

# Impact of Covid-19 on Automobile sector



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Fall 2023



*Majors: FIN*

*S.No. BBA05*

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**Fall 2023**

**FINAL PROJECT/THESIS APPROVAL SHEET**

**Viva-Voce Examination**

Viva Date 29/01/2024

**Topic of Research:** Impact of Covid-19 on Automobile  
Industry

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## **DEDICATION**

In sincere appreciation and gratitude, we dedicate this project to our beloved grandparents, parents, brothers, sisters, and esteemed professors. Their unwavering support, invaluable guidance, profound expertise, and mentorship have been indispensable in the development of this work.

## Acknowledgment:

Appreciating people for their assistance, thanking them for their contributions, and realizing how sincerely grateful you are to them is the most satisfying task ever. A lot of direction and assistance from many people was required to effectively conduct our research, and we are fortunate to have received this throughout the completion of our research work.

We are grateful to Allah Almighty, for giving us the chance to be a part of this esteemed university and conduct our project under the guidance of Mr. Abdullah Hafeez who has refined our concepts and helped us to improve the standard of our project. His methodical approach regarding knowledge transfer and motivating students to conduct research is remarkable and highly inspiring to us. We would like to express our gratitude to the professors of Bahria Business School, who instilled us the knowledge, skills and helped us through our BBA degree.

## Abstract:

The “Impact of Covid-19 on the automobile industry of Pakistan” seeks to learn more about the effects of the worldwide pandemic on Pakistan’s Automobile industry. By considering three significant companies, this project primarily tries to evaluate the automobile industry’s profitability both before and after the Covid-19 period. The study concentrates on a specific time that includes the period before the epidemic, the period of lockdown and restriction, and the subsequent recovery stage. Financial information will be gathered and analyzed for the study from both primary and secondary sources, including annual reports of the various companies. Later, investigating key financial indicators, such as net profit margin, earnings per share, and current ratio, and share price returns. The project will also provide important insights for investors, industry stakeholders, and policymakers. The findings will serve as a foundation for upcoming automobile industry research and decision-making procedures, assisting stakeholders in navigating the difficulties presented by the ongoing pandemic and other market uncertainties.

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# **1. Introduction**

The origination of the SARS- CoV-2 coronavirus led to a global pandemic crisis in late 2019. It took no time for it to grow into an extreme and far-reaching challenge for everyone, disturbing the social structure of societies and economies worldwide, including Pakistan. The government implemented a lockdown across the country in an attempt to contain this breakout. The lockdown severely impacted the country, disrupting the entire value chains of the key industries, despite the fact that it slows down the disease's spread.

This chapter provides a comprehensive introduction to the automobile industry and the COVID-19 pandemic. To gain a deeper insight into the importance of our study concerning the effects of COVID-19 on Pakistan's automobile industry. It's crucial to have a general understanding of the pandemic and automobile sectors.

## **1.1. Automobile Industry**

The global economy depends on the automobile sector. Together with other manufacturers with global headquarters like Toyota, Volkswagen, and Hyundai, the "Big Three" U.S. automakers, General Motors, Ford, and Stellantis, contribute considerably to the gross domestic product of numerous nations. This industry, which produces significant amounts of income globally, is made up of a number of areas, including production, sales, and marketing. It makes heavy demands on resources from various supply chains, including those for rubber, steel, plastics, and oil. Currently, the global automobile industry is guided by newly constructed eco-friendly automobiles and developing technology. (Green, 2023)

The Automobile industry have grown to be an important component of industrialized countries economy. One of the main indicators of the health of the economies is the manufacture and sales of automobiles. The continuing existence of strong international trade balances is contingent upon the export of motor vehicles to nations for example Japan, Italy, Sweden, United Kingdom, Germany, and South Korea. The automobile industry is vast nowadays. In United States, it is largest single manufacturing firm in the context of overall worth. The receipts and sales of

automotive companies regard for more than one-fourth of the nation's retail commerce and more than one-fifth of its wholesale trade. These ratios are slightly lower for other nations, although Western European nations, South Korea, Japan, and the United States have been catching up quickly.

The manufacture of automobiles has a vital impact on other industries as well. Approximately three-fifths of its rubber manufacturing and one-fifth of America's steel is used by the automobile sector, which also happens to be the biggest user of machineries. Moreover, the special demands of mass-producing automobiles have greatly impacted the creation and advancement of extremely specialized machineries, in addition to promoting technological advancements. The countless auto-related firms, for example highway buildings companies and motor freight operators, have significant indirect benefits as well.

However, there's some adverse effects of the industry too. It is already possible to see the industry's tendency toward consolidation. The primary driver of this tendency is mass manufacturing, which can only be achieved by huge organizations because of the high equipment and tooling costs involved. The large business has a commanding advantage from the consequent economies of scale, presuming that the industry can accommodate the volume of cars that must be created in order to justify the investment. Consolidation has also been influenced by more expensive and restrictive rules designed to repair environmental harm caused by an increase in the number of automobiles on the road. (Binder & Rae, 2023). Electric vehicles (EVs) are rapidly gaining popularity in the automotive industry, and this is creating an exhilarating uncertainty of the automotive environment. However, even if EVs are the answer to a more sustainable future, the high prices of battery technology have made most OEMs and giga plants less profitable. (Wicks, 2023)

### **Pakistan's Automobile Industry**

Pakistan's automotive history is extensive and diverse. The sector has expanded dramatically over the years and is now home to many domestic and foreign automakers. The automotive industry in Pakistan has exhibited remarkable growth, a testament to its emergence as one of the fastest-growing sectors in the country. As of 2018, it contributed approximately 3% to Pakistan's GDP

and employed over 3.5 million individuals, reflecting its substantial economic significance. Pakistan ranks as the 35th largest global producer of automobiles, and its contribution to the national exchequer stands at an impressive Rs. 50 billion (around US\$220 million). Honda, Toyota, and Suzuki currently hold a majority of the market's share, but international automakers like Renault, Nissan, Proton Holdings, Kia, SsangYong, Volkswagen, FAW, and Hyundai have expressed significant interest in the "Auto Policy 2016-21" since its introduction in 2016. (Murtaza, 2023).

A new auto policy was approved in 2016 that provides tax breaks to automakers that establish production facilities inside the country. Numerous businesses indicated their desire to join the Pakistani market. Several incentives were provided to new investors in the automobile sector under the Auto Policy 2016–21. A significant inducement was the five-year reduction in customs tax on non-localized components. Additionally, the charge on customs was reduced from 32.5% to 10%. The duty was lowered for current investors from 2.5% to 30% beginning of the 2016–17 fiscal year. The import tariff on localized components was lowered to 45% for current players. For a period of seven years, the existing tariff structure was maintained for new investors. (Zahid, 2023)

Currently, Pakistan's automobile industry is now dealing with a number of issues that are making it difficult for producers to continue turning a profit. Completely Knocked Down (CKD) kits continue to face import limitations, which is one of the main problems. Kit imports are causing plant closures and capacity reductions. Along with declining consumer demand, the business is negatively impacted by the devaluation of the Pakistani rupee, increasing inflation, and stricter fiscal and monetary policies. Furthermore, the sector is suffering financial losses as a result of outstanding LCs (Letters of Credit) and the strong US currency relative to the Pakistani rupee. The present decline drop in auto revenue is a result of all these issues. According to the recent statistics released by the Pakistan Automotive Manufacturers organization (PAMA), the total number of cars sold by members of the organization in February 2023 was a mere 5,762. This translates into a significant 73% year-over-year fall and a 47% month-over-month decrease. Toyota Indus Motor Company (IMC) reported a 49% decrease in sales from the previous month with 1,803 vehicles sold, according to the statistics. Honda Atlas Vehicles Limited (HACL) had a 39% decrease in

sales with 1,636 vehicles sold, while Pak Suzuki Motor Company (PSMC) saw a dramatic 67% reduction in monthly sales with just 978 cars sold. (Zahid, 2023)

The domestic car manufacturing industry, which contributes 4% of the nation's GDP, is vital to the growth and stability of the country's economy. This is one of the main justifications for the federal government's attempts to support domestically produced automobile businesses. We are all aware that Japanese companies, namely Suzuki, Toyota, and Honda, have dominated Pakistan's car sector. Their affiliation with regional businesses has earned them the local nicknames Pak Suzuki, Toyota Indus, and Honda Atlas Cars. Though things are anticipated to change soon since new players are entering Pakistan's automobile sector. (Mazher, 2023)

### **Auto Policy 2021-2026**

The tax incentives and other assistance provided to automakers looking to start up manufacturing facilities in the nation are described in this policy. In the 2021–2026 auto policy, the government suggested tax incentives for domestically built vehicles with engines up to 800cc. The Ministry of Industry has suggested that extra customs taxes on compact automobiles be removed. Additionally, vehicles with engines up to 800cc will no longer be subject to the withholding tax. The Auto Policy 2021-2026 states that for a period of one year, the import tariff on electric cars will be lowered from 25% to 10%. (Zahid, 2023)

### **1.1. Covid-19 Overview**

In the last week of December 2019, several pneumonia cases that were not diagnosed were reported in Wuhan, South China. The World Health Organization designated the illness as COVID-19 on February 11, 2020 (WHO, 2020). On 11 March 2020, the globe Health Organization declared the COVID-19 outburst to be an epidemic due to the rise in cases, which had reached over two million in various parts of the world other than the China. While the quantity of new cases beyond China continues to increase, the number of newly reported cases within China, where the virus initially surfaced, is drastically falling. The top ten countries in the world with the most confirmed cases as of 3 August 2020, are shown in Figure 1. (Nayak, Mishra, & Naik, 2022)

