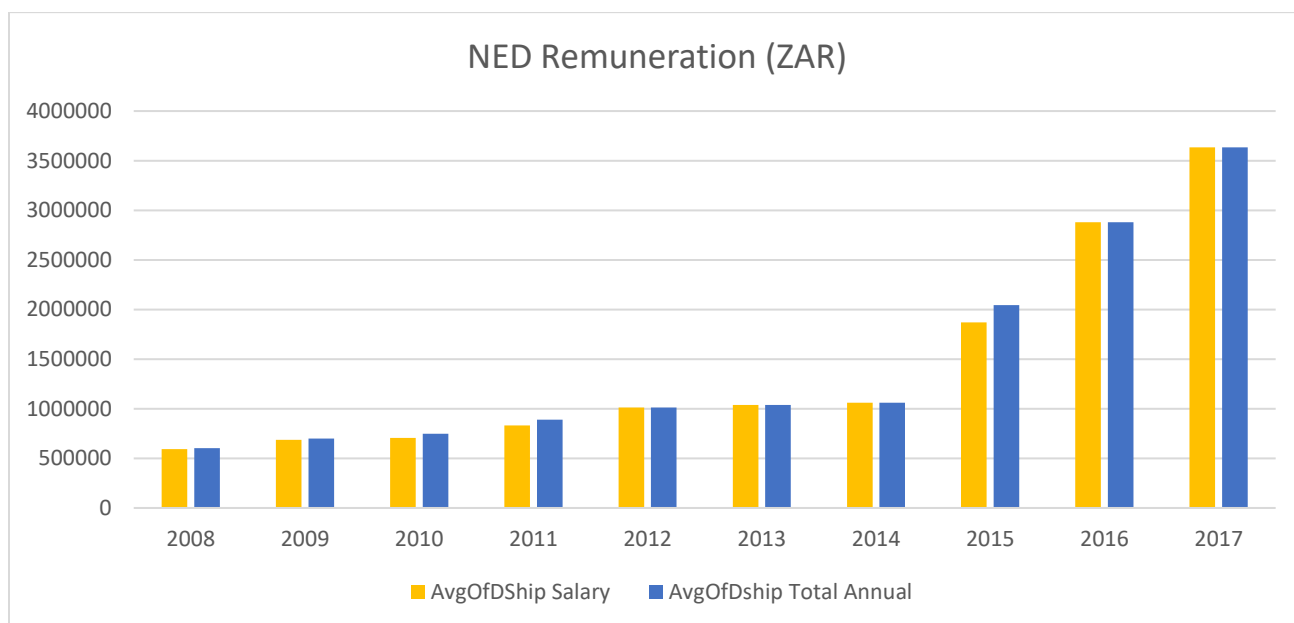
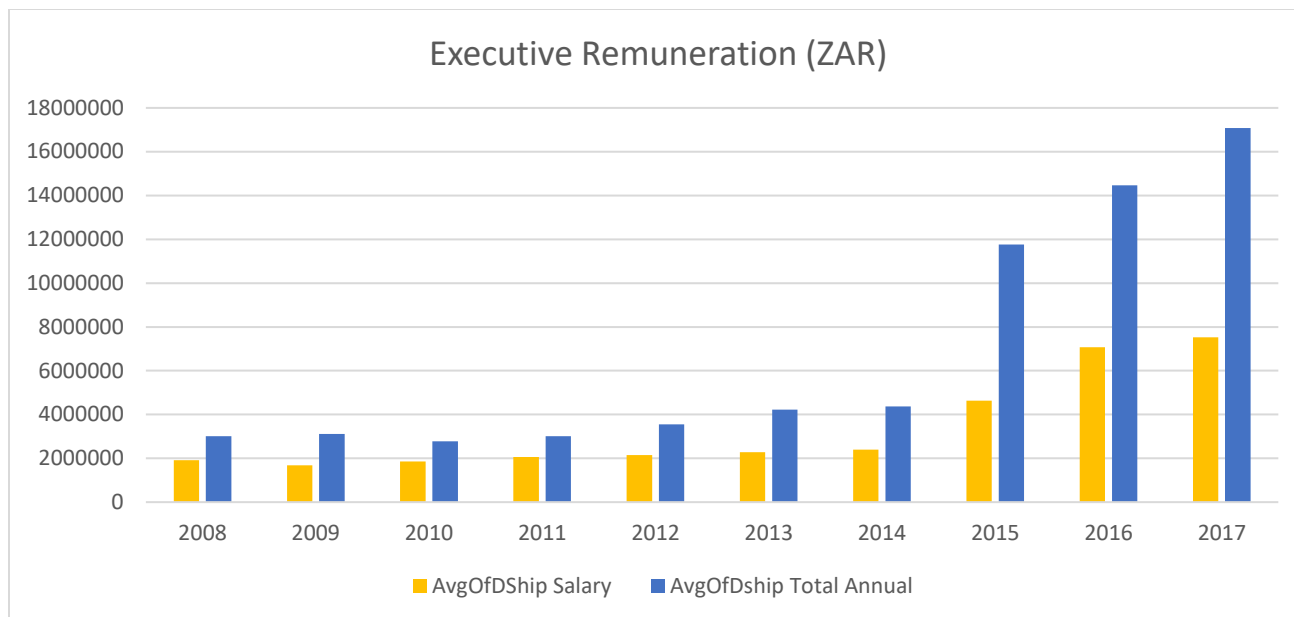




## Media

Naspers and Caxton CTP are the only two MNCs in the media sector. Naspers by far exceeds Caxton CTP in revenue and in executive pay. Naspers CEO, Bob van Dijk, was paid a salary just short of ZAR 15 million, and an LTI of ZAR 140,581,081.081 (the biggest LTI of all the CEOs on our list). Executive remuneration in this sector increased by 18.13%, and non-executive remuneration increased by 26%.



