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## AN IMPACT ASSESSMENT OF COVID-19 ON THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY

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### Abstract

The purpose of this article is to provide an impact assessment of Covid-19 on the South African automotive industry. The study is exploratory in nature and employs descriptive quantitative analyses. Monthly time series data (01/2000-01/2021) available from Statistics South Africa (StatsSA) were used for analysis and to achieve the objectives of the study. The results indicate that since the beginning of March 2020, all categories started to show significant contraction, and the worst negative growth was observed in April at the height of the Covid-19 pandemic regulations imposed by the government. Measured in nominal values at current prices and compared on a year-on-year (YOY) basis, the largest negative annual growth rate (contraction) was in used vehicle sales, followed by new vehicle sales, income from sales of accessories, workshop income, fuel sales, and convenient store sales. The overall YOY actual motor trade sales contracted by a massive 84%, and when seasonally adjusted, by 81%. Led by used vehicle sales, the automotive industry was able to recover rather quickly as the restrictions imposed by the government were eased from May 2020 onwards. However, the overall performance of the industry is still in a worse state when compared to the preceding year, 2019. Looking forward, the gradual increase in overall motor trade sales suggests a positive trend of growth.

**Keywords:** Automotive Industry, Motor Trade Sales, Covid-19 Pandemic, South Africa

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### 1. Introduction

Globally, the novel and dangerous COVID-19 pandemic has inflicted great damage to many economies. The negative impacts of the pandemic on healthcare systems and economic activities are felt across the globe (The New York Times, 2020). Several industries were directly affected by measures taken by different governments, resulting in a slowing down of the economy, and disruptions to supply, thereby causing them to shut down completely or disrupt their normal flow of services. The pandemic led to stringent lockdown measures by governments to reduce the spread of the disease and its impact on several sectors.

In South Africa, the first lockdown was severe. It included restricted social interaction, total closures of economic activities that were deemed non-essential, closures of educational institutions, closures of borders and prohibition of non-essential trade and travel (Chitiga-Mabugu *et al.* 2021). The first South African government regulations, gazetted on 26 March 2020, which lasted for a 21-day lockdown period until 16 April 2020, had a profound impact on the lives and livelihoods of individual consumers and businesses. These measures led to closures of many businesses, slowing or bringing production to a standstill in many sectors, increased unemployment, enforcement of social distancing, and reduction of the size of social gatherings, among others. Among many challenges associated with the pandemic, most individuals, especially those with comorbidities and those over the age of 60, are vulnerable to it; the rate and conditions under which it spreads are high, and the rollout of vaccines is not as swift as it is in other countries (more advanced countries). De Villiers *et al.* (2020) argue that if well-resourced countries are struggling to respond to the pandemic, developing countries, such as South Africa, face an even greater challenge due to its precarious economy and pressing social needs to respond to the pandemic, both of which are likely to have long-term consequences.

Arndt *et al.* (2020) identified four channels by which the lockdown may influence economic activity. These are a decrease in production as a result of the lockdown and other restrictions on non-essential business operations, the influence of the lockdown and restrictions on household demands for goods and services, the effect of disrupted global production and supply chains on South African exports, and the response of uncertainty on business investment. Collectively, most sectors of the economy are likely to experience serious negative consequences. Furthermore, Daniels (2020) commented that the lockdown influenced four key performance indicators in the automotive sector, namely production, sales, imports and exports. These indicators slowed down to meet the slow demand and standstill of business.

According to the World Bank (2020), the COVID-19 epidemic has inflicted a major blow to an already fragile global economy, which is set to enter its deepest recession since World War II, despite massive policy support. Although the stringent measures taken by many governments across the globe have been effective in curbing the spread of the virus, this has come at a high price. Several industries, among which are the hospitality, tourism, liquor and automotive industries, have been severely impacted by the pandemic, thereby drastically reducing their contribution to the gross domestic product (GDP) of the country.

The impact of the pandemic on the automobile industry, on which most South African industries rely, is the focus of this study. According to Barnes (2020), with the exception of very limited product supply for essential domestic service delivery (e.g., the continued supply of vehicle replacement parts) and the continuation of critical factory maintenance activities, operations in the automotive value chain have come to a halt as a result of the drastic lockdown measures. Some organizations in the business may have to face the unavoidable reality of issues linked with liquidity, total closure, downsizing, and staff retrenchment.