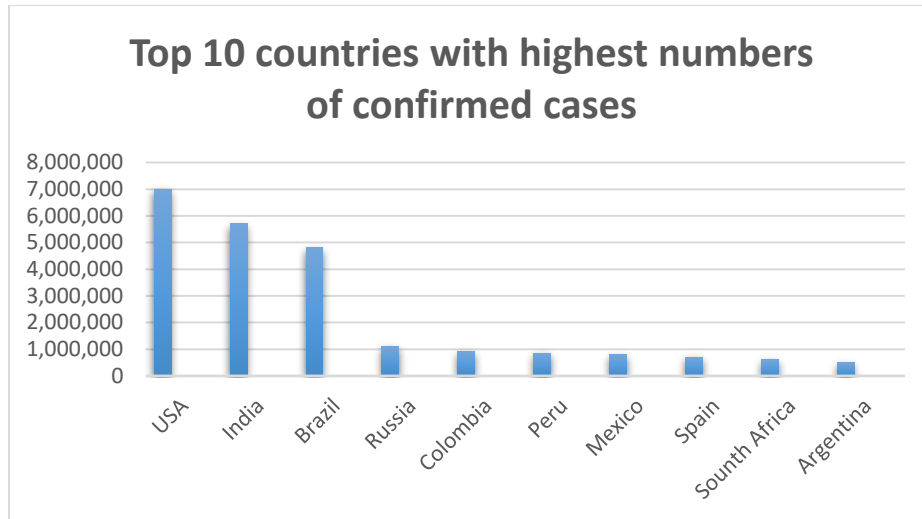


Figure 1.1

Covid-19 has Significant health problems which affected worldwide beyond their borders and are racial and ethnic in nature. All nations encountered this pandemic problem, but the majority of developing nations are in more dangerous situations since they lack the resources and medical infrastructure to combat it. Pakistan was one of that country. (Sohil, Umair, & Shabbir, 2021)

### **Covid-19 in Pakistan**

The first reports of COVID-19 instances came from Karachi and Islamabad on February 26, 2020. Karachi is the country's biggest metropolis, making it particularly vulnerable to the pandemic. It was the administration's great obligation to stop the spread by acting quickly and enacting the necessary policies to prevent a big disaster. At first, it was challenging to control the illness, mostly due to the general public's disregard for the recommended precautions and their tardiness in reporting symptoms. Controlling the borders was the government's primary response to COVID-19. In order to ensure that individuals visiting Pakistan for a short time are not infected, the authorities decided to set up quarantine homes close to borders and airports. The government had a significant financial and strategic challenge in developing these sanctuaries. Furthermore, there was conjecture that the broadcasts were brought in from overseas. Thus, travel restrictions were put in place to stop the virus from spreading to Pakistan from other nations.



The government of Pakistan implemented several additional measures to decrease the spread of illness and lessen the harm caused by the outbreak. Implementing well thought-out lockdowns in all of Pakistan's main cities was one of the measures the authorities took to stop the virus from spreading among the population. The province governments and opposition retaliated against this because it was a necessary step to stop the spread of illness, but it also presented a serious economic danger to the nation's low-income people and daily wage workers. The government also closed mosques to prayer, including Friday prayers, a move that was met with strong protest. SOPs were designed for the general public and were intended to be followed to strictly in public spaces. Disciplinary action was initiated by the authorities against those who disobeyed standard operating procedures (SOPs) in public areas throughout Pakistan in compliance with the National Command and Control Center's directives. (Covid-19 Pakistan Socio-Economic Framework, 2020)

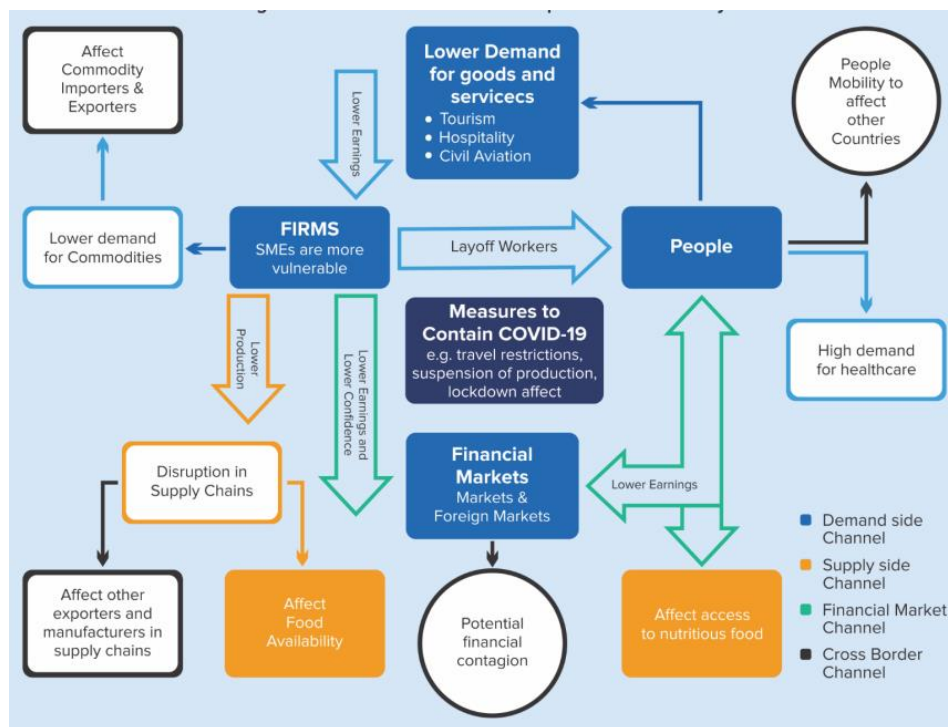


Figure 1.2 Channels of Covid-19's Impact on the economy

Moreover, the entire healthcare system encountered a number of challenges because of the system's shortcomings, inadequate infrastructure, unequal access to care, opposition from different social, political, cultural, and religious groups, political unpredictability, economic fragilities, and

public mistrust. Spread and containment of Covid-19 had an enormous impact on the economy in many different ways, as shown above in figure 1.

Pakistan introduced a number of programs to address the financial hardship that many people experienced during the outbreak. Prime Minister Imran Khan announced a relief scheme on May 2, 2020, for anyone who had their employment terminated as a result of the lockdown. In order to help the jobless, he started the Ehsaas financial Programme, a financial aid program. The government lifted the lockdown in several industries, long as they complied with SOPs and took the appropriate safety measures. This assisted in relieving some of the government's financial constraints. (Akhtar, Afridi, & Akhtar, 2021).

### **Impact on businesses**

This virus has caused tens of millions of people to lose their jobs, shut down many businesses of all sizes, and had other adverse effects on company operations. It has also caused a significant short-term economic downturn. Due to the fact that small companies are the foundation of every economy and that COVID-19 is having an impact on economies worldwide, it is more crucial than ever to defend them. (Engidaw, 2022). There have been numerous ups and downs in the business world. This is because lockdowns were implemented by several countries. In order to learn more about how COVID-19 was affecting organizations, what challenges and opportunities they were encountering, and what plans they had in place to maintain business continuity, Management Events conducted a poll at the time. In this follow-up analysis, they discovered fresh information on how leading European corporations handled business interruptions caused by the coronavirus and their tactics during the outbreak. According to the Management Event Executive Trend Survey, the majority of executives (64%) expected "*business as usual*" to resume in two to three months, despite the coronavirus's predicted short-term negative effect on the company. In a poll conducted with over 1,000 decision makers in Europe five months into the pandemic, 31% of the adversely afflicted firms said that they were presently in the recovery stage, and 12% had already made progress into the growth stage. (The Impact of Covid-19 on Businesses, 2023)

According to research conducted five months earlier, 86% of respondents anticipated a significant reduction in revenue as a consequence of the direct impacts of COVID-19 on their company.

Businesses were still expecting COVID-19 to have a negative revenue impact five months later, demonstrating the long-lasting financial ramifications of the virus. Of those surveyed, 44% anticipated a decline in revenue during the next six months. The remainder, however, anticipated a boost in income, with the plurality (40%) only projecting a rise of less than 15%. Despite this, corporate executives had high hopes for their future cash flow: 52% expected sales to rise by at least 15% in the next year, and 18%. (The Impact of Covid-19 on Businesses, 2023)

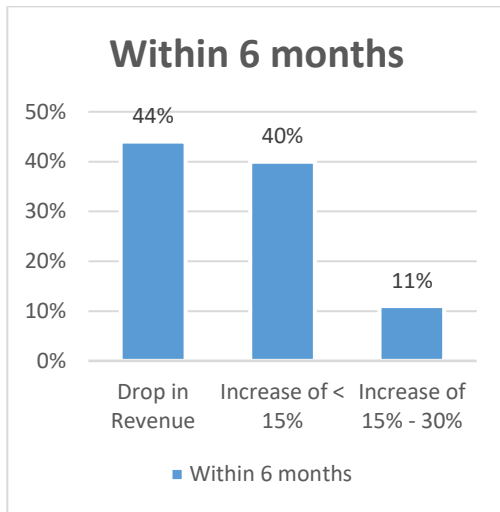


Figure 1.3

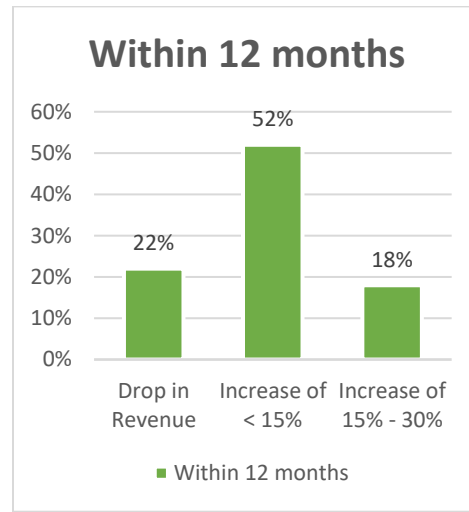


Figure 1.4

One of the most significant developments of the COVID-19 pandemic has been the move by small firms to go online, which opens up new avenues for problem-solving. In fact, the internet continues to be a lifeline for a lot of small enterprises, keeping them viable throughout the outbreak. Facebook's analysis states that 23% of firms reported using digital ordering tools, 16% service delivery tools, and 37% digital payment tools. But during COVID-19, we have also seen a great deal of small companies come up with innovative methods to thrive, whether it is by branching out into new areas or developing new distribution strategies. Simultaneously, some big digital firms, like Google and Facebook, are developing new channels for small enterprises to communicate with their clientele. (Engidaw, 2022).

Furthermore, lockdowns and the COVID-19 pandemic are having unprecedentedly negative consequences on Pakistani enterprises. In a recent study, the United Nations Conference on Trade

and Development (UNCTAD) said that Pakistan was the country most severely affected by the COVID-19 epidemic worldwide. (Shafi, 2020)

### **Impact on Automobile Industry**

The automobile sector was already uneasy due to issues in its three largest markets, the United States, China, and Europe. The Chinese market has been growing less rapidly over the last two years, the US market was worried about maintaining vehicle, and automakers in Europe were struggling to meet CO2 regulations in order to sell electric cars (EVs), which had poor profit margins. COVID-19 arrived on top of an industry that was already under pressure from three directions, disrupting supply chain operations and ultimately stopping production across markets.