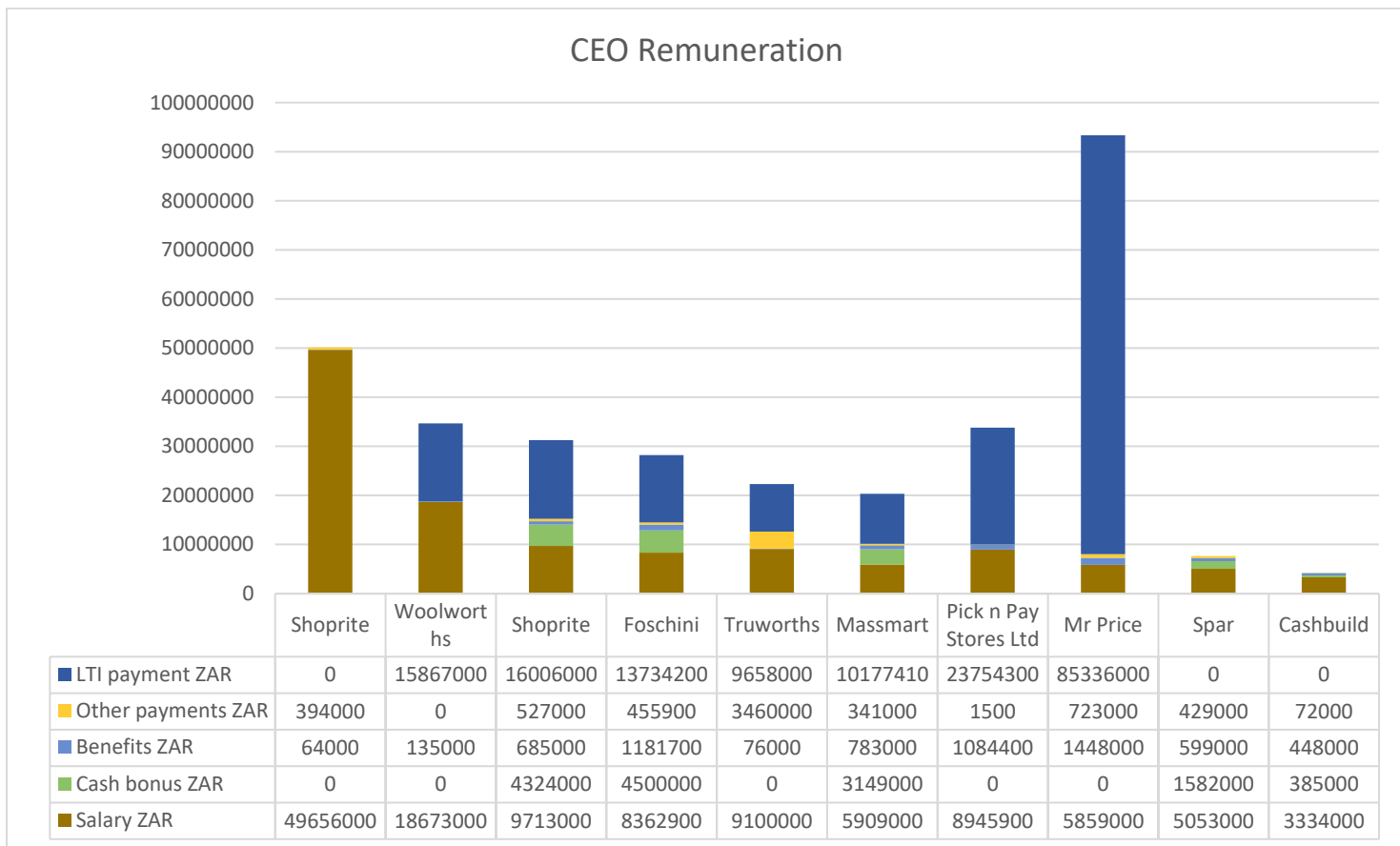


## Retail

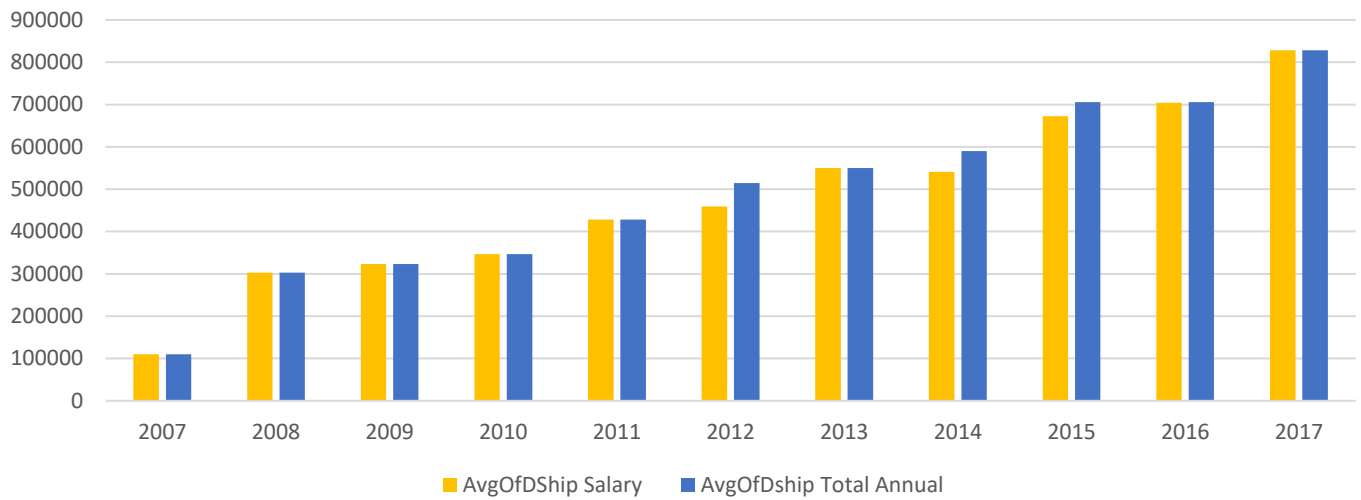
In 2017, the highest paid CEO in the sector was Stuart Bird of Mr Price, who was paid a total remuneration of ZAR 93,366,000, including a big LTI of over ZAR 80 million. In this year, Shoprite, usually at the top of CEO pay checks, changed CEOs from Whitey Basson to Pieter Engelbrecht. Basson received total remuneration of ZAR 50 million, while Engelbrecht received ZAR 31 million in total.

Retail sector Non-Executive Directors: 17.29% average increase in year-on-year remuneration growth rate between 2016 and 2017.

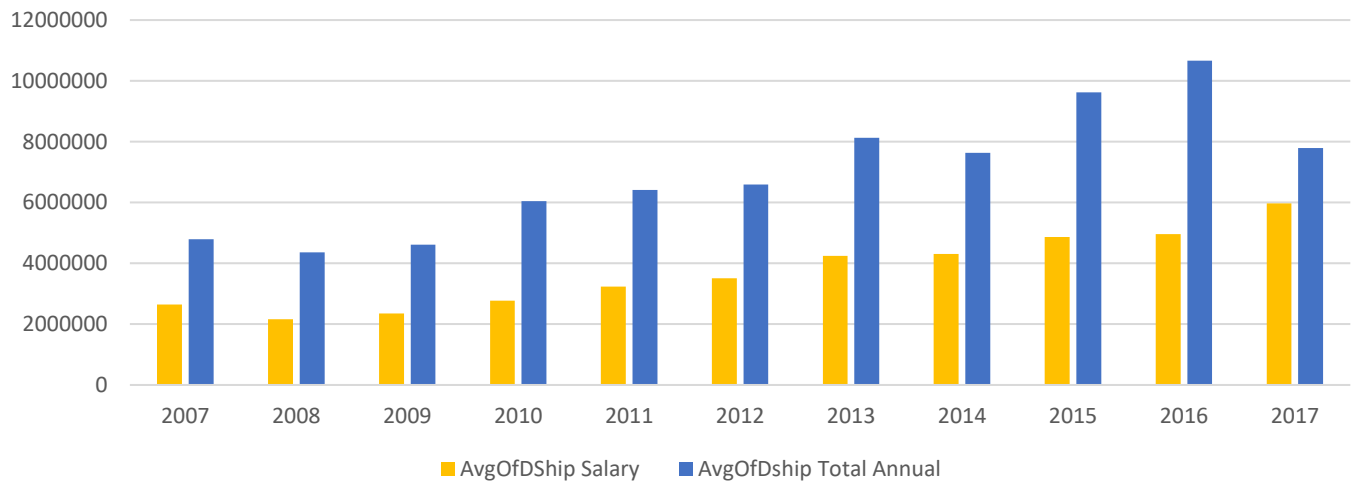
Retail sector Executive Directors: 26.96% average decrease in year-on-year remuneration growth rate between 2016 and 2017.