This study places emphasis on several categories of activities of the automotive industry as used by StatsSA, namely income from the sales of accessories, income from convenient store sales, income from fuel sales, new vehicle sales, workshop income and motor trade sales, to assess the overall impact of Covid-19 in the automotive industry. The main contribution of this study is the unpacking of the impact of Covid-19 as per the categories mentioned above so that insightful solutions are made when it comes to Covid-19 related regulations.

This paper is organized as follows: Section 2 gives brief information about the automotive industry in South Africa. Section 3 presents the methodology whereas Section 4 states the results and discussion. Finally, Section 5 concludes the paper with managerial implications.

## **2. Automotive industry in South Africa**

The automotive cluster is an important industrial sector in South Africa and accounts for approximately seven percent of the gross domestic product (GDP) (Davies and Vincent, 2020), and employs close to a million people (Mail & Guardian, 2020). The South African automotive industry does host seven global brands, of which 64% of its production are for export purposes. Although the automotive industry was already in decline because of environmental concerns and

a reduced demand for vehicles because of services such as Uber (Mail & Guardian, 2020), a steep decline in the industry was experienced since Covid-19 lockdown protocols were implemented in March 2020. The South African automotive sector plays a critical role in the economy, since it accounts for close on to 700,000 jobs, of which 110,000 are associated with automotive manufacturing (Davies and Vincent, 2020).

Globally, the strict government-led measures have resulted in many manufacturers reducing their manufacturing in the wake of reduced demand for motor vehicles. Automotive manufacturers will therefore face the challenge of footing the full salary of their employees and laying off some of them. The ripple effect of this will be experienced across the sector – dealerships will be affected as there may be a delay in the manufacturing and supply of parts, which, in turn, will affect the service cycle of vehicles as well as owners not bringing in vehicles for servicing during the lockdown period. Sharma and Naude (2020) state that South African automotive component manufacturers are not internationally competitive. They therefore import components more cheaply from abroad. The global restrictions as a result of Covid-19 will, no doubt, severely hamper the supply chain and consequently the automotive sector. Furthermore, the stringent lockdown measures have resulted in a huge reduction in travel. This in itself had its own ripple effect on the automotive industry – resulting in a decrease in the demand for vehicle services, fewer accidents, which meant lower demand for panel beating and repairs.

Mehta *et al.* (2020) argue that since a strong interrelationship between the lockdown and different sectors of the economy exists, instabilities in the economy may occur. This may lead to changes in consumer behavior, with consumers showing preference towards more essential products. Hence, a product such as a motor vehicle, which may be non-essential during the lockdown, may not enjoy preference over other consumer goods may not be a priority. This may result in a slowing down of industries producing and marketing non-essential products (like, for example, motor vehicles).

Venter (2021) highlights the different responses to the pandemic related to the automotive industry. Consumer response to the pandemic includes postponing the decision to purchase a new vehicle or extending their service and motor plan to keep their vehicles longer. Banks responded by providing relief to both customers and dealerships, while the government also played a crucial role in ensuring stability to the automotive industry. The lower interest rates also contributed to the relief experienced by consumers and dealerships. There were varied responses from dealerships. During the period April to September 2020, 38 dealerships faced closure, 19 changed ownership and six dealerships amalgamated. A positive outcome of the pandemic regarding the automotive industry was increased sales and demand for pre-owned vehicles. Modiba (2020) adds that the import of vehicle parts has become difficult and expensive because of the lockdown experienced by trading partners, consumers having to increase precautionary savings, thereby postponing the purchase of new vehicles, and quarantine and social distancing contributing to a decline in labor supply resulting in some cases of production halting. With strict restrictions on business and other travel as well as tourism, the vehicle rental sector, on which many dealerships are reliant for the sale of new vehicles, has also slowed down dramatically since the start of the pandemic.

Although the picture of the motor industry looks bleak, it is predicted that the industry will bounce back and experience a brighter 2021 (Venter, 2021). The National Association of Automobile Manufacturers of SA (Naamsa) predicts that although the automotive industry will continue to experience a tough period before business and consumer confidence will be restored, an improvement of about 15% in domestic new-vehicle sales and a 20% improvement in vehicle exports for 2021 can be expected (Droppa, 2021).