A significant center for the production of automobiles and auto components worldwide was shut down as a consequence of the city of Wuhan and the province of Hubei going under prolonged lockdown, upsetting the global auto manufacturing supply chain. International automakers struggled to keep their industrial engines operating due to a scarcity of components, according to The Financial Times (FT). Moreover, Financial Times stated that, in order to maintain manufacturing, Jaguar Land Rover rushed to get suitcase-sized components out of China. Production eventually stopped in the US, Europe, Japan, and other major countries because to social distancing policies, safety and health issues, and a lack of components. Due to the shutdown, Ford and GM were compelled to stop paying dividends and use emergency credit lines in order to survive in the US. Ten times worse than Brexit declines, the UK's automobile production plummeted by 37.6%, according to the Society of Motor Manufacturers and Traders (SMMT). For 2020, the prolonged shutdown period eliminated 21–18% of global vehicle output, according to Frost & Sullivan. (Baig, 2020)

Several academic studies have explained the effects of COVID-19 on the automotive sector. Rajamohan studied how COVID-19 has affected the stock market, especially the National Stock Exchange for the car industry. Higher value stocks have been sold at depreciation value, according to the findings. Furthermore, the returns of the vehicle sector index have been observed to be lower. Therefore, based on the data, it can be said that the COVID-19 epidemic has had a major impact on the automotive stock market. Yan suggested a hybrid model called the SEM-Logit model to investigate consumer decision-making and the variables influencing car purchases during

pandemics. The findings indicate that the pandemic has had a negative impact on car purchases. Individuals' choice to buy has been impacted by several variables, including family income, travel vulnerability, and the intensity of the pandemic in the surrounding areas. (Nayak, Mishra, & Naik, 2022)

## **1.2. Companies Background**

### **Toyota**

Toyota Motor Corporation, Japanese main corporation of the Toyota Group. It became the biggest vehicle brand and manufacturer in the world for the first time in 2008, overtaking General Motors. Many of its nearly 1,000 subsidiary firms and affiliates are engaged in the manufacturing of cars, automotive components, and commercial and industrial vehicles. Headquarters are in Toyota City, an industrial city east of Nagoya, Japan. For many decades Toyota was Japan's biggest vehicle manufacturer. However, the company subsequently faced significant financial challenges: plummeting sales stemming from the global financial crisis of 2008 as well as an international safety recall of more than eight million vehicles in 2010, which temporarily halted the production and sales of several of its top models. Today Toyota has assembly plants and distributors in numerous nations. (Toyota Motor Corporation, 2023)

Toyota, the renowned Japanese automotive giant, has a significant presence in the Pakistani automobile market as well. In 2020, Toyota Indus Motors reported revenues exceeding PKR 100 billion (\$623 million). The Toyota Corolla remains a top-selling car in Pakistan, consistently holding a substantial market share. Toyota's market share in Pakistan's automobile industry is around 25-30%. The manufacturing facility in Port Qasim, Karachi, has an annual production capacity of over 50,000 units. As of 2021, Toyota boasted an extensive network of over 50 dealerships and authorized service centers across Pakistan.

Toyota has established itself as a dominant and adaptable player in the Pakistani automotive market. Through a diversified product lineup, investments in local production, and a strong commitment to quality and innovation, Toyota continues to thrive despite economic challenges and fierce competition. Toyota's resilience and future-oriented approach position it for sustained success in Pakistan's dynamic automotive industry.

## **Honda**

Honda Motor Company, Ltd. is a well-known Japanese motorbike manufacturer and a significant global automaker. Although Honda leads the world in motorcycle production, the company's automobile division accounts for the majority of its yearly sales. Honda, the renowned Japanese automotive manufacturer, has carved a substantial niche for itself in the Pakistani automobile market. Establishment of Honda Atlas Cars (Pakistan) Limited in 2002 as a joint venture between Honda Motor Co. Ltd. and the Atlas Group was one of the first step towards their growth in Pakistan.

Although they had to face some Challenges due to economic instability and evolving government policies in Pakistan. Yet in 2020, Honda Atlas Cars reported revenues exceeding PKR 70 billion (\$436 million). Honda maintains a market share ranging from 15-20% in Pakistan's competitive automotive industry. Honda Atlas Cars' manufacturing facility in Manga Mandi, near Lahore, boasts an annual production capacity of over 50,000 units. As of 2021, Honda's expansive network encompassed over 100 dealerships and authorized service centers across Pakistan. (Honda Motor Company, Ltd., 2023)

Honda's journey in Pakistan has been marked by resilience, innovation, and strategic adaptation. With a commitment to quality, a diverse product lineup, and a growing presence across the country, Honda is poised for a promising future in Pakistan's dynamic automotive landscape.

## **Pak Suzuki**

Pak Suzuki Motor Company Limited, a subsidiary of the Japanese automaker Suzuki Motor Corporation, holds a significant presence in the Pakistani automotive industry. Pak Suzuki was established in 1982 as a joint venture between Suzuki Motor Corporation and local partners. During 2011-2015 Economic challenges and increasing competition from other automakers tested Pak Suzuki's resilience. Thus Efforts were made to enhance the after-sales service and parts availability.

In 2020, Pak Suzuki reported revenues exceeding PKR 60 billion (\$373 million). The Suzuki Mehran and Suzuki Alto consistently ranked among the top-selling cars in Pakistan. Pak Suzuki maintained a market share ranging from 30-40% in Pakistan's competitive automobile industry. The manufacturing facility in Karachi has an annual production capacity of over 100,000 units. As

of 2021, Pak Suzuki boasted a network of over 150 dealerships and authorized service centers across Pakistan.

Pak Suzuki has played a significant role in shaping the Pakistani automotive landscape. Through a focus on affordability and practicality, along with periodic product innovations, it has garnered a loyal customer base. Despite economic challenges and changing market dynamics, Pak Suzuki remains a formidable player in Pakistan's automotive industry, with continued potential for growth and adaptation in the years to come.

## **2. Problem and Requirement Analysis**

### **2.1. Problem statement**

**The main aim of problem statement is to focus on price and ratio changes for major automakers like Toyota, Honda, and Pak Suzuki, the study intends to investigate the complex effects of the COVID-19 pandemic on Pakistan's automotive industry. The ultimate goal is to comprehend the disruptions experienced by these leaders and to suggest methods for increased resilience, adaptability, and revitalization in the face of macroeconomic and microeconomic challenges.**

The COVID-19 epidemic has had a significant impact on several international businesses, including the automobile industry. This problem statement seeks to explore the many ways that COVID-19 has affected Pakistan's automotive sector, with a focus on changes in ratios and prices. In order to carry out this thorough research, we will concentrate on the top automakers and dealerships in the area, assessing their performance both before and after the pandemic.

- Toyota
- Honda
- Pak Suzuki

The goal is to tackle the complex issues that emerged in the Pakistani automobile sector as a result of the epidemic. The objective is to comprehend how much disruption these important industry players are facing. Through the analysis of several factors, this study will identify viable approaches for industry revitalization, flexibility, and improved resilience. This comprehensive investigation will clarify the macroeconomic and microeconomic effects of the pandemic, providing a clear picture of the automotive industry's path through these turbulent times and beyond.

### **2.2. Purpose of the study**

The purpose of this research is to offer a thorough comprehension of the extensive consequences of the COVID-19 pandemic on Pakistan's automotive sector. The main objective is to use financial data to support the specifics of how the pandemic affected different aspects of the industry. By



providing insightful information that will help industry participants, such as manufacturers, dealerships, and service providers, not only navigate current obstacles but also develop long-term resilience. Specifically, this study seeks to achieve the following objectives

- Impact assessment
- Challenges and adaptation
- Strategies

The study's conclusions and suggestions will not only demonstrate the industry's toughness but also act as a benchmark for determining its course going forward.

### **2.3. Problem faced by the automobile industry during Covid-19**

#### **Impact on Manufacturing:**

In Pakistan, the federal government's directives to enforce a lockdown in response to the COVID-19 outbreak led to the closure of most of the automobile manufacturing and assembly plants since March 23, 2020. The phased easing of the lockdown, with conditional plans for labor-intensive industries, further disrupted production and operations in the auto sector. Auto manufacturers have halted production in regions such as China, North America, and Europe. These disruptions have led to reduced work hours, short-time labor, and other measures. The impact on manufacturing stoppages, coupled with reduced demand and employee safety concerns, is expected to have a significant financial impact in the short to medium term.

In 2019, the global automotive industry already faced a 5% decline in production, marking the end of a decade-long growth streak. However, in 2020, the sector encountered an unprecedented challenge in the form of the COVID-19 pandemic. Extensive shutdowns impacted not only automakers but their suppliers worldwide. The result was a staggering 16% decline in production, which brought global vehicle manufacturing down to levels last seen in 2010. Europe bore a more than 21% average drop, with all major producing countries experiencing significant declines. The Americas, the NAFTA region, and South America witnessed drops of more than 20%, while Africa saw a sharp decline of over 35%. In contrast, Asia, particularly China, exhibited resilience with a mere 10% production decline. Although global sales figures also showed a decline of around 12%, the industry managed a gradual recovery in the latter part of 2020. President Fu Bingfeng highlighted the industry's ongoing challenges, including producing cleaner, safer, and more

connected and automated vehicles, emphasizing the need for a sustainable and technologically advanced future in the automotive sector.

### **Impact on Metal Powder Sales:**

The COVID-19 pandemic has wrought havoc on the global automotive industry, causing a substantial downturn in sales of metal powder due to the volatile demand. Metal powder, crucial in the manufacturing of automotive parts, experienced a notable decline in sales as automakers reduced production capacities. The demand for metal powder declined as automakers postponed or canceled production plans, resulting in reduced orders for metal powders. A decrease in consumer confidence and limited access to showrooms and dealerships further strained the automotive industry, affecting the need for metal powders. The metal powder market saw a contraction of approximately 10% in 2020 due to reduced demand from the automotive sector.

## **2.4. Strategic assessment**



Figure 2.1

The automobile sector in Pakistan has a number of advantages that increase its potential for development and success. Firstly, there is an *increasing demand* for cars. Pakistan has one of the lowest car-to-person ratios among rising nations, with nine vehicles per 1,000 people. This suggests that the auto industry, and particularly automobile production, has significant development potential. The business is encouraged to develop and expand by rising per capita income, shifting demographics, and the expected entry of 30 to 40 million young people into the economically active labor market over the next few years. Because there are more spare parts, warranties, and after-sale services available for locally produced automobiles, their *resale value is higher*. For the past six months, used import automobiles have been selling for less than their advertised costs in dealerships, but because of their poor resale value and trouble finding replacement components, buyers are reluctant to purchase them. When auto imports were first legalized, the quality of locally assembled cars was inferior, so high-class consumers began purchasing imported vehicles, which caused local assembly plant sales to decline. As a result, local automakers began to improve the quality of their products, and today we can say that locally assembled cars are the auto industry's strongest suit.