### NED Remuneration (ZAR)



### Executive Remuneration (ZAR)

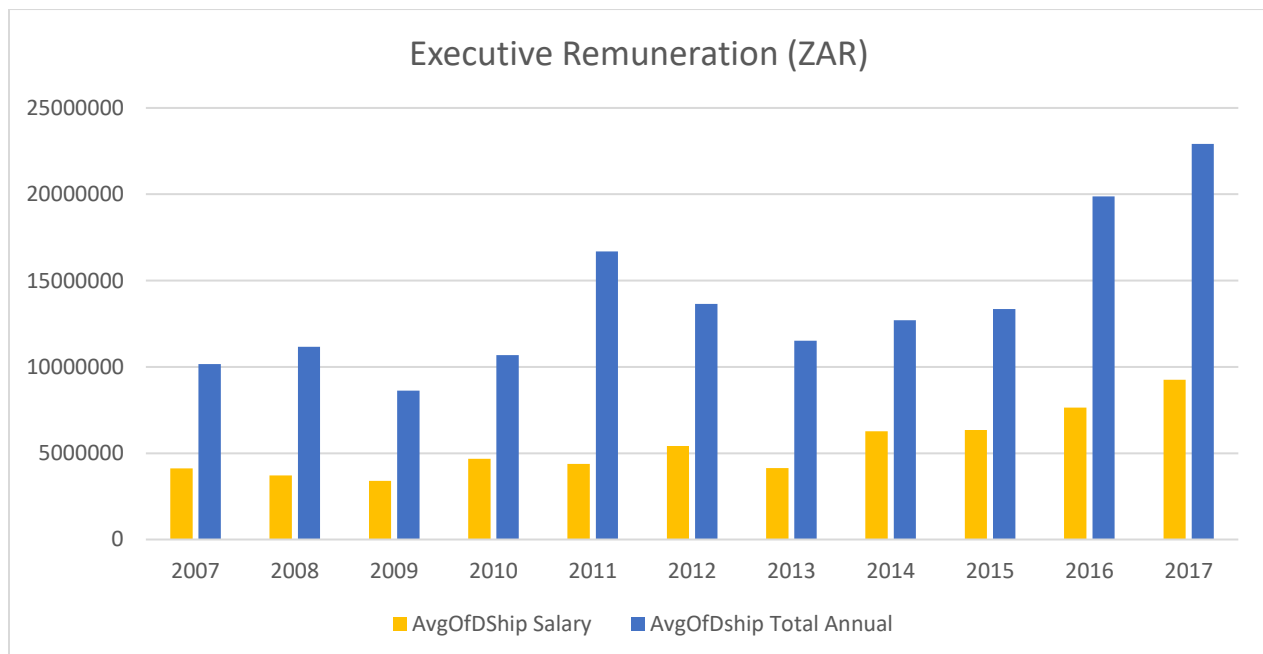
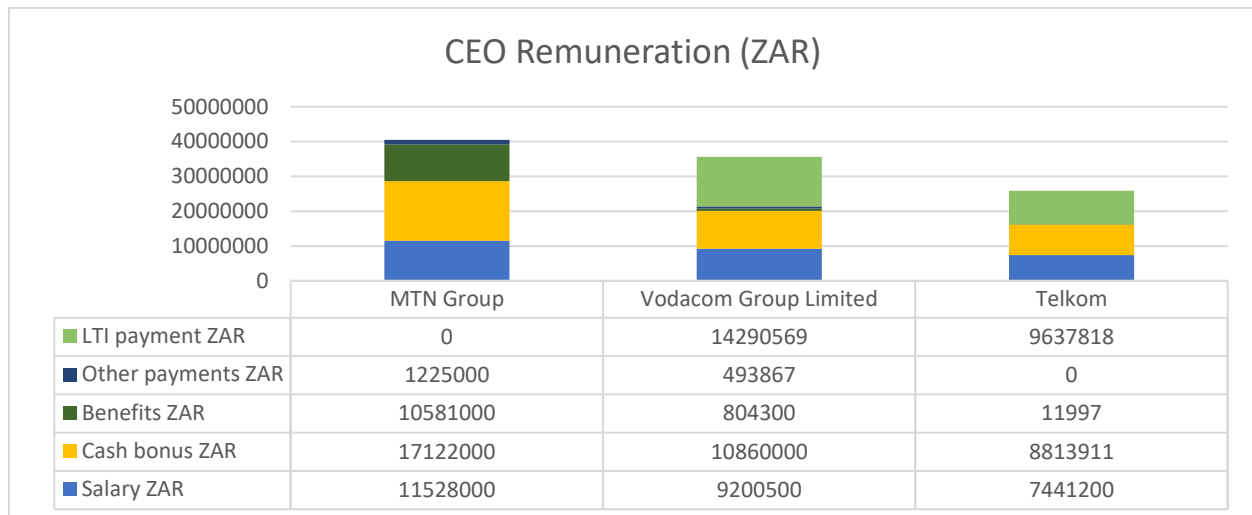


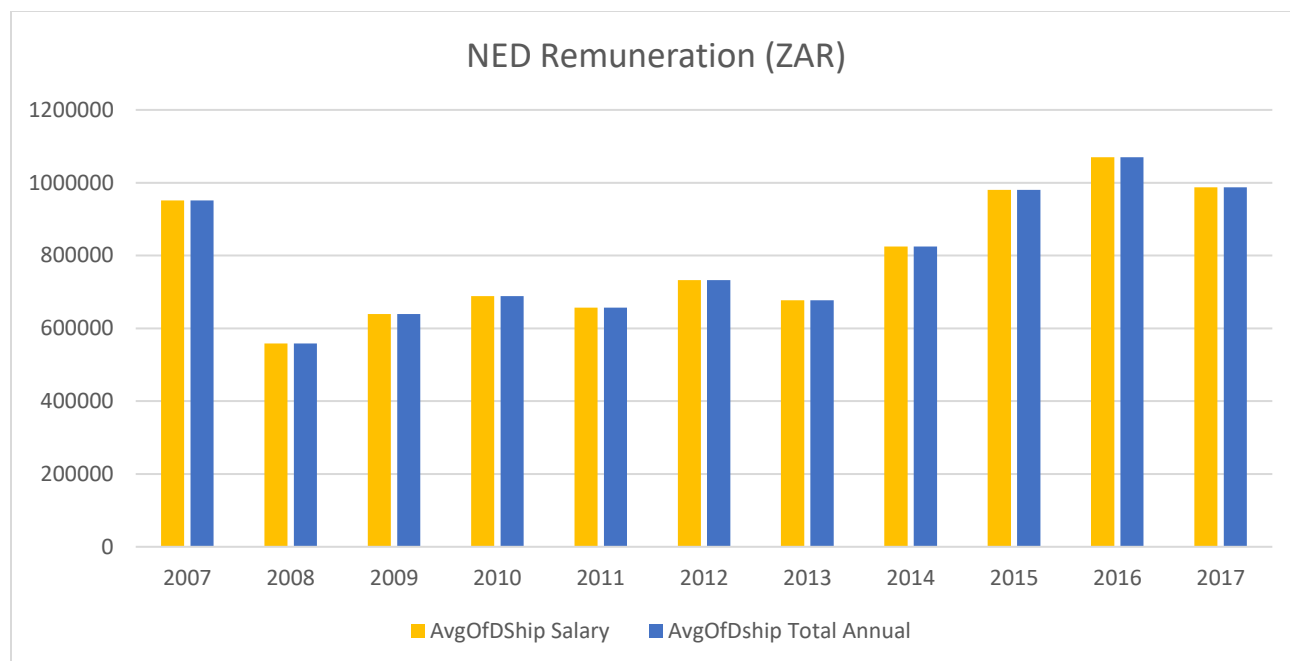
## Technology & Telecommunications

Non-Executive Directors: 7.67% average decrease in annual remuneration between 2016 and 2017.

Executive Directors: 15.34% average increase in annual remuneration between 2016 and 2017.

Rob Shuter of MTN Group did not serve a full year, but started in March 2017. He did not receive an LTI payment, but is still the highest paid CEO in this sector. The CEOs of Vodacom Group Limited and Telkom received LTIs of ZAR 14 million and ZAR 9.6 million respectively.





## Summary of Findings

The **SA MNC Database** makes it possible to compare the changes in revenue and profit compared to that of directors' remuneration. The table below illustrates these results in an attempt towards interpreting the changes in revenue and remuneration.

Revenue and profit year-on-year growth rates compared to Executive Director Remuneration changes:

| 2016-2017                            | Year-on-year growth in Revenue | Year-on-year growth in Profit | Year-on-year growth in ED Remuneration |
|--------------------------------------|--------------------------------|-------------------------------|----------------------------------------|
| Banking and Financial Services       | 5.28%                          | 11%                           | 12%                                    |
| Construction                         | -10.68%                        | -254%                         | -27%                                   |
| Diversified Holdings                 | -1.11%                         | 60%                           | -35%                                   |
| Education, Bus Training & Employment | 3.13%                          | -76%                          | -50%                                   |
| Food and Beverage                    | 1.50%                          | -4%                           | -20%                                   |
| Health                               | 7.84%                          | -24%                          | -15%                                   |
| Hospitality                          | 16.91%                         | 82%                           | 6%                                     |
| Industrial                           | 3.27%                          | 5%                            | 20%                                    |
| Media                                | -2.53%                         | 125%                          | 26%                                    |
| Mining                               | 22.17%                         | 876%                          | 3%                                     |
| Paper and Packaging                  | 4.31%                          | 1%                            | -18%                                   |
| Retail                               | 6.02%                          | 5%                            | -27%                                   |
| Technology and Telecommunications    | -3.87%                         | 23%                           | 15%                                    |
| Transport                            | 1.00%                          | -27%                          | 22%                                    |