### 3. Methodology

The study is exploratory in nature, as the impact of the Covid-19 pandemic is still raging its devastating blow in many sectors of the economy, including the automotive industry. The study relied on publicly available secondary data (quantitative data) obtainable from the website of StatsSA. Using a stratified random sampling method, monthly data were collected from a sample of 908 enterprises across all provinces of South Africa. The data included monthly time series

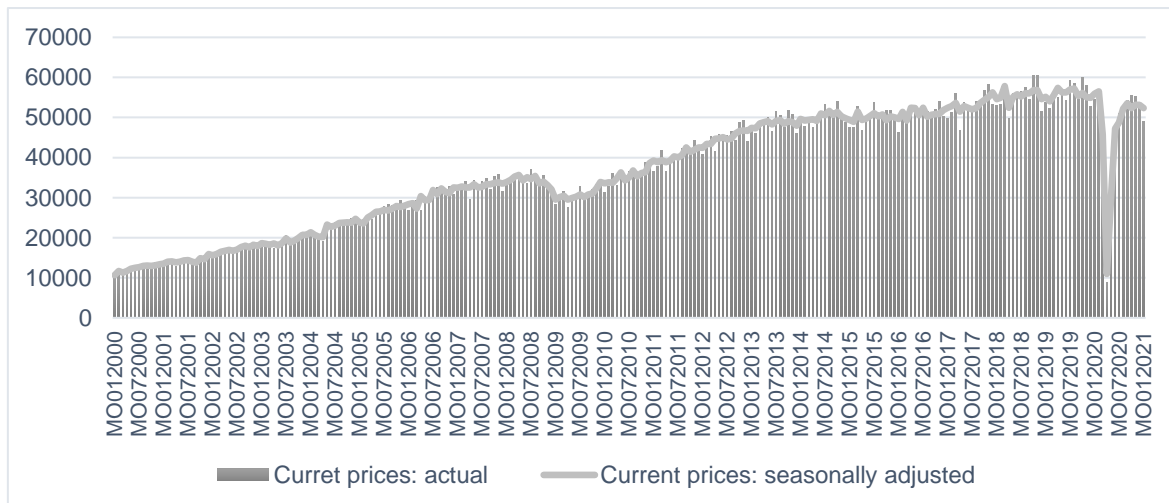
data (01/2000-01/2021). Actual and seasonally adjusted values at current prices are provided by StatsSA.

The trade sales for the automotive industry are provided under the following categories of activities: i) income from the sales of accessories; ii) income from convenient store sales; iii) income from fuel sales; iv) new vehicle sales; v) used vehicle sales; vi) workshop income; vii) motor trade sales: actual; and viii) motor trade sales: seasonally adjusted (Statistics South Africa, 2020). Descriptive quantitative analyses presented in the form of tables, figures and bar charts are used to address the research objectives of the study.

#### 4. Results and discussion

This section presents an analysis of important statistics and figures based on time series data obtained from StatsSA. Firstly, the analysis focuses on the overall motor trade sales of the industry from January 2000 to January 2021 (241 months) to provide an overall picture of the industry, followed by an analysis of the breakdown of sales in the motor industry by activity during the first pandemic year, 2020. Year-on-year analysis of the 12 months of the pandemic year with the preceding year, 2019, is also presented in order to provide comparison and meaningful analysis. The final section of the analysis focuses on the recovery of the industry as the restrictions imposed by the government were eased from May of 2020.

Figure 1 shows motor trade sales from 01/2000 to 01/2021 to provide an overall picture of the performance of the motor industry over the past 20 years. Figure 1 illustrates total actual trade sales and seasonally adjusted values for the period specified. Overall, the historical data show a positive growth trend over the past 20 years, with a slight decline in 2008/9, which occurred due the global financial crisis (GFC). The global financial crisis initially started in the US housing market, which later mutated into a full-blown recession by the end of 2007, affecting the economic fortunes of many economies, including South Africa. As can be observed, the worst decline occurred between March and April 2020 as a result of the strict lockdown restrictions imposed by the South African government during the initial period of the Covid-19 pandemic (level 5 lockdown stage). The decline is the largest in more than 20 years. The president of the Business Chamber, Andrew Muir, is reported to have said the Nelson Mandela Bay Metro, the hub of car manufacturing in the Eastern Cape, was in a deep hole and in the worst state since 1994 (Daniels, 2020).