Moreover, the local OEM in Pakistan has the necessary *advanced technology* and experienced people to make parts that meet the required quality standards of any international business. Purchasing locally produced automobiles has the benefit of having *factory-installed CNG kits* during a period when fuel prices are growing faster than ever elsewhere in the world. While foreign car availability is a bigger problem for the owners and, even if they are able to find one, the mechanics charge much more than what is actually necessary, local assembled cars have readily available mechanics who are also much cheaper, so the buyer need not worry about any potential long-term problems with the car. (Zaheer, 2011)

However, Pakistan's automobile sector also has a number of flaws that might prevent it from expanding and operating effectively. Pakistan's *political instability* and different policies have had a negative impact on the industry. The Pakistani government asked the World Trade Organization (WTO) for permission to prolong the deletion program at the start of 2008. The local content requirement (LCR) program, commonly referred to as the *deletion program*, mandated that the

automotive industry employ parts produced locally. The scheme was not in line with the WTO's objective of liberalizing global commerce. This choice has caused significant harm to the regional makers of auto parts. Another significant element that has severely harmed Pakistan's car sector is *inflation*. Over the past two years, there has been a significant increase in input prices due to strong inflation, which has prevented auto manufacturers from producing affordable automobiles. Furthermore, the automotive industry's situation has gotten worse as a result of the *energy crisis*, forcing them to shift towards expensive self-generation, which has increased the costs even further. Modern automobiles cannot be produced using conventional machinery with the same level of quality. The industry has to purchase sophisticated machinery in order to produce cars that meet worldwide standards, but it lacks experienced staff to operate the new machinery effectively. (Zaheer, 2011)

Despite these flaws, there are several chances for Pakistan's automobile sector to prosper. Pakistan has enormous *potential to expand* its automobile market, given its relatively low penetration rate of only 13 vehicles per 1000 inhabitants and its quickly increasing urbanization rate of 40.5%. As of right now, just three Japanese OEMs—Suzuki, Honda, and Toyota—assemble automobiles in the nation; these companies clearly control the majority of the domestic car industry. In order to provide end users more options, the Pakistani government is eager to provide incentives to both new and established OEMs for the introduction of new models. Since there are now just three OEMs, there is *room for more to enter the market* and meet end users' unmet needs. (Frost & Sullivan, 2018). Moreover, *Importing German machinery* that is updated and meets global standards can help Pakistani automakers improve the quality of their goods. Local automakers may also start collaborative partnerships with their international competitors. They will be able to manufacture premium cars at competitive pricing as a result. Numerous foreign nationals have expressed interest in making *investments* in Pakistan's car industry. One of China's biggest heavy-duty truck manufacturers, China National Heavy Duty Truck Corporation (CNHDTTC), has been in talks to form a cooperation with a local truck manufacturer in order to engage in the car business. Similar alliances may be formed with foreign automakers, such as those in the US and Germany.

Threats to Pakistan's steel industry, however, nevertheless exist and may have an effect on its development. Numerous *taxes* are often imposed on the car sector; the presumed *tax structure* has resulted in higher import input and finished goods costs. *Used components* are still being imported

on a large scale. *Auto parts smuggling, undervaluing, and dumping* Pakistan's automotive sector is still in its infancy; if the government decides to remove import taxes, foreign automakers would pose a severe threat to the sector. Even a small cut in import duties, much less their elimination, would severely harm the business and perhaps put it in danger. Moreover, given how much the price of oil has climbed over the past few years, as a result, there is less of a need for cars. (Zaheer, 2011)

### **3. Design and implementation:**

#### **3.1. Objectives & Goals of the study**

In the design and implementation chapter, the report objective is to undertake a comprehensive financial analysis of Pakistan's automobile sector, primarily focusing on Toyota, Honda, and Pak Suzuki, by evaluating their performance through financial ratios including liquidity ratio, profitability ratio, and market ratio for the periods before and after the impact of the COVID-19 pandemic. The main objective is to determine how the financial health of these automobile companies was affected by the pandemic and to ascertain if there were variations in the share prices. By identifying specific key financial indicators that significantly shifted due to the pandemic, the Research paper will analyse the vulnerabilities and strengths of these companies.

The initial goal is to examine the impact of the pandemic on the automobile companies. Later, it will identify important financial ratios that can reveal information about the performance and adaptability of the industry. The in-depth analysis of the industry and economic dynamics will help to identify areas for enhancement and support businesses in making evidence-based decisions that will promote recovery and progress in the automobile sector post-pandemic by offering a comparative view of financial ratios before and after the pandemic.

#### **3.2. Data Collection and Limitation**

##### **Project Design**

The project implements a quantitative research design in order to make the collection of actual data easier, which can be subjected to statistical analysis. This design is used because of the need to collect quantifiable data that ensures a systematic and data-driven approach to analysing the pandemic's impact on these companies. The primary source includes all the financial statements and publicly available records.

##### **Data Collection Methods**

The data was collected from three well-performing companies in Pakistan. It was a rigorous data collection approach to ensure the reliability and inclusiveness of the data. To achieve the objective Data was gathered from the financial statements obtained from their respective websites, including

financial reports, balance sheets, income statements, and cash flow statements of Toyota, Honda, and Pak Suzuki for the pre- and post-pandemic periods. Secondary pertinent data from the Pakistan Stock Exchange website was collected to supplement the financial statistics. This reliable and accurate source included share prices, market trends, and historical stock data for the chosen companies. Which we used to evaluate market performance and investor sentiment. Data concerning government policies and regulatory changes was sourced from official sites.

### **Data Analysis Techniques**

The collected financial data was analysed using calculations of various financial ratios, including liquidity ratios, current ratios, profitability ratios such as net profit margin, market ratios such as net profit margin, and price-to-earnings ratios for each company. These ratios provided valuable insights into the financial performance and strength of companies operating within the auto sector during the pandemic. Year-on-year comparisons of financial data will be conducted to identify trends, variations, and performance during both pre- and post-pandemic periods.

### **Ethical Considerations**

Ethical standards, values, and guidelines were followed throughout the project process. Before taking part in the study, all volunteers will be fully informed about it, and their consent will be needed. In addition to data protection laws, participants' privacy and the confidentiality of companies' rights will be safeguarded. The project proposal was reviewed and approved by the supervisor of Bahria University Islamabad (BUIC) prior to data collection.

### **Limitations**

It is important to mention that there are some limitations regarding the project. Firstly, the study focused on the impact of COVID-19 and did not consider any other factors that may have affected the automobile sector during the same period. Secondly, a small sample size may affect the generalizability of findings. Lastly, Study mainly relies on quantitative data, and it's limited based mostly on assumptions.

### **3.3. Financial Ratios**

Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and

income statement. Ratio analysis is a cornerstone of analysis. To evaluate the profitability of the companies, the project is going to examine the following ratios. (Bloomenthal, 2023)

### **liquidity ratio:**

Liquidity ratios measure a company's ability to pay off its short-term debts as they become due, using the company's current or quick assets. Liquidity ratios include the current ratio, quick ratio, and working capital ratio. (Bloomenthal,2023)

#### **A. Current Ratio:**

**Significance:** Current ratio determines the firm's ability to pay back short-term liabilities. It is important since it shows whether the firm can keep up with paying its short-term liabilities using its current assets and not go bankrupt overtime. Hence ideally a firm's current ratio should stay above 1.

**Formula:**  $\text{Current Ratio} = (\text{Current Assets}/\text{Current Liabilities}) * 100$

#### **B. Quick Ratio:**

**Significance:** Quick ratio determines the firm's ability to pay back short-term liabilities using only liquid assets. It is important since it shows whether the firm can back its immediate liabilities using cash at hand and not relying on other non-liquid assets such as receivables. Ideally, a firm's quick ratio should stay above 1.

**Formula:**  $\text{Quick Ratio} = [(\text{Current Assets}-\text{Inventory})/\text{Current Liabilities}] * 100$

### **Profitability ratio:**

Profitability is the net result of several policies and decisions. It relates profit to sales and investments.

#### **A. Gross Profit Margin Ratio:**

**Significance:** This ratio tells the profit of the firm relative to its sales and measures the efficiency of the firm's operations as well as an indication of how products are priced.

**Formula:**  $(\text{Net Profit}/\text{Net Sales}) * 100$



### **B. Return on Assets (ROA):**

**Significance:** Return on assets (ROA) is like a way to see how good a company is at making money from all the stuff it owns. It's a percentage, and if the percentage is high, it means the company is good at using its stuff to make money.

**Formula:** Return on Assets (ROA) = (Net Profit/ Total Assets) \*100 OR  
(Net Profit/Total Assets) \*100

### **C. Return on Equity (ROE):**

**Significance:** It evaluates the rate of return on common stockholder's investment. High rate signifies that the firm has effective investment openings.

**Formula:** Return on Equity (ROE) = ROA/Ownership Ratio

### **Market Ratio:**

Market value ratios are formulas that are used to provide insights into a company's share price. There are many formulas that are used in various combinations for different analytical techniques. One thing is for sure, market value ratios give equity analysts a basic framework of a company and can possibly help to identify undervalued or overvalued stocks. (venketas, 2020)

#### **A. Earnings Per Share (EPS):**

**Significance:** This ratio is important for any company. Investors usually look at this ratio before investing in any company. The higher this ratio, there is more likely that investors will invest in the company. This ratio basically indicates how much money a company makes for each share of its stock.

**Formula:** Per Share (EPS) = Net Income/Avg. Outstanding Share

#### **B. Price Earnings Ratio (P/E)**

**Significance:** This ratio is also significant for companies as it tells us about the market value of shares as compared to the company's earnings. It helps investors determine the value of the shares. In short the P/E ratio shows the stock holders in the company as what the market is willing to pay today for a stock in the company based on its past or future earnings.

**Formula:** Per Share (EPS) = Net Income/Avg. Outstanding Share

### **3.4. Business Model**

An automobile company's business model is a blueprint that describes its essential elements, such as how it develops and provides value to its consumers, maintains operations, generates revenue, and adjusts to market fluctuations. Numerous elements, including product innovation, production procedures, relationships with consumers, distribution methods, and financial strategies, all have an impact on how effective these models are. In this section, we will be discussing the business models of Toyota, Honda, and Pak Suzuki in order to understand how they continued to deliver value to their customers. It is very vital for the sake of the study to see how the value proposition, value capture, and value delivery approaches of the firms and evaluating the broader implications of the pandemic on the sector.