Source: 2017 SA MNC Database

Executive director remuneration does not seem to be directly linked to revenue or profit growth. Although the analyses above are done on a sectoral level, it clearly illustrates a lack of coherence. Banking and financial services seem to be relatively on par – ED growth grew by approximately the same as profit growth from 2016 to 2017. The construction sectors show a massive loss in revenue as well as profit, and ED remuneration reflects this by decreasing by 27% (though still not directly correlated to the numbers). The Food and Beverage sectors showed a small loss in revenue, which was accompanied by a big pay cut for Executive Directors (20%). The hospitality sector saw a profit increase of 82%, and an ED remuneration increase of only 3%. The retail industry saw an increase in revenue and PBT, but a decrease in ED remuneration of 27%. This is mainly due to Shoprite's change in CEO, which accounts for a large percentage of EC remuneration in this sector. In the Technology and Telecommunications sector, ED remuneration increased by 22%. PBT, however, decreased by 27%. It is often claimed that CEO remuneration is linked to company performance. From the above it can be inferred that there is at best a vague connotation between the two in any given year. There is little observable logic when it comes to ED remuneration.

|                              | <b>Highest Remuneration (excluding LTI)</b> | <b>Amount</b> |
|------------------------------|---------------------------------------------|---------------|
| <b>Liberty Holdings</b>      | Banking and Financial Services              | 65626000      |
| <b>Anglo American plc</b>    | Mining                                      | 65183333.33   |
| <b>BHP Billiton</b>          | Mining                                      | 51712500      |
| <b>Shoprite</b>              | Retail                                      | 50114000      |
| <b>Assore limited</b>        | Mining                                      | 49752000      |
| <b>Investec</b>              | Banking and Financial Services              | 43986933.33   |
| <b>Barloworld Limited</b>    | Diversified Holdings                        | 42987000      |
| <b>MTN Group</b>             | Technology and Telecommunications           | 40456000      |
| <b>Anglo-Vaal Industries</b> | Food and Beverage                           | 38994000      |
| <b>Mondi Group</b>           | Paper and Packaging                         | 35156242.86   |

|                              | <b>Highest LTI</b>             | <b>Amount</b> |
|------------------------------|--------------------------------|---------------|
| <b>Naspers</b>               | Media                          | 140581081.1   |
| <b>Bidvest</b>               | Diversified Holdings           | 89606000      |
| <b>Mr Price</b>              | Retail                         | 85336000      |
| <b>Anglo American plc</b>    | Mining                         | 46383333.33   |
| <b>BHP Billiton</b>          | Mining                         | 36937500      |
| <b>Sibanye Gold</b>          | Mining                         | 25956000      |
| <b>Pick n Pay Stores Ltd</b> | Retail                         | 23754300      |
| <b>FirstRand Bank</b>        | Banking and Financial Services | 20250000      |
| <b>Liberty Holdings</b>      | Banking and Financial Services | 19096000      |
| <b>Pioneer Foods</b>         | Food and Beverage              | 17757000      |



| Highest Total Remuneration |                                | Amount      |
|----------------------------|--------------------------------|-------------|
| <b>Naspers</b>             | Media                          | 170337837.8 |
| <b>Anglo American plc</b>  | Mining                         | 111566666.7 |
| <b>Bidvest</b>             | Diversified Holdings           | 107734000   |
| <b>Mr Price</b>            | Retail                         | 93366000    |
| <b>BHP Billiton</b>        | Mining                         | 88650000    |
| <b>Liberty Holdings</b>    | Banking and Financial Services | 65626000    |
| <b>Sibanye Gold</b>        | Mining                         | 52656000    |
| <b>Shoprite</b>            | Retail                         | 50114000    |
| <b>FirstRand Bank</b>      | Banking and Financial Services | 50044000    |
| <b>Assore limited</b>      | Mining                         | 49752000    |

| Highest Total Rem as a % of MNC Revenue |                      |       |
|-----------------------------------------|----------------------|-------|
| <b>Trans Hex</b>                        | Mining               | 1.22% |
| <b>City Lodge Hotels</b>                | Hospitality          | 0.69% |
| <b>Assore limited</b>                   | Mining               | 0.69% |
| <b>Crookes Brothers</b>                 | Food and Beverage    | 0.69% |
| <b>Cargo Carriers</b>                   | Transport            | 0.51% |
| <b>Grindrod</b>                         | Transport            | 0.49% |
| <b>Mr Price</b>                         | Retail               | 0.47% |
| <b>Grindrod</b>                         | Transport            | 0.32% |
| <b>Anglo-Vaal Industries</b>            | Food and Beverage    | 0.30% |
| <b>Sear del Investments</b>             | Diversified Holdings | 0.29% |

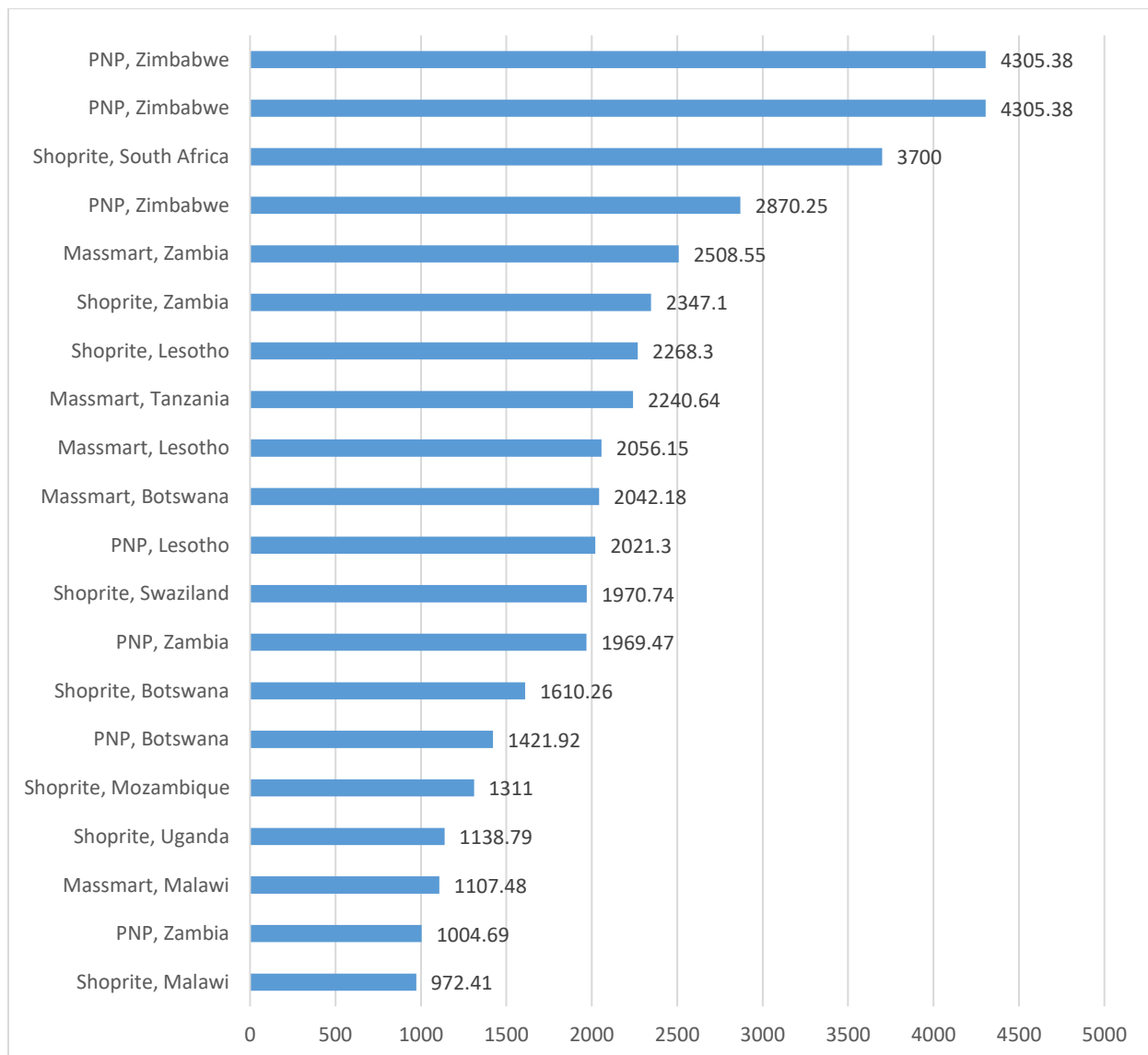
Companies often cite decreasing revenue or profits as the reason for not increasing wages of workers. From the above, we can see that when it comes to CEO paychecks this is not always the case. CEOs are often still rewarded when companies are losing significant profit/revenue.