**Figure 1. Motor trade sales (01/2000 to 01/2020)**

**Source:** Researchers' own construction from StatsSA data

Table 1 shows the various trade sales of the motor industry as per the categories utilized by StatsSA from 01/2020 to 01/2021. All the categories experienced extremely high negative sales growth rates, and the worst decline occurred between March and April 2020. The largest

negative growth rate (decline) was in used vehicle sales (97%), followed by new vehicle sales (90%), income from sales of accessories (85%), and workshop income (82%). The least affected categories are convenient store sales (-59%) and fuel sales (67%). The overall actual motor trade sales fell by 81%, and when seasonally adjusted, by 76%. This is indicative that the automotive industry has been one of the worst affected by the Covid-19 pandemic and the strict lockdown restrictions imposed by the South African government during the initial period (level 5 lockdown stage). These results do provide support to claims made by the CEO of Naamsa, Michael Mbaso, who indicated a huge decline particularly for new vehicles sales because of the introduction of the lockdown and subsequent economic restrictions and regulations imposed on the South African economy due to Covid-19 (Mail & Guardian, 2020).

**Table 1. Break-down of sales in the motor industry by activity during the first pandemic year, 2020**

Categories	01/2020	02/2020	03/2020	04/2020	05/2020	06/2020	07/2020	08/2020	09/2020	10/2020	11/2020	12/2020	01/2021	March to April - %
Income from the sales of accessories	29,134	9,081	8,331	1,212	6,790	8,963	9,679	9,425	9,735	10,104	9,996	8,821	8,729	-85
Income from convenient store sales	2,010	2,002	1,850	820	1,311	1,570	1,617	1,679	1,832	1,926	1,891	2,140	1,736	-56
Income from fuel sales	16,331	16,292	14,590	4,858	8,350	10,861	12,782	13,691	13,855	14,522	14,202	14,836	12,796	-67
New vehicle sales	13,275	13,342	10,488	1,032	5,635	12,892	12,292	12,981	13,370	13,442	13,884	12,687	12,267	-90
Used vehicle sales	10,196	10,286	8,018	267	4,415	10,013	11,081	10,758	11,625	11,923	11,553	10,402	10,150	-97
Workshop income	3,576	3,879	3,342	601	1,850	3,093	3,601	3,412	3,766	3,580	3,704	3,316	3,305	-82
Motor trade sales: actual	54,522	54,883	46,619	8,790	28,349	47,392	51,052	51,946	54,183	55,496	55,231	52,202	48,983	-81
Motor trade sales: seasonally adjusted	55,919	56,526	45,826	10,970	29,885	47,227	48,770	52,213	53,525	52,324	53,141	53,182	52,328	-76

**Note:** The figures are in million Rands.

Table 2 illustrates the year-on-year (YOY) comparison for the years 2019 and 2020. As illustrated in Table 2, the YOY figures started to show negative growth as early as January and February 2020 for some of the categories such as new vehicle sales, workshop income and convenient store sales, while the overall motor trade sales remained positive. Beginning from March, all categories started to show significant contraction, and the worst negative growth was observed in April at the height of Covid-19 pandemic regulations imposed by the government. Modiba (2020) reported that, for April 2020, the total vehicle units sold were 574, reflecting a 98.4% decline in sales compared to the same period the previous year, with the expectancy that further declines could be anticipated because of changes in consumer behavior and prolonged shutdown of automotive sector activities. Measured in nominal values, at current prices, and compared on a YOY basis, the largest negative annual growth rate (contraction) was in used vehicle sales (97%), followed by new vehicle sales (92%), income from sales of accessories (87%), workshop income (84%), fuel sales (71%), and convenient store sales (60%). The overall YOY actual motor trade sales contracted by a whopping 84%, and when seasonally adjusted, by 81%.

May 2020 was predicted to be a bad month for the automotive industry. The severity of the contraction started to ease only from June 2020. With the exception of used vehicle sales and income from the sales of accessories, all categories of activities in the automotive industry experienced negative growth for the rest of the year, as indicated by the YOY growth rates illustrated in Table 2. In other words, the recovery is uniform; better recovery seems to be limited to used vehicle sales and sales of accessories.