#### **Toyota**

Toyota's key focus has always been customer satisfaction, and they fully understand that the only way to keep a customer satisfied is with after-sales services and effective communication. In order to decode Toyota's business model, let's begin by analyzing their market share. With 2.3 million Toyota vehicles sold this year to date, representing a 7.9% growth in total sales, the Toyota Group leads the global market as of March 2021 with a 12.6% share. Currently, the brand is distributed in almost 200 countries worldwide, with Japan accounting for about 45% of all vehicle sales and 52% of all income made outside of Japan (shastri, 2021). Pakistan is one of the countries to contribute to this market share. As a result of their worldwide market and brand recognition, they've attained a sustainable long-term business model.

With its "Quality, Durability, and Reliability" motto at its core, Toyota's value proposition revolves around giving customers a product that either meets or surpasses their expectations. Toyota's value statement places a strong emphasis on innovation, which is seen by their ongoing attempts to adopt eco-friendly solutions and their innovative hybrid technology. The firm markets itself as a brand that delivers cars as well as an efficient, environmentally friendly, and technologically sophisticated driving experience. Let's dissect Toyota's business model with a primary focus on Pakistan.

Toyota has observed a notable increase in demand for its automobiles in Pakistan throughout the past several years. As a result, the business has started releasing new models in Pakistan, such the Toyota Yaris. The production and distribution of Toyota automobiles in Pakistan is now handled by Indus Motor Company, one of the biggest automakers in the nation. Due to its emphasis on quality, dependability, and after-sales care, the firm has also made a name for itself in the regional auto sector. (Toyota, 2023)

## **Honda**

We will now be studying Honda's business model from the inside out to determine the factors that contribute to their success on a worldwide scale. Honda emphasizes a sporty and dynamic driving experience across its product lines, positioning Honda as a brand for enthusiasts. Honda's value proposition centers on delivering innovative and fuel-efficient vehicles that offer a blend of performance, reliability, and cutting-edge technology. Honda's development of hybrid and fuel-efficient vehicles is evident in its commitment to environmental sustainability, aligning with eco-conscious consumer preferences. Honda generates value mainly from the sale of a wide variety of vehicles, such as cars, motorbikes, and power tools. (Gitnux, 2023)

Honda customizes its product offerings in Pakistan to suit local consumer tastes and market conditions. They employ a localized production approach in Pakistan, boosting the nation's economy and lowering reliance on imports. Honda's cooperation with regional partners, such as Honda Atlas Cars Pakistan Limited, guarantees adherence to regional laws and makes Honda's worldwide technical innovations more accessible. Although, like other automotive companies in Pakistan, may face challenges related to regulatory changes, market competition, and economic factors impacting consumer purchasing power.

Especially during Covid-19 their business strategy has been put to the test, requiring complex solutions to adjust to the particular problems presented by the epidemic. Covid-19 pandemic posed operational issues, impacting production processes and supply chain dynamics. Honda's reaction to these obstacles, including safety precautions and adaptation, demonstrates resilience. And they modified its local supply chain methods in Pakistan to lessen interruptions brought on by the pandemic, similar to its worldwide strategy. The country's middle class is expected to grow dramatically over the next ten years, which will lead to a sharp increase in demand for automobiles and automotive services. These developments offer a significant business potential for Honda

Atlas Cars Pakistan, a joint venture between Honda Motor Company Limited and the Atlas Group of Companies, also referred to as "Honda Pakistan". (Honda Pakistan, 2021)

### **Pak Suzuki**

As of right now, its primary manufacturing facilities are spread over 23 foreign nations and regions. Suzuki is able to function as an international company that serves 196 nations and territories thanks to the developed network. The largest network of dealers in Pakistan providing 3S (Sales, Service, and Spare Parts) facilities is owned by Pak Suzuki. In the market for cars and light commercial vehicles, Pak Suzuki was able to capture and hold onto almost 50% of the market share. Pak Suzuki continues to lead the industry by keeping costs under control, satisfying customer demands with a large selection of automobiles, producing goods of the highest caliber, and maximizing production efficiency. (Pak Suzuki Motor , 2018)

At present, Pak Suzuki has invested Rs. 12.7 billion in plants and infrastructure. Both the company's workforce and output have increased in tandem with rising investments. Pak Suzuki is dedicated to enhancing the environment and was founded on the principles of corporate citizenship. When it came to the first factory-fitted CNG cars that are environmentally friendly, Pak Suzuki led the way. The company keeps a close eye on the trash that is produced by its operations and has facilities and equipment for environmental control in place when needed. (Pak Suzuki Motor , 2018)

In order to guarantee the safe discharge of water into the environment, the firm has also developed cutting edge wastewater treatment plants. The Pak Suzuki Motor Company is dedicated to upholding social responsibility in business practices and consistently contributes to the field of corporate social responsibility. (Pak Suzuki Motor , 2018)

## 4. Testing and Development:

### 4.1. Financial Ratios

#### Pre and Post Covid-19 Analysis

##### 1. Liquidity Ratio

###### a. Current Ratio

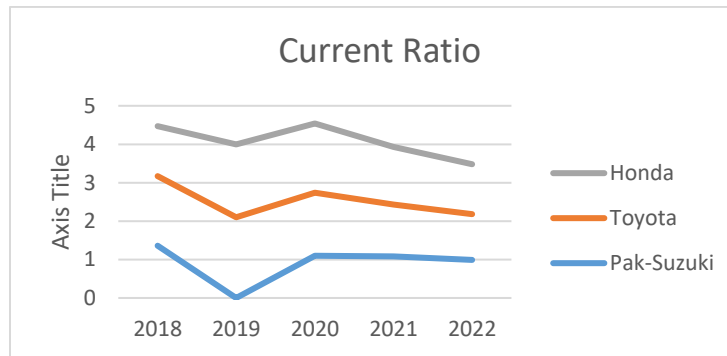


Figure 4.1

### Significance

The current ratio holds substantial significance within the automobile industry as a key financial metric that reflects a company's short-term liquidity and ability to meet its immediate obligations. This ratio, calculated by dividing a company's current assets by its current liabilities, serves as a crucial indicator of financial health and operational efficiency. For automobile manufacturers and dealerships, which often operate in a capital-intensive environment with significant working capital requirements, the current ratio is particularly important. A high current ratio suggests a robust capacity to cover short-term liabilities, indicating financial stability and the ability to navigate economic fluctuations. Conversely, a low current ratio may signal liquidity challenges and potential difficulties in meeting near-term obligations. Investors, creditors, and stakeholders closely monitor the current ratio in the automobile sector as it provides insights into the company's liquidity position, influencing strategic decisions, investment considerations, and overall confidence in the entity's financial viability.

Table 4.1

Years	2018	2019	2020	2021	2022
<b>Pak-Suzuki</b>	1.36	1.13/113.5	1.10	1.08	0.99
<b>Toyota</b>	1.81	2.10	1.64	1.35	1.19
<b>Honda</b>	1.3	1.9	1.8	1.5	1.3

### **Pre Covid-Analysis:**

Before the onset of the Covid-19 pandemic, the current ratio analysis for Pak-Suzuki, Toyota, and Honda in the years 2018, 2019, and 2020 displayed varying levels of liquidity.

**Pak-Suzuki:** The pre covid current ratio of Pak Suzuki illustrates that the business has more assets than liabilities, however in in 2020 the ratio start declining that shows increase in liabilities.

**Toyota:** The current ratio of Toyota before the COVID-19 shows that the company has more assets than liabilities. In 2019 the ratio improves as compared to 2018 but is still considered as good ratio for the company. However, the ratio starts declining in 2020.

**Honda:** The Current Ratio of Honda in 2018 to 2020 shows an increasing trend and remain favorable.

### **Post Covid Analysis:**

The post-Covid analysis of the current ratios for Pak-Suzuki, Toyota, and Honda in the years 2021 and 2022 reveals the continuing influence of the pandemic on liquidity.

**Pak-Suzuki:** Post Covid Current ratio of Pak-Suzuki is less than 1.2 which is unfavorable and shows that the company does not have enough cash to support liabilities.

**Toyota:** The current ratio of Toyota in 2021 is 1.35 which is still considered favorable on the other hand it declines in 2022 to 0.99 which shows that the companies have more liabilities than the assets.

**Honda:** The current ratio of Honda in 2021 is 1.5 and in 2022 is 1.3 which is still considered favorable.

## **Causes of Changes in Current Ratios:**

### **Pak-Suzuki:**

Pre-Covid (2018-2020): The declining trend in Pak-Suzuki's current ratio from 2018 to 2020 could be attributed to an increase in liabilities, possibly due to factors such as higher short-term debt or operational challenges. This might indicate a need for careful management of working capital.

Post-Covid (2021-2022): The further decrease in the current ratio in 2022, falling below 1, suggests potential liquidity challenges exacerbated by the impacts of the Covid-19 pandemic. Reduced sales, supply chain disruptions, or increased financial obligations might have contributed to this decline.

### **Toyota:**

Pre-Covid (2018-2020): Toyota exhibited a strong current ratio in 2018, which slightly improved in 2019 but declined in 2020. The positive ratio indicates a healthy ability to cover short-term obligations. The decline in 2020 might be linked to pandemic-related disruptions affecting operations and sales.

Post-Covid (2021-2022): The decline in 2022 to a current ratio of 0.99 signals a potential concern as liabilities surpass assets. This could be attributed to ongoing challenges in the automobile industry, such as supply chain issues or decreased demand.

### **Honda:**

Pre-Covid (2018-2020): Honda's increasing trend in the current ratio from 2018 to 2020 indicates a favorable liquidity position. This may be due to effective working capital management and prudent financial strategies.

Post-Covid (2021-2022): While there's a slight decrease in 2022, the current ratio remains favorable. This suggests that Honda may have navigated the post-Covid challenges more resiliently compared to some peers.

### **Summary:**

The analysis reveals the dynamic nature of liquidity for automobile companies in both pre and post-Covid periods. The decline in current ratios post-Covid for Pak-Suzuki and Toyota

underscores the impact of the pandemic on the industry. Pak-Suzuki faces a more pronounced challenge, with a current ratio dropping below 1 in 2022, signaling potential difficulties in meeting short-term obligations. In contrast, Honda maintains a relatively stable and favorable current ratio, indicating effective financial management. Investors and stakeholders should carefully consider these ratios, recognizing the unique challenges and strategies employed by each company in response to the evolving economic landscape.