While Shoprite scores high when it comes to highest remuneration (excluding LTI), as a percentage of revenue this is only 0.0355%. Diamond mining company Trans Hex, who lost over 19% in revenue in 2017, paid their CEO 1.22% of total revenue. From the numbers above, it is hard to determine any logic when it comes to CEO pay.

## The Wage Gap

The previous section pointed out the lack of transparency when it comes to directors' remuneration. However, in some cases companies do unpack remuneration practices, and KING IV compels companies to be more transparent in this regard. Unfortunately the same cannot be said for workers' remuneration. There is a complete lack of reporting when it comes to workers' remuneration. As with the 2017 MNC Trend Report, this section advocates for more transparent and detailed reporting on workers' remuneration. The below graph illustrates some information obtained from the retail networks on entry-level wages in the retail sector, again showing the value of these networks and the information obtained from sharing within these networks. The lowest paid entry level position is of an entry-level worker in Shoprite, Malawi, at R972.41 per month. When compared to the CEO's remuneration (Basson of Shoprite), who received total remuneration package of ZAR 50,114,000, the massive gap is evident. Basson was paid 4195 times more than the lowest paid worker in this company.

Entry level minimum wages (Rand) per month (2017):



# The Future of Work

## Introduction

*Industry 4.0*, the *Fourth Industrial Revolution*, the *gig-economy* and the *internet-of-things* are all terms becoming more generally used when discussing the future of work. These terms share the fact that technology is playing an increasing role in our daily lives and that it will alter the way we perform tasks. As early as 1930, Maynard Keynes warned that: "We are being afflicted with a new disease of which some readers may not have heard the name, but of which they will hear a great deal in the years to come—namely, technological unemployment" (Keynes, 1930: unpaginated).

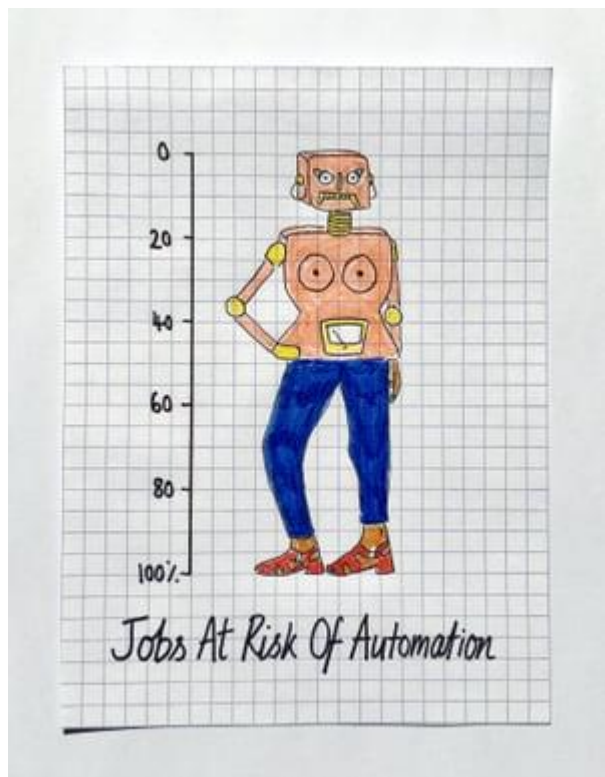
Central to the technological advances of our time is an intersection of hardware, software and humans in a context of artificial intelligence (AI) (Baldassari and Roux, 2017). One of the main advantages of AI is described as "its ability to help turn large and diverse data sets into enriched information that can help improve speed, cost and flexibility across the value chain" (Chitrakorn, 2018). While the cost associated with technology like AI is currently high, it is set to decrease and increasingly create workplaces less reliant on employees. The gig-economy, associated with innovations such as Uber and Airbnb, creates situations where jobs are secured through online platforms and employees have often not even met their employer (Smith, 2016).

The previous quote from Keynes illustrates that there has, throughout history, been fears that new technology would replace workers. While this may be true, some argue that the 19<sup>th</sup> and 20<sup>th</sup> century has shown that the new jobs created through technology, in fact, outnumber the job losses (Arntz, Gregory and Zierahn, 2016). Past president of the *The Institute for the Future*, Roy Amara, is quoted as saying: "We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run" (The Age, 31 October 2006). The Fourth Industrial Revolution will see humans increasingly involved in the design of jobs but less in the actual performance thereof. App developers, cloud computing specialists, data scientists, social media managers and sustainability managers are but to name a few of the occupations seen as synonym to the new wave of technology (Baldassari and Roux, 2017). Researchers predict that the new world of technology will bring a demand for more skilled labour in these fields (*ibid*). However, Osborne & Frey (2013) posit that not only are blue collar jobs at risk of automation, but also white collar jobs like bookkeeping, accounting and auditing clerks. Jobs that have elements that are *predictable* and *repetitive* are likely to have these elements of the job automated. Jobs at risk include cashiers, clerks, and mining and maintenance workers, as many elements of these jobs are both predictable and repetitive.

Based on a literature review, desktop research and engagements with unions in various retail network alliances, this paper provides an analysis of what the future of work could entail in a developing context, and more specifically, Africa. The first section of the paper focuses on the retail sector as a case study relating to technological innovations. This sector is chosen in particular as it is a sector in which technology could have a direct bearing on employment based on the number of low skilled workers. The LRS is further well located to utilise the primary research it conducts through its supporting role in the UNIGlobal Shoprite, Massmart and Pick n Pay Network Alliances.

How relevant are some of the predictions regarding technological innovations in the developing world? The second section of this paper aims to answer this question by locating the impact of new technologies

and different debates within the retail sector. Through the LRS's involvement with unions in the retail sector, it is possible to develop insights into the challenges unions are facing as a direct result of attempts at more “streamlined” supply chains. While it is difficult to predict to what extent job losses could be experienced in the sector, it becomes apparent that the future of work within the context of the Fourth Industrial Revolution will take on a more flexible format which could have serious implications for the social protection of workers. These dynamics are deliberated in the third section of the report.



Source: The Guardian, 2017

Based on foregoing findings, the following two sections reflect on what responses the future of work will require from labour movements. Where section four considers national responses, section five focuses on the workplace and what those engaged in collective bargaining will have to look out for. The report concludes with broad recommendations for collective bargaining and broader campaign development. Although the report focuses on retail, the recommendations are formulated for all sectors and in support of cross-sectoral and cross-border alliances.

## Technological Changes in the Retail Sector

Retailers are increasingly shaping their models based on convenience and the experience of shopping. E-commerce, which entails ordering shopping online, is becoming more and more prevalent. PrimeNow, for example, is a division within Amazon through which a delivery is made within one hour of ordering online (Smith, 2016). Services such as these allow customers to free up more space to dedicate to, among others, leisure or family. What is central to creating such systems of convenience is what is referred to as *Big Data* and the *Internet of Things*. The collection of data based on preferences and shopping trends makes it possible to develop software that can filter through thousands of items to match an item with a suitable buyer. Amazon has gone as far as to develop “anticipatory shopping software” (*ibid.*). Based on a buyer's previous browsing preferences, the software will assess whether the shopper is likely to buy a product and if so, start the shipping process even before the customer has pressed the “buy” button.

Based on the idea that the act of paying is associated with negative, retailers are moving towards automated stores in which customers do not have to make use of any till facility or encounter any employee. High-tech automated convenience stores are becoming more frequent across Chinese cities such as Beijing and Shanghai (Chitrakorn, 2018). These stores have no checkout, cash or salespersons. Each shopper has a unique ID through a mobile app and pays for the purchases through the app. To prevent theft, a sensor on the shelves can detect if an item has been lifted by a customer. Such an item will be directly linked to the shopper's ID. Amazon has launched a similar store concept through “Amazon Go” that is also run through a mobile app. When a customer leaves a store their credit card is charged directly

which means there is no line for checkout (Kestenbaum, 2017). An Irish company, Everseen, has gone a step further where no mobile phone is required once a shopper is registered. The store will recognize your face and run the purchase accordingly (*ibid.*).