**Table 2. Year-on-year comparison (2019 & 2020)**

Categories	01/2020	02/2020	03/2020	04/2020	05/2020	06/2020	07/2020	08/2020	09/2020	10/2020	11/2020	12/2020
Income from the sales of accessories	0.24	1.69	-11.32	-86.94	-30.75	0.06	-1.65	-2.70	7.50	0.37	2.25	11.49
Income from convenient store sales	-3.32	5.87	-12.61	-59.86	-34.81	-22.24	-19.27	-18.06	-10.55	-7.89	-10.80	-3.78
Income from fuel sales	5.84	12.17	-11.22	-71.13	-50.10	-35.36	-24.80	-20.05	-15.63	-14.86	-17.25	-13.88
New vehicle sales	-3.44	-3.01	-26.64	-92.16	-59.84	-5.10	-21.45	-14.61	-2.18	-11.79	-3.70	-0.77
Used vehicle sales	3.39	6.62	-17.51	-97.32	-56.84	6.26	1.21	1.34	20.97	3.14	9.38	11.44
Workshop income	-1.00	7.36	-9.26	-83.80	-54.14	-10.63	-6.05	-9.18	2.78	-9.30	-4.46	2.47
Moto trade sales: actual	1.26	4.82	-16.22	-84.01	-50.13	-12.64	-13.87	-11.10	-0.52	-7.44	-4.63	-0.98
Motor trade sales: seasonally adjusted	1.43	4.69	-17.45	-80.87	-46.85	-16.05	-14.44	-8.77	-3.37	-6.69	-3.43	-3.16

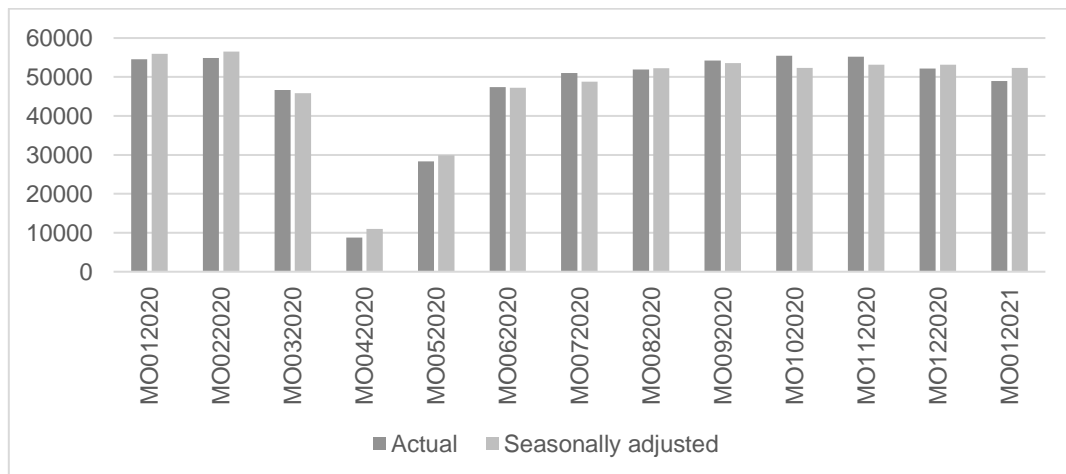
**Note:** The figures are in million Rands.

**Source:** Figures compiled by author from StatsSA time-series data

In a nutshell, while one can notice the recovery sign in the industry (Figure 1 and 2), the overall performance of the industry is still in worse state when compared with the preceding year, 2019, which is abundantly clear by the negative growth rates observed in Table 2. The main challenge of the automotive industry in South Africa has been more on the demand side, and less on the supply side (Davies & Vincent, 2020). Mail and Guardian (2020) concurs and adds that the automotive industry was in decline even before the Covid-19 crisis due to environmental concerns and a reduced demand for vehicles because of services such as Uber. It is common cause that the demand for durable goods such as motor vehicles and properties has been affected negatively due to Covid-19 inevitably worsening consumer demand in the automotive sector. There is no doubt that it will take a considerable amount of time before it reaches full recovery. Full recovery in the sector will only be realized when a time arrives where the consumer demand is improved significantly both locally as well as internationally where the industry relies on its export sales.

It is evident from Table 1 that there was a steep decline in sales since measures were taken to stem the spread of the pandemic. Barnes (2020) argues that smaller, second tier automotive component manufacturers, who have limited access to credit, and have lower operating margins, appear to be the most affected. The survival of these manufacturers is dependent on the nature and type of government support they receive.

Both Figures 1 and 2 illustrate total motor trade sales and seasonally adjusted values for the first pandemic year, 2020.