***b. Quick Ratio***

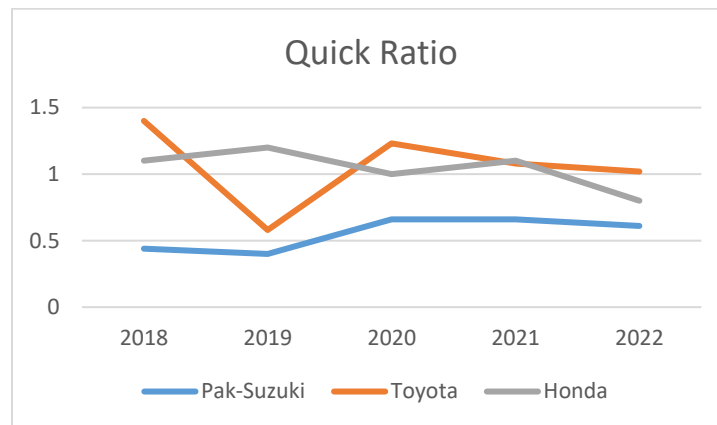


Figure 4.2

**Significance**

The quick ratio, also known as the acid-test ratio, is a financial metric that assesses a company's short-term liquidity by measuring its ability to cover immediate liabilities using its most liquid assets. The quick ratio is calculated by considering only the most liquid assets, typically excluding inventory from the current assets.

For companies in the automobile industry, the quick ratio is of significance because it provides a more stringent evaluation of liquidity than the current ratio. Given the capital-intensive nature of the industry, where inventory levels can be substantial, excluding inventory from the calculation allows for a more conservative assessment of a company's ability to meet short-term obligations. A higher quick ratio suggests a stronger ability to cover immediate liabilities, indicating better financial health and agility in responding to unexpected financial demands. Investors and creditors often use the quick ratio to gauge a company's short-term liquidity position and its capacity to weather financial uncertainties.



$(\text{Current Asset} - \text{inventory} / \text{Current liability}) * 100$

Table 4.2

Years	2018	2019	2020	2021	2022
<b>Pak-Suzuki</b>	0.44	0.40	0.66	0.66	0.61
<b>Toyota</b>	1.40	0.58	1.23	1.08	1.02
<b>Honda</b>	1.1	1.2	1.0	1.1	0.8

### **Pre Covid-Analysis:**

Before the Covid-19 pandemic, the quick ratio analysis for Pak-Suzuki and Honda in the years 2018, 2019, and 2020 displayed variations in their ability to cover short-term liabilities without relying on inventory.

**Pak-Suzuki:** The Quick ratio of Pak-Suzuki in Pre-Covid remain less than 1 which shows that the company is not able to meet its current liabilities.

**Toyota:** The Quick Ratio of Toyota in 2018 is more than 1 which shows company Is able to pay current liabilities however it decreases in 2019 as company couldn't meet the current liabilities. In 2020 it will rise again, and the company's quick ratio remain favorable.

**Honda:** The Pre-Covid Quick ratio of Honda shows that the company can pay its creditors.

### **Post Covid Analysis:**

The post-Covid analysis of the quick ratios for Pak-Suzuki and Honda in the years 2021 and 2022 reveals further changes in their liquidity positions.

**Pak-Suzuki:** The Quick ratio of Pak-Suzuki in Post-Covid remains less than 1 which shows that the company is not able to pay current debts.

**Toyota:** The Quick ratio of Toyota in Post-Covid remains more than 1 which shows that the company can pay current debts.

**Honda:** The Post-Covid Quick Ratio of Honda in 2021 shows that the company can pay its creditors however in 2022 Quick Ratio in unfavorable.

### **Causes of Changes in Quick Ratio:**

#### **Pak-Suzuki:**

Pre-Covid (2018-2020): The quick ratio remained consistently less than 1 throughout the pre-Covid period, indicating that Pak-Suzuki may have faced challenges in meeting its short-term liabilities without relying on inventory. The decline in quick ratio over the years may be attributed to changes in the composition of current assets or an increase in current liabilities.

Post-Covid (2021-2022): The continued quick ratio below 1 post-Covid suggests that Pak-Suzuki still faces difficulties in covering immediate liabilities without relying on inventory. Factors such as increased current liabilities or changes in the composition of current assets may contribute to this ongoing challenge.

#### **Toyota:**

Pre-Covid (2018-2020): Toyota's quick ratio fluctuated, with a favorable ratio in 2018, a decrease in 2019, and a subsequent rise in 2020. The favorable quick ratio in 2020 indicates that Toyota was able to cover its short-term liabilities without relying heavily on inventory. The changes may be influenced by variations in current assets and liabilities.

Post-Covid (2021-2022): Toyota's continued quick ratio above 1 post-Covid suggests a favorable liquidity position. The company appears capable of meeting immediate obligations without significant reliance on inventory, indicating stability in its short-term financial position.

#### **Honda:**

Pre-Covid (2018-2020): Honda had favorable quick ratios throughout the pre-Covid period, indicating its ability to cover short-term liabilities without relying heavily on inventory. The slight decrease in 2020 may be attributed to changes in the composition of current assets or increased current liabilities.

Post-Covid (2021-2022): The favorable quick ratio in 2021 followed by an unfavorable ratio in 2022 indicates changes in Honda's liquidity position. Factors such as increased current liabilities or changes in current assets may have affected the quick ratio in the post-Covid period.

### **Summary:**

The analysis of quick ratios for Pak-Suzuki, Toyota, and Honda reveals variations in their ability to cover short-term liabilities without relying on inventory, both before and after the Covid-19 pandemic. Pak-Suzuki faces ongoing challenges, as indicated by a quick ratio below 1 post-Covid. Toyota maintains a favorable quick ratio, suggesting stability in short-term liquidity. Honda experienced fluctuations, with a favorable ratio in 2021 followed by an unfavorable ratio in 2022, emphasizing the need for continuous monitoring of liquidity positions and factors influencing quick ratios in the dynamic automotive industry. Investors and stakeholders should consider these trends when evaluating the financial health and short-term liquidity of these companies.

## **2. Profitability Ratio**

### **a. Gross profit margin Ratio**

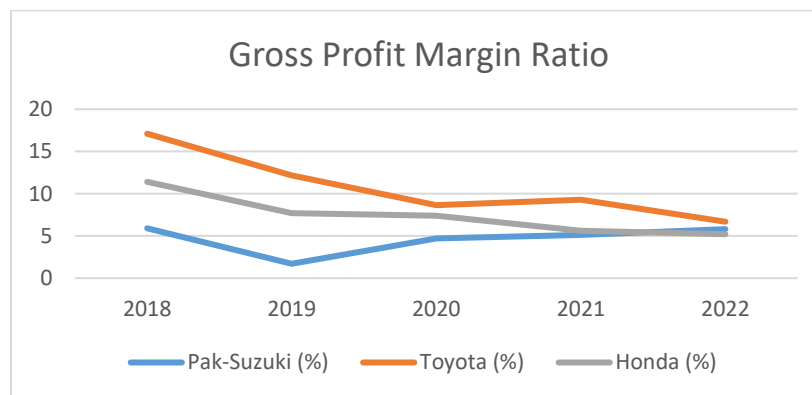


Figure 4.3

### **Significance**

The gross profit margin ratio is a financial metric that assesses a company's profitability by measuring the percentage of revenue that exceeds the cost of goods sold (COGS). It provides insights into the efficiency of a company's production and pricing strategies. The formula for calculating the gross profit margin is as follows:

In the context of the automobile industry, the gross profit margin is particularly relevant as it reflects the profitability of manufacturing or selling vehicles. A higher gross profit margin indicates that the company is generating more revenue relative to the costs associated with producing or selling its products. This ratio is essential for assessing operational efficiency, pricing strategies, and cost management within the industry.

Investors and analysts use the gross profit margin to evaluate the financial health and competitiveness of companies in the automobile sector. A consistent or improving gross profit margin may suggest effective cost control, efficient production processes, or successful pricing strategies. On the other hand, a declining gross profit margin may raise concerns about increasing production costs or pricing pressures. Overall, the gross profit margin is a key indicator for stakeholders seeking to understand the fundamental financial performance of companies in the automobile industry.

(Net profit / Net sales) \* 100

Table 4.3

Years	2018	2019	2020	2021	2022
<b>Pak-Suzuki (%)</b>	5.9	1.7	4.7	5.1	5.8
<b>Toyota (%)</b>	17.10	12.15	8.65	9.30	6.68
<b>Honda (%)</b>	11.4	7.7	7.4	5.6	5.2

### **Pre Covid-Analysis:**

Before the Covid-19 pandemic, the gross profit margin ratios for Pak-Suzuki, Toyota, and Honda in the years 2018, 2019, and 2020 showed fluctuations in the profitability of their operations.

**Pak-Suzuki:** The Profit margin Ratio of Pak-Suzuki Remain low though out the period of pre-Covid.

**Toyota:** The Profit margin Ratio of Toyota Remain more than 10% though out the period of pre-Covid which is good or favorable.

**Honda:** The Profit margin Ratio of Honda (2018-2019) is less than 10 percent which is Average and in 2020 it increases to 11.4 percent which is favorable.

## **Post Covid Analysis:**

The years 2021 and 2022 reflect the continuing impact of the Covid-19 pandemic on the gross profit margins of these automotive companies.

**Pak-Suzuki:** As compared to pre-Covid the Gross Profit margin Ratio increases by more than 5%.

**Toyota:** As compared to pre-Covid the Gross Profit margin Ratio decreases but remain more than 5%.

**Honda:** As compared to pre-Covid the Gross Profit margin Ratio increases by more than 5%.

## **Causes of Changes in Gross Profit Margin:**

### **Pak-Suzuki:**

Pre-Covid (2018-2020): The consistently low gross profit margin indicates challenges in generating significant profits relative to the cost of goods sold. This might be attributed to factors such as intense competition, higher production costs, or pricing strategies that need adjustment.

Post-Covid (2021-2022): The notable increase in gross profit margin post-Covid suggests that Pak-Suzuki may have implemented effective cost control measures or experienced improved pricing dynamics. This positive shift could be influenced by factors such as operational efficiencies or changes in market demand.

### **Toyota:**

Pre-Covid (2018-2020): Toyota maintained a relatively high gross profit margin throughout the pre-Covid period, reflecting efficient production processes and favorable pricing strategies. The slight decline in 2021 and 2022 may be linked to challenges faced by the industry due to the pandemic, such as supply chain disruptions or changes in consumer behavior.

Post-Covid (2021-2022): The decrease in gross profit margin post-Covid indicates ongoing challenges for Toyota. Factors like increased production costs, supply chain disruptions, or changes in market dynamics may have contributed to this decline.