In addition to the advantages customers could experience through automated stores and e-commerce, retailers have much to gain. Retailers would require less floor space in future as shopping goes online (Singh, 2008 and Omarjee, 2017). Retailers might only keep smaller stores in set locations as showrooms, but the remaining trade would take place through online platforms from central distribution centres. There will also be less reliance on actual employees. Automated tills; digital price displays through which thousands of prices can be changed within minutes; robotic shopping carts as well as robots that restock shelves and direct customers are but to name a few innovations set to decrease the reliance on human labour (Bhattarai, 2016).

Figure 1: Robotic shopping cart and robots that restock shelves and direct customers



Source: Bhattarai (2016)

Such a decreased reliance on human labour will not only have cost-saving effects, but also avoid the demands of organized labour such as providing workers with adequate social protection.

### What Is The Reality In The Developing World?

The debates arguing that jobs are at risk of being replaced or computerized is to a large extent based on studies conducted in Europe and Northern America (Arntz, Gregory and Zierahn, 2016). While this may be true, there are some who argue that this is not the norm. Arntz *et al.* (2016) conducted a study in which they compare different countries in the Organisation for Economic Co-operation and Development (OECD). Although most OECD members are high-income economies with a very high Human Development Index (HDI) and are regarded as developed countries the findings could have potential relevance to developing parts of the world:

*"We further find heterogeneities across OECD countries. For instance, while the share of automatable jobs is 6 % in Korea, the corresponding share is 12% in Austria. Differences between countries may reflect general differences in workplace organisation, differences in previous*



investments into automation technologies as well as differences in the education of workers across countries” (Arntz et al., 2016: 4).

Although a similar study could not be found for developing countries it starts to illustrate that the future of work is a context-dependent phenomenon. Services such as automated stores and online shopping are associated with middle to high-level income groups. When we are considering Africa, it is well known that affordability and literacy levels differ to that of the global North. The Living Standards Measure (LSM) is a tool used in South Africa to group people according to their living standards. It divides the population into 10 LSM groups, 10 (highest) to 1 (lowest). A successful retailer such as Shoprite's majority of buyers is located in the mid-range LMS as illustrated in Figure 1.

Figure 2: The target LSM divisions of some of the Shoprite divisions

| Brand                      | Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Target market | Store count |         |            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|---------|------------|
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               | RSA         | Non-RSA | Total      |
| <b>SHOPRITE</b>            | Affordable and accessible, Shoprite caters to the mass middle-income market by providing its lowest prices on basic goods, including groceries and household products. As the Group's original and flagship brand, Shoprite owns the most stores in South Africa, and is the main spearhead for growth into Africa.                                                                                                                                                                                                    | LSM 4 – 7     | 458         | 155     | <b>613</b> |
| <b>Usave</b>               | The chain's simple philosophy – “When we save, Usave” is backed by a strategy of small-format stores offering a limited range of basic foods at everyday low prices to lower-income consumers. The small-format stores are an ideal vehicle for the Group's expansion into Africa and allow far greater penetration into previously underserved communities in South Africa.                                                                                                                                           | LSM 1 – 5     | 302         | 65      | <b>367</b> |
| <b>Checkers</b>            | Convenience, quality and freshness define the Checkers brand. Time-pressed upper-income consumers in search of a world-class shopping experience enjoy great value on a wide selection of groceries, household products, fresh and convenience foods and speciality lifestyle ranges of wine and coffee. Located in shopping malls and other convenient premises across South Africa and some neighbouring countries, the brand caters to discerning shoppers in affluent residential areas.                           | LSM 8 – 10    | 202         | 7       | <b>209</b> |
| <b>Checkers Hyper</b>      | Checkers Hyper offers the same speciality food selections and great value as Checkers, but within large-format stores that encourage bulk rather than convenience shopping. The general merchandise ranges are far wider in Hyper stores, focusing on categories like small appliances, pet accessories, garden and pool care, outdoor gear, home improvement, homeware, baby products, toys and stationery. Checkers Hyper stores operate in South Africa only and are found in areas with high population densities. | LSM 8 – 10    | 37          | —       | <b>37</b>  |
| <b>OK Furniture</b>        | The OK Furniture chain brings affordable quality to homes across Africa. With its vast geographic spread of stores, the brand offers a wide range of furniture, bedding, loose carpeting, electrical appliances and home entertainment products at the lowest prices, cash or on credit. Choice quality goods and exceptional service define the ‘no problem’ shopping experience.                                                                                                                                     | LSM 5 – 7     | 338         | 69      | <b>407</b> |
| <b>OK Power &amp; More</b> | This chain of small-format stores sells a carefully selected range of white goods and home entertainment products, as well as bedding and loose carpeting. Located mainly in high-density areas, shoppers can choose to pay with cash or take advantage of competitive credit options.                                                                                                                                                                                                                                 | LSM 5 – 7     | 24          | 5       | <b>29</b>  |

Source: Shoprite Annual Report (2017: 6)

There is a case to be made that a large percentage of the buying power in developing countries is located in an LSM bracket that does not necessarily support automation processes.

The development of automated stores and Big Data represents complex systems operated at very high costs. In 2017, Amazon admitted that “scaling this technology [automated stores] for uncontrolled numbers of people is too taxing, it takes the system beyond its capacity” (Kestenbaum, 2017). As the cost of automation decreases this could change, but it is difficult to foresee when as automation is further

reliant on infrastructure - like good internet connections. Automation can, therefore, be regarded as a slow process that has to overcome economic, societal and legal hurdles which are often more pronounced in a developing context.

It further has to be acknowledged that the experience a retailer is trying to create in the developing world could differ fundamentally from that in the global North. Retailers in sub-Saharan Africa could have already started the automation process, but it becomes a branding decision. It relates back to the experience they want to craft in a context where price is valued more than convenience.

Another potential consequence of automation is increased economic disparity, which makes for bad social capital on the side of MNCs in developing countries. Daniel le Roux (2018) makes an argument for automation being a 'driver of economic inequality':

*Businesses around the world are cottoning on to the value of transferring labour from human workers to machines. Automation can increase efficiency and decrease labour costs. It helps employers to avoid complex challenges like wage increase demands, labour protests and strikes. Consumers also benefit from automation when products and services become cheaper because of reduced input costs.*

*But while there are numerous benefits to automation, recent economic trends in the developed world suggest that it may also be a key driver of economic inequality.*

Some are also more cautious regarding the role of technology in retail and the extent that automation would actually lead to job losses. Kestenbaum (2017) reasons that technology is important but will remain as only a tool in which the connection between a consumer and a product is made. It is not the answer to all the challenges existing in the sector. Arntz *et al.* (2016) bring forward the idea that predictions of a jobless future are based on an occupation rather than job-task approach. When considering that certain tasks within one occupation rather than a whole occupation could be automated, it becomes apparent that the job automatability has been overestimated. Where previous studies estimated the percentage of job losses based on automation through an occupation-based approach to be 47% in the US, a task-based evaluation brings such estimations down to 9%. It is yet to be discovered what similar percentages in developing countries will represent.

While this section, on the one hand, proves that the future of work is content driven and that some argue that the extent of automation is often exaggerated, it is anticipated that routine or predictable tasks are more susceptible to displacement than non-routine tasks. Such predictions place a sector such as retail at a higher risk than an industry such as Information Technology (IT). It is predicted that while the jobs themselves may not entirely vanish, the jobs will be 'redefined'. If a job radically changes, a worker may indeed not have the new skillset.

## Flexibility in the Retail Sector

Automation comes at a cost and to compensate for these additional costs, retailers will continue to reduce costs such as labour:

*"All on-demand mobile services keep sales costs low by using an app for ordering, payment, and feedback. But the biggest part of this rebalancing is labour costs. As an aggregation and distribution channel for people providing personal services, a company with an Uber-All business model creates*

*scale that has been difficult to realize heretofore. In addition, by engaging people to provide personal services on demand, companies can lower the overhead costs associated with full-time employees by taking advantage of broader shifts in labour markets" (Smith, 2016: 387).*

The reality is that work is starting to take on a more flexible form in which workers are not protected and jobs are not secured (Omomowo, 2011). Outsourcing of work is fundamental to a value chain in which cost dominates all decisions. Outsourcing becomes a way for organisations to rid themselves of less-skilled workers and to have that work done at a lower cost.