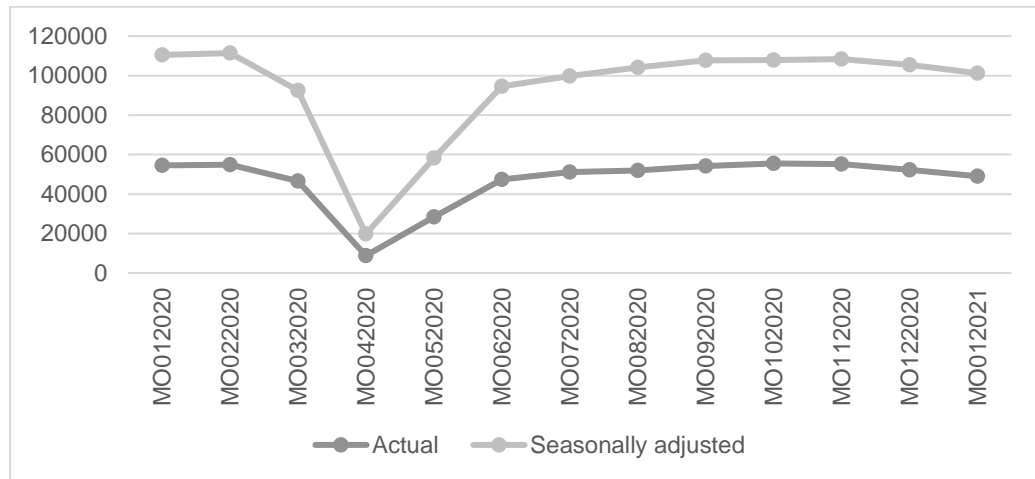


**Figure 2. Motor trade sales during the first pandemic year, 2020**

**Source:** Researchers' own construction from StatsSA data

As can be observed from Figures 1 and 2, the total motor trade sales dropped significantly between March and April of 2020 because of the strict regulations imposed by the government. The motor trade sales contracted by 81%, and when seasonally adjusted, by 76%, which

translates to R34,856 million revenue loss to the automotive industry. What is interesting is that the automotive industry was able to recover rather quickly as the restrictions imposed by the government were eased from May 2020 onwards. The short-lived contraction is evidenced by the V-shaped recovery depicted in Figure 3. The V-shaped recovery, as opposed to a U-shaped recovery, in the automotive industry, and the steady improvement are good news as it may suggest positive consumer confidence, which may send positive signals to other important players in the economy. The performance of the industry is in line with predications that the industry will bounce back and experience a brighter 2021 (Venter, 2021).



**Figure 3. Motor trade sales during the first pandemic year, 2020**

Source: Researchers' own construction from StatsSA data

## 5. Conclusion and managerial implications

The South African automotive industry plays a significant role in the South African economy. It contributes about seven percent towards GDP, and employs close to a million people. The Covid-19 pandemic and strict protocols implemented by governments globally to curb the spread of the virus are having unimaginable disruptions to business activities across the world, thereby negatively impacting this important industry. The purpose of this article was to provide an impact assessment of Covid-19 on the South African automotive industry. Using quantitative analysis, the study has explored and analyzed the impact of Covid-19 pandemic and the regulations imposed by the government on the automotive industry.

The study has established that beginning from March 2020, all categories of motor trade sales started to show significant contraction. The worst negative growth was observed in April at the height of Covid-19 pandemic regulations imposed by the South Africa government. Furthermore, measured in nominal values at current prices and compared on a YOY basis, the largest negative annual growth rate (contraction) was in used vehicle sales, followed by new vehicle sales, income from sales of accessories, workshop income, fuel sales, and convenient store sales. The overall YOY actual motor trade sales contracted by a whopping 84%, and when seasonally adjusted, by 81%. Led by used vehicle sales, the automotive industry was able to recover rather quickly as the restrictions imposed by the government were eased from May 2020 onwards. However, the overall performance of the industry is still in a worse state when compared with the preceding year, 2019. Looking forward, the gradual increase in overall motor trade sales suggests a positive trend of growth. Full recovery in the sector will only be realized when the threat of Covid-19 is eased due to interventions such as successful rollout of vaccines. Such condition will boast consumer confidence and consumer demand for products and services of the automotive industry significantly, both locally as well as internationally where the industry relies on for its export sales.

It is evident that the world and South Africa are not out of the woods yet as far as the Covid-19 pandemic is concerned. There could very well be more waves of Covid-19 in the coming months or years. An important lesson for government is to avoid a recurrence of what happened in April of 2020. In other words, not to implement a level 5 lockdown in South Africa, as this would cause devastating and irreversible damage in terms of income lost and loss of employment on the economy as a whole and the automotive industry in particular. Future studies could focus on the impact of Covid-19 on employment and productivity of the automotive industry and its relationship with the overall economic recovery of the country.

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