**Honda:**

Pre-Covid (2018-2020): Honda showed an improvement in gross profit margin from 2018 to 2020, indicating effective cost management and potentially successful pricing strategies. The positive trend suggests the company's adaptability to market conditions.

Post-Covid (2021-2022): The increase in gross profit margin post-Covid for Honda indicates resilience and adaptability, possibly due to effective cost control measures or shifts in consumer demand that favored the company.

**Summary:**

The gross profit margin analysis provides valuable insights into the profitability dynamics of Pak-Suzuki, Toyota, and Honda. Post-Covid, while Pak-Suzuki experienced a significant improvement, Toyota faced a decline, and Honda continued to demonstrate a positive trend. Stakeholders should consider these changes in the context of broader industry challenges and specific company strategies. The ability to maintain or enhance gross profit margins is crucial for long-term sustainability and understanding these fluctuations aids investors and analysts in making informed decisions about the financial health and competitiveness of these automotive companies.

***b. Return on Asset (ROA)***

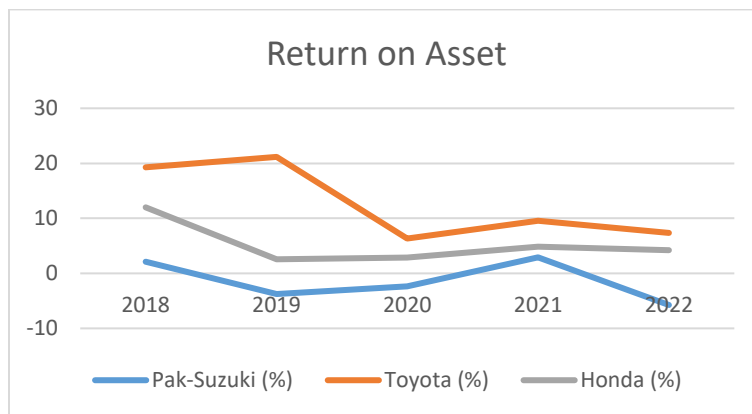


Figure 4.4

## Significance

Return on Assets (ROA) is a financial ratio that measures a company's efficiency in generating profits from its assets. It provides insight into how well a company utilizes its assets to generate earnings. The ROA formula is as follows:

In the context of the automobile industry, ROA is a significant metric for assessing the effectiveness of a company's asset management. For automobile manufacturers, assets include production facilities, inventory, and equipment, while for dealerships, assets comprise inventory, showroom space, and other operational assets. A higher ROA indicates that a company is more proficient in converting its investments in assets into profits.

Investors and analysts use ROA to compare the performance of companies within the industry and to evaluate management efficiency. A rising ROA over time suggests improved asset utilization and profitability, while a declining ROA may indicate inefficiencies or challenges in generating earnings from assets. It's crucial to consider industry benchmarks and compare ROA with similar companies to gain a more meaningful perspective on a company's performance relative to its peers. Overall, ROA serves as a valuable metric for stakeholders seeking to evaluate the financial effectiveness and operational efficiency of companies in the automobile sector.

$(\text{Net profit NPAT} / \text{Total asset}) * 100$

Table 4.4

Years	2018	2019	2020	2021	2022
<b>Pak-Suzuki (%)</b>	2.11	(3.76)	(2.38)	2.91	(5.75)
<b>Toyota (%)</b>	19.25	21.17	6.33	9.58	7.38
<b>Honda (%)</b>	12.0	2.56	2.85	4.85	4.23

### Pre Covid-Analysis:

Before the Covid-19 pandemic, the Return on investment based on net profit to total assets for Pak-Suzuki, Toyota, and Honda in the years 2018, 2019, and 2020 showed variations in the profitability and efficiency of their asset utilization.

**Pak-Suzuki:** In 2018 the company's ROA is favorable however in 2019-2020 it is negative which is unfavorable and shows that company is not making a profit and is not using its asset efficiently.

**Toyota:** the ROA of Company Remain Favorable throughout the pre-covid.

**Honda:** ROA is good in 2018, in 2019 and 2020 it decreases but still remain favorable.

### **Post Covid Analysis:**

The impact of the Covid-19 pandemic is evident in the gross profit margin ratios for the years 2021 and 2022.

**Pak-Suzuki:** in 2021 ROA improves and favorable however in 2022 it is negative which is unfavorable.

**Toyota:** ROA remains favorable.

**Honda:** ROA remains favorable.

### **Causes of Changes in Return on Assets (ROA):**

#### **Pak-Suzuki:**

Pre-Covid (2018-2020): The negative ROA in 2019 and 2020 suggests challenges in generating profits from the utilized assets. This could be attributed to factors such as increased costs, operational inefficiencies, or market conditions impacting demand. In 2018, the favorable ROA indicates relatively efficient asset utilization.

Post-Covid (2021-2022): The improvement in ROA in 2021 followed by a negative turn in 2022 may indicate the ongoing impact of the pandemic on Pak-Suzuki's ability to generate profits from its assets. Factors such as supply chain disruptions, fluctuating demand, or increased costs may contribute to these variations.

#### **Toyota:**

Pre-Covid (2018-2020): Toyota maintained a consistently favorable ROA throughout the pre-Covid period. This suggests efficient asset utilization and profitability, reflecting the company's strong position in the automobile industry and effective management strategies.



Post-Covid (2021-2022): The continued favorable ROA post-Covid indicates Toyota's resilience and adaptability. Despite industry challenges, the company seems to be effectively managing its assets to generate profits.

**Honda:**

Pre-Covid (2018-2020): Honda experienced a decrease in ROA from 2018 to 2020, but the ratio remained favorable. This may be due to changes in market dynamics, increased competition, or other industry-specific factors affecting profitability.

Post-Covid (2021-2022): Honda's ability to maintain a favorable ROA post-Covid suggests effective asset management and profitability. The company appears to navigate challenges and continue utilizing its assets efficiently to generate earnings.

**Summary:**

The analysis of ROA highlights the varying efficiency in asset utilization and profitability for Pak-Suzuki, Toyota, and Honda in both pre- and post-Covid periods. Pak-Suzuki faced challenges pre-Covid, with a negative ROA, and the post-Covid period brought mixed results. Toyota maintained a consistently favorable ROA, reflecting its strong performance and adaptability. Honda experienced a slight decrease in ROA pre-Covid, but the company remained efficient in asset utilization. Post-Covid, both Toyota and Honda demonstrated resilience, emphasizing the importance of effective asset management in navigating industry challenges. Stakeholders should closely monitor these metrics to assess the financial health and operational efficiency of these automotive companies.

**c. Return on Equity (RoE)**

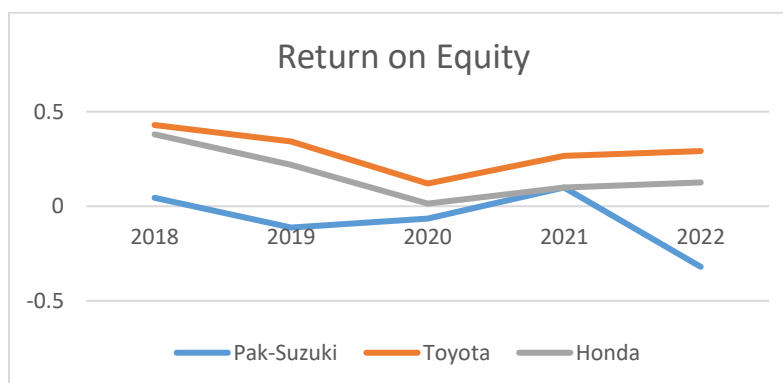


Figure 4.5

## Significance

Return on Equity (ROE) is a financial ratio that measures the profitability of a company in relation to its shareholders' equity. ROE is a key indicator of how effectively a company uses its equity capital to generate profits. The formula for calculating ROE is as follows:

In the context of the automobile industry, ROE is crucial for assessing the financial performance and efficiency of a company in generating returns for its shareholders. Shareholders' equity includes common stock, retained earnings, and other equity components. A higher ROE indicates that a company is effectively using its equity to generate profits.

Investors and analysts often use ROE to evaluate the management's ability to maximize shareholder value. A consistently high ROE suggests that a company is efficiently deploying its capital to generate returns, while a declining or below-average ROE may raise concerns about the company's ability to generate satisfactory returns for its shareholders. It's essential to compare a company's ROE with industry benchmarks and similar companies to gain a more meaningful perspective on its performance.

While a high ROE is generally considered favorable, it's crucial to analyze the underlying factors influencing the ratio, such as financial leverage, net profit margin, and asset turnover, to get a comprehensive understanding of a company's financial health and performance.

Formula:  $ROE = (ROA / \text{Ownership ratio}) * 100$

Table 4.5

<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Pak-Suzuki</b>	0.044	(0.112)	(0.065)	0.099	(0.320)
<b>Toyota</b>	0.429	0.342	0.12	0.266	0.292
<b>Honda</b>	0.380	0.218	0.014	0.098	0.125

## **Pre Covid-Analysis**

Before the Covid-19 pandemic, the Return on Equity (ROE) ratios for Pak-Suzuki, Toyota, and Honda in the years 2018, 2019, and 2020 showed variations in their ability to generate returns for shareholders.

**Pak-Suzuki:** In 2018 the ROE is positive which average. In 2019-2020

**Toyota:** The ROE is positive however it is less throughout pre-covid. Which is favorable.

**Honda:** The ROE is positive however it is less throughout pre-covid. Which is favorable.

## **Post Covid Analysis:**

The impact of the Covid-19 pandemic is evident in the ROE ratios for the years 2021 and 2022.

**Pak-Suzuki:** The ROE is unfavorable in 2022 however it is favorable in 2021.

**Toyota:** The ROE is positive however it is less throughout post-covid. Which is favorable.

**Honda:** The ROE is positive however it is less throughout post-covid. Which is favorable.

## **Causes of Changes in Return on Equity (ROE):**

### **Pak-Suzuki:**

Pre-Covid (2018-2020): The positive ROE in 2018 indicates that Pak-Suzuki effectively used its equity to generate returns. However, the negative ROE in 2019 and 2020 suggests challenges in generating profits in relation to shareholders' equity. Factors such as net losses or increased equity could contribute to this trend.

Post-Covid (2021-2022): The unfavorable ROE in 2022 indicates ongoing challenges, potentially exacerbated by the impact of the pandemic. While 2021 shows improvement, the negative trend in 2022 suggests persistent difficulties in generating satisfactory returns for shareholders.