Within the Shoprite, Massmart and Pick n Pay Alliances, to which the LRS provides strategic research support, it has become evident that these companies are moving towards a more flexible workforce. A company such as Massmart is also bringing in the position of "general assistant" in which employees need to be able to multi-task and conduct various jobs at the same time. Employees are not adequately compensated for performing multiple tasks which in turns drain productivity (Massmart Alliance Meeting, 2017). Throughout these network meetings complaints relating to temporary workers and the conditions under which they are employed are heard:

*"Key-time employees who are employed in Shoprite are not treated like employees nor according to our labour laws."*

*"The company survives through key-time employees."*

*"We need to be assisted with international campaigns against the employment status of key-time employees and/or to eliminate precarious work."*

In an article written on how employers should structure work contracts towards the implementation of technological innovations the following is stated:

*"...if your labour contract does not contain strong job security provisions or minimum-hours guarantees, count your blessings— and do not let the union negotiate those in during the next round of bargaining. However, employers that are signatory to a labour contract containing job guarantees over the life of the CBA, work-hour guarantees, and/or restrictions on the right to lay-off workers will want to jettison these provisions when the parties bargain for a renewal agreement. ... picture the retail establishment that wants to phase-out its cashiers and move to an automated check-out system, and, thus, reduce the workweek of its 10 full-time cashiers to part-time, only to find its hands tied with a guaranteed 40-hour workweek" (Korval, 2017: ).*

The above quote clearly states how employers are seeking more flexible workforces in the advent of the fourth industrial revolution. The steps employers are willing to take to free themselves from a permanent guaranteed workforce is in line with what retail workers are experiencing on the ground. Unions are constantly faced with employers whose main objective is to terminate all permanent contracts that provide employees with any form of social security.

While the outsourcing of work may become more prevalent, Tavis (2017: 8) speaks to one of the risks posed by a "loosely connected network of part-time workers". It is said that workers subcontracted into any company will be disengaged from the actual organization, its vision and objective. Many businesses rely on elements of teamwork to advance and promote the company. This desire would not exist within



a group of neglected contract workers and could result in negative long-term consequences such as losing institutional knowledge and damaging their reputation as an employer. Unfortunately, these negative consequences are yet to be seen, especially in a sector such as retail in which employees are regarded as replaceable. As a result, unions and workers will have to be cautious of the tactics employers will use to ensure flexibility within their workforce.

## A Response: The Broader Framework

The future of work is not only a concern within the workplace but also on a national level. As automation increases those with inadequate skills may be left behind and unemployment rates could soar. Within national debates the potential loss of jobs brings forward arguments for compensatory measures (guaranteed basic income and wealth redistribution), legislation protecting the rights of workers (realistic minimum levels of pay and benefits, restoring a decent work-life balance, and removing the impediments to union organizing) and ensuring sufficient (re-)training especially for low qualified workers (Arntz et al., 2016; Hodgson, 2016; Wright, 2018). New ownership models are also being discussed; if workers are replaced by robots, they could still be assured an income if ownership was to be shared among workers. As a result, worker cooperatives become more prevalent (Hodgson, 2016).

Labour, civil society, the private sector as well as government become key stakeholders towards developing a skills transition or relevant compensation measures. The International Labour Organisation (ILO) framework and the G20 Policy Priorities on the Future of Work identify the following key areas towards stimulating debate:

- *“Preventive labour market policy: What role can labour market policy play in preventing technological unemployment and support the creation of quality jobs in times of structural change? Which instruments are necessary, in particular regarding skills in the digital world?”*
- *Social security in the digital age: Which mechanisms of social security can be provided for workers in the digital world? How to reform existing social security systems to include new forms of work (e.g. crowd working, free-lancers, self-employed)?*
- *Future proofing labour law: How can the legal frameworks evolve in response to a growing diversification of new and/or non-standard forms of employment without putting standard forms of employment at risk?*
- *Agile industrial relations: How to make co-determination work for all workers, including in new types of employment (e.g. platform workers)? What are appropriate collective bargaining solutions? How to foster innovation to harness technological change for better work? Is there a place for “innovation spaces” within companies to try out different arrangements of work organization, work design and working time?” (Ramutloa, 2017).*

An analysis of relevant policy frameworks addressing these issues is beyond the scope of this report. It is, however, crucial that labour acknowledge these issues and work towards national campaigns to ensure pro-active debates and change. Altenburg, Kulke, Hampel-Milagrosa, Peterskovsky, and Reeg (2016) who conducted a study on retail modernization in developing countries explained how *“despite the far-reaching impact of the supermarket revolution, this challenge has so far hardly been debated in development policy circles* (Altenburg et al., 2016: 1). There is much to be done on the part of all stakeholders involved. In the absence of such pro-active action and policies, the tendency of capitalism to exacerbate income inequality will increase.

## A Response: Bargaining at the Workplace

With regards to the future of work and bargaining in the workplace, this report highlights four areas that deserve attention.

The first is the need for trade unions to revisit the way in which they organize through an acknowledgement of the broader value chains in which they operate. Although the focus of a union is in the workplace, broader value chains and the dissemination of power are starting to play a more prominent role. Value chains describe where a company or operation is situated in the bigger picture of production and how it is situated there, or rather what power it has in the bigger picture of how things are produced. This has implications for organising and bargaining. Knowing where and how a company is situated in a value chain can help the trade union understand how to best negotiate for better pay or conditions of work. Revisiting strategies will have to be done on a step-by-step basis but will start, for example, through a retail worker looking beyond their own workplace at something such as distribution centres that influence the functioning of the company as a whole. Having a presence in such areas of operation will increase the power of a union in relation to the employer.

The second concerns the way in which union, themselves will utilize technology:

“The advent of the Internet has seen a variety of contrary claims about their adoption by trade unions. Some have argued that the increasing use of the ICTs will further undermine the role of the traditional representative organisations, including trade unions, in favour of more issue-oriented groups, protest networks and/or individualised forms of participation. Alternatively, there has been interest in the notion of e-unions, virtual unions or cyber unions, where the ICTs are harnessed to reinvigorate and modernise union practices...

In fact, it is only the labour that will decide where they want to stand. In this digital economy, only the powerful can survive. Therefore, the workers continuously need to develop IT skills and to be on the alert so as to market them at every opportunity. Internet and e-commerce technologies are just tools, what the labour market is going to do with these tools will decide the future of the labour market” (Singh, 2008: 639-640).

Utilising technology within unions will become increasingly necessary if they were to target the broader value chains along which companies operate. As explained in the quote above, the organisations who have mobilized against big retailers or companies have been big NGOs and consumer movements in the Global North. This poses a challenge for unions. How do they respond to these big NGOs? NGOs operate differently as they do not have members - they report to a board. Should unions start thinking of alliances with quite different organisations or should they start utilising technology to expand their own campaigns? These are but a few questions that stand to be answered.

The third relates to the expansion of the traditional role of unions. Traditionally trade unions would have focused on issues such as wage increases, benefits and working conditions during negotiations. Going forward, automation in the workplace will require an increased focus on issues relating to “education, training, and legal support in an increasingly complex environment” (Hodgson, 2016: 213). If the fourth industrial revolution is to result in a positive effect on employment, the reskilling of the workforce is pivotal. Tavis (2017) place employers on a continuum of options. The first option is where companies decide to invest in their workers through training to include them in the technological transition. A

national policy framework with strong labour movement and civil society would assist in moving employers towards the positive end of the continuum.

The fourth issue speaks to the tactics employers will implement to start reshaping their workforce towards automation and a more flexible workforce. As stated earlier, employers will try to bring in clauses like the following to ease their transition to automated functions:

"Management, in its sole and absolute judgment and discretion, shall have the unlimited right to lay-off, eliminate the jobs of, and/or reduce the workweek of bargaining unit employees during the term of this agreement. The Employer shall have the right to open or close departments as it deems appropriate and to use new and improved methods (including automation) which it deems to be in the best interests of its business" (Korval, 2017)

Such a clause will ensure that a company has no restriction on their right to sub-contract. Some employers might even bargain for a right to sub-contract such as the following:

"The Employer shall have the absolute and unlimited right to sub-contract out bargaining unit work at any time, including the right to subcontract out the work of the entire bargaining unit, or any part thereof. The Employer shall further have the absolute right to select subcontractor(s) of its own choosing, in its sole judgment and discretion. This agreement shall satisfy any obligation that the Employer may have to bargain about the decision to subcontract" (Korval, 2017)

Language like this will allow employers to sub-out the warehousing and delivery services to a drone operation that can do it more cost-effectively because their associates' labour costs are negligible. Based on the issues identified, the following section concludes with some key recommendations for unions faced with the challenges of the future of work.

## Conclusion

There is no doubt that the world of work will be altered from how we know it to be today. While this report acknowledges these changes, it also emphasizes that fourth industrial revolution is context dependent and that the effect could be different in a developing country compared to a developed country. The question becomes less to what extent employers will try to replace humans with machines but rather to what extent they will want to employ a more flexible workforce without commitments towards social protection and decent wages.

Going forward, employers will increasingly try to structure their employment contracts to accommodate the transition to a more flexible workforce. Within bargaining processes unions' negotiators should thus focus on ensuring clauses such as the following:

- Guaranteed minimum working hours
- Job guarantees for the length of the CBA
- Restrictions on staff dismissals
- Restrictions on sub-contracting
- Protection of non-permanent workers
- Education and training (including re-skilling to meet new skills demands)

If the fourth industrial revolution is to result in a positive effect on employment, the reskilling of the workforce is pivotal. Unions will need to form part of a process in which there is a crafting of approaches to ensure the re-skill of workers.

There is further a need for labour movements to start looking at the broader value chains in which they operate. Such a broadening could result in more power in the hands of a union compared to employers. The way technology will be utilized by unions themselves is important in this regard. As technology is influencing all sectors it will also influence unions going forward. E-unions, virtual unions or cyber unions are becoming a reality. In this way, technology becomes a tool that can be utilised by unions to enhance their own influence.

In addition to bargaining within the workplace, there is also the need for national debates to ensure the required skills transition or relevant compensation measures. Such broader campaigns targeted to influence policy formulation include the following:

- Compensatory measures (guaranteed basic income and wealth redistribution)
- Legislation protecting the rights of workers (realistic minimum levels of pay and benefits, restoring a decent work-life balance, and removing the impediments to union organizing)
- Training demands/programmes: ensuring sufficient (re-)training especially for low qualified workers

Change has been inevitable throughout history. There is, however, no reason why change cannot be accommodated for adequate social protection, compensation measures and/or training and (re)skilling opportunities for workers. Bargaining is a pivotal tool in ensuring workers receive protection and would gain immensely from being supported by broader support and awareness campaigns. Capacity building to equip negotiators to bargain in complex environments is crucial. Employers will increasingly try to by-pass any responsibilities in the changing nature of work. Should this become the norm, the tendency of capitalism to exacerbate income inequality will increase.

Although the report focuses on retail, in particular, the recommendations are formulated for all sectors and in support of cross-sectorial and cross-border alliances.

## Bibliography

- Altenburg, T., Kulke, E., Hampel-Milagrosa, A., Peterskovsky, L. and Reeg, C. 2016. Making retail modernisation in developing countries inclusive: A development policy perspective. Deutsches Institut für Entwicklungspolitik: Discussion Paper, Bonn 2016 (p 1- 63).
- Arntz, M., Gregory, T. and Zierahn, U. 2016. "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis", OECD Social, Employment and Migration Working Papers, No. 189, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jlz9h56dvq7-en>
- Baldassari, P. and Roux, J. D. 2017. Industry 4.0: Preparing for the Future of Work. People and Strategy. VOLUME 40 | ISSUE 3 | SUMMER 2017
- Biagi, F. and Falk, M. The impact of ICT and e-commerce on employment in Europe. Journal of Policy Modeling 39 (2017) 1–18. <http://dx.doi.org/10.1016/j.jpolmod.2016.12.004>
- Chitrakorn, K. 2018. 5 Technologies Transforming Retail in 2018. <https://www.businessoffashion.com/articles/fashion-tech/5-technologies-transforming-retail> Date of Access: 8 March 2018.
- Gruen, D. 2017. The Future of Work: What are the implications of technological change for the labour market as we know it? asks David Gruen. POLICY • Vol. 33 No. 3 • Spring 2017.
- Hodgson, G. M. 2016. The Future of Work in the Twenty-First Century. JOURNAL OF ECONOMIC ISSUES. Vol. L No. 1 March 2016. DOI 10.1080/00213624.2016.1148469
- John Maynard Keynes, ' ', in Essays in Persuasion (New York: Norton & Co., 1930).
- Kestenbaum, R. 2017. Where Retail Technology Needs To Go Now. <https://www.forbes.com/sites/richardkestenbaum/2017/12/10/where-retail-technology-needs-to-go-now/#4fb4d3875fc6> Date of Access: 8 March 2018.
- Korval, N. 2017. Collective Bargaining Challenges Facing the Retail Sector. Employee Relations Law Journal. Vol. 43, No. 2, Autumn 2017
- Le Roux, D. (2018) Many South African jobs could soon be automated, and the country isn't prepared, The Conversation, 17 July 2018: <https://theconversation.com/many-south-african-jobs-could-soon-be-automated-and-the-country-isnt-prepared-99689>
- Omarjee, L. 2017. The future of retail: Robots to replace people? <https://www.fin24.com/Companies/Retail/the-future-of-retail-robots-to-replace-people-20170109>
- Omomowo, K. E. 2011. The changing nature of work: The creation of a 'working poor' population in post-apartheid South Africa. Development Southern Africa Vol. 28, No. 5, December 2011.
- Osborne & Frey (2013), Accenture Research, OECD, Stats SA, US Bureau of Labor Statistics: [https://www.accenture.com/t20180201T173907Z\\_\\_w\\_/za-en/\\_acnmedia/PDF-70/Accenture-Creating-South-Africa-Future-Workforce.pdf?la=en](https://www.accenture.com/t20180201T173907Z__w_/za-en/_acnmedia/PDF-70/Accenture-Creating-South-Africa-Future-Workforce.pdf?la=en)

- Ramutloa, L. 2017. Deputy Labour Minister, iNkosi Holomisa to deliver key address on debate on the future of work in South Africa and Germany <http://www.labour.gov.za/DOL/media-desk/media-alerts/deputy-labour-minister-inkosi-holomisa-to-deliver-key-address-on-debate-on-the-future-of-work-in-south-africa-and-germany> Date of Access: 8 March 2018.
- Rifkin, J. (1995), *The End of Work: Technology, Jobs, and Your Future*, Putnam, New York.
- Singh, S. 2008. Impact of Internet and E-Commerce on the Labour Market. *Indian Journal of Industrial Relations*, Vol. 43, No. 4 (Apr., 2008), pp. 633-644. Published by: Shri Ram Centre for Industrial Relations and Human Resources. Stable URL: <http://www.jstor.org/stable/27768158>
- Smith, J. W. 2016. The Uber-All Economy of the Future. *The Independent Review*, v. 20, n. 3, Winter 2016, ISSN 1086-1653, Copyright© 2016, pp. 383-390. Volume 20, Number 3, Winter 2016
- Tavis, A. 2017. How the Internet of People Will Change the Future of Work. *PEOPLE + STRATEGY. VOLUME 40 | ISSUE 3 | SUMMER 2017*
- The Age, 2006: <http://www.oxfordreference.com/view/10.1093/acref/9780191826719.001.0001/q-oro-ed4-00018679>
- The Guardian (2017) What jobs will still be around in 20 years? Read this to prepare your future: <https://www.theguardian.com/us-news/2017/jun/26/jobs-future-automation-robots-skills-creative-health>
- Wright, M. J. 2018. The Changing Nature of Work. *AJPH SPECIAL SECTION: WORK*. March 2018, Vol 108, No. 3)