### **Toyota:**

Pre-Covid (2018-2020): Toyota's consistently positive ROE throughout the pre-Covid period indicates effective use of equity to generate returns. The decreasing trend, however, suggests a need for careful examination of the underlying factors, such as changes in net profit or equity.

Post-Covid (2021-2022): The positive but declining ROE post-Covid indicates that Toyota is still generating returns for shareholders, but the efficiency of equity utilization may need attention. Factors like increased equity or changes in profitability may contribute to this trend.

**Honda:**

Pre-Covid (2018-2020): Honda's positive ROE throughout the pre-Covid period suggests effective use of equity capital to generate returns for shareholders. The slight decrease in 2020 may warrant further investigation into factors influencing profitability and equity.

Post-Covid (2021-2022): The positive but declining ROE post-Covid indicates that Honda continues to generate returns for shareholders, though the efficiency of equity utilization may be affected. Examining net profit, equity changes, and industry dynamics can provide insights into these trends.

**Summary:**

The analysis of ROE for Pak-Suzuki, Toyota, and Honda reveals variations in their ability to generate returns for shareholders both before and after the Covid-19 pandemic. While Toyota and Honda demonstrated positive ROE trends, Pak-Suzuki faced challenges with negative ROE during the pandemic, indicating potential difficulties in utilizing equity effectively. These changes emphasize the importance of closely monitoring financial metrics and conducting a comprehensive analysis of underlying factors to assess the financial health and performance of companies in the automobile sector. Stakeholders should consider industry benchmarks and peer comparisons for a more holistic understanding of the companies' performance.

**3. Market Ratio:**

*a. Earnings Per Share*

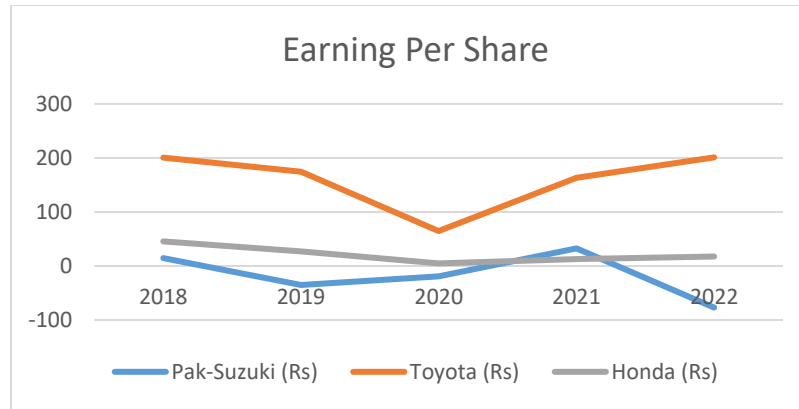


Figure 4.6

## Significance

Earnings Per Share (EPS) is a key financial metric that represents the portion of a company's profit allocated to each outstanding share of common stock. It is a fundamental measure of a company's profitability and is widely used by investors, analysts, and shareholders to assess financial performance. The formula for calculating EPS is as follows:

In the context of the automobile industry, EPS is a critical indicator of a company's ability to generate earnings for its shareholders. A higher EPS indicates higher profitability on a per-share basis, which is often seen as positive by investors. Investors use EPS to make informed decisions about investing in a particular company's stock and to compare the earnings performance of different companies within the industry.

It's important to note that there are two types of EPS: basic EPS and diluted EPS. Basic EPS considers only the actual number of common shares outstanding, while diluted EPS considers potential dilution from convertible securities such as stock options and convertible bonds.

Investors typically look for companies with consistent or growing EPS over time, as it reflects sustained profitability and potential for shareholder value appreciation. However, it's crucial to consider other financial metrics and industry benchmarks to get a comprehensive view of a company's financial health and performance. Additionally, the context of the automotive industry, which often involves cyclical trends and capital-intensive operations, should be considered when interpreting EPS.

$(\text{Net income} / \text{Average outstanding Shares}) * 100$

Table 4.6

Years	2018	2019	2020	2021	2022
<b>Pak-Suzuki (Rs)</b>	14.75	(35.29)	(19.31)	32.56	(77.00)
<b>Toyota (Rs)</b>	200.66	174.49	64.66	163.21	201.04
<b>Honda (Rs)</b>	45.48	26.97	4.77	12.56	17.58

### **Pre Covid-Analysis:**

Before the COVID-19 pandemic, the earnings per share (EPS) for Pak-Suzuki, Toyota, and Honda in the years 2018, 2019, and 2020 showed fluctuations in their ability to generate earnings on a per-share basis.

**Pak-Suzuki:** In 2018, the EPS of Pak-Suzuki was favorable, and it was considered that the company performed well during the earnings period. The EPS ratio declined to negative within the period of 2019–2020, which is unfavorable and shows the decreasing performance of the company.

**Toyota:** the EPS of Toyota was favorable throughout the period of pre-Covid, and the company performed very well during the earning period, and investors are willing to pay more for its share. However, it shows a declining ratio.

**Honda:** The EPS of Honda was favorable throughout the period of pre-Covid, and the company performed very well during the earning period, and investors are willing to pay more for its share. However, it shows a declining ratio.

### **Post Covid Analysis:**

The impact of the Covid-19 pandemic is evident in the EPS for the years 2021 and 2022.

**Pak-Suzuki:** Pak-Suzuki's EPS turned positive again in 2021 at Rs 32.56, but then turned negative again in 2022 at -Rs 77.00. This suggests ongoing challenges for Pak-Suzuki in stabilizing its earnings per share.

**Toyota:** Toyota experienced a recovery in its EPS, increasing to Rs 163.21 in 2021 and further to Rs 201.04 in 2022. The recovery suggests improved earnings per share post-Covid.

**Honda:** Honda's EPS also improved, reaching Rs 12.56 in 2021 and Rs 17.58 in 2022. While showing improvement, the ratios remain below the pre-Covid levels.

These trends post-Covid may suggest ongoing challenges for Pak-Suzuki in terms of stabilizing its earnings per share, while Toyota and Honda demonstrated recovery. Strategies to improve operational efficiency, manage costs, and adapt to changing market conditions will be crucial for all these companies in enhancing their Earnings Per Share in the post-pandemic era. Shareholders will likely be monitoring these indicators closely for signs of sustained recovery and long-term financial health.

### **Causes of Changes in Earnings Per Share (EPS):**

#### **Pak-Suzuki:**

Pre-Covid (2018-2020): The favorable EPS in 2018 indicates strong performance, but the subsequent negative trend in 2019-2020 suggests challenges in generating earnings on a per-share basis. Factors such as net losses, increased outstanding shares, or other financial difficulties may have contributed to this decline.

Post-Covid (2021-2022): The recovery in 2021 followed by a decline in 2022 indicates ongoing challenges. The negative EPS in 2022 may be attributed to factors such as increased losses or a significant increase in outstanding shares, negatively impacting the earnings available per share.

#### **Toyota:**

Pre-Covid (2018-2020): Toyota maintained favorable EPS throughout the pre-Covid period, indicating consistent profitability and strong performance. The declining trend may be due to factors like increased outstanding shares or changes in net income.

Post-Covid (2021-2022): The recovery in EPS in 2022 suggests Toyota's resilience and ability to generate earnings on a per-share basis. This positive trend may be influenced by factors such as improved net income or effective management strategies.

## Honda:

Pre-Covid (2018-2020): Honda demonstrated favorable EPS throughout the pre-Covid period, with a declining trend in 2020. The decline may be due to changes in net income or increased outstanding shares.

Post-Covid (2021-2022): The increasing trend in EPS in 2021 and 2022 suggests recovery and effective strategies post-Covid. Honda's ability to rebound and demonstrate growth in EPS indicates positive performance and resilience in the face of challenges.

## Summary:

The analysis of EPS for Pak-Suzuki, Toyota, and Honda reveals fluctuations in their ability to generate earnings on a per-share basis, both before and after the Covid-19 pandemic. Pak-Suzuki faced challenges with negative EPS during the pandemic, indicating potential difficulties in stabilizing earnings per share. In contrast, Toyota and Honda demonstrated recovery and positive trends post-Covid, showcasing resilience and effective strategies in adapting to changing market conditions. Shareholders and investors should closely monitor these trends, considering factors like net income, outstanding shares, and overall industry dynamics to make informed decisions about their investments.

### b. Price Earnings Ratio

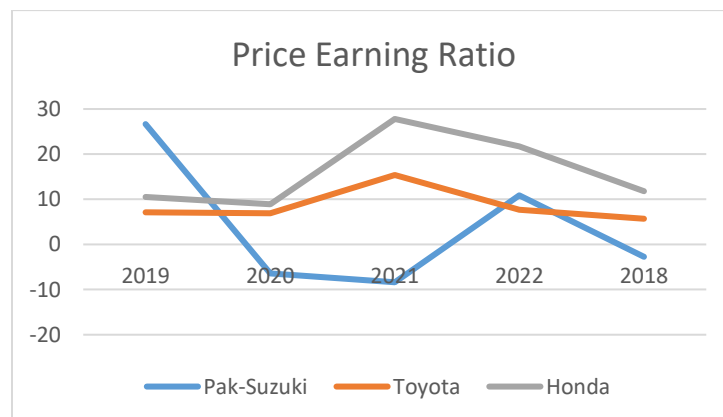


Figure 4.7



## Significance

The price-earnings ratio (P/E ratio) is a valuation metric that compares a company's current stock price to its earnings per share (EPS). It is a widely used financial ratio that provides insight into the market's expectations regarding a company's future earnings growth and risk. The formula for calculating the P/E ratio is as follows:

In the context of the automobile industry, the P/E ratio is a crucial tool for investors and analysts to assess the relative value of a company's stock and make informed investment decisions. A high P/E ratio may suggest that investors have high expectations for future earnings growth, while a low P/E ratio may indicate lower expectations or potential undervaluation.

Different factors can influence the P/E ratio, including the company's growth prospects, risk profile, and prevailing market conditions. Cyclical industries like automotive manufacturing may experience fluctuations in P/E ratios due to economic cycles and industry trends.

Investors use the P/E ratio for several purposes. A low P/E ratio might be interpreted as a value investment opportunity, suggesting that the stock may be undervalued. Conversely, a high P/E ratio may signal that the market anticipates strong future earnings growth, but it could also indicate overvaluation.

It's important to consider the P/E ratio in conjunction with other financial metrics and industry benchmarks to gain a comprehensive understanding of a company's valuation and growth prospects. Additionally, comparing a company's P/E ratio to its historical P/E ratio and to the P/E ratios of peer companies can provide valuable insights into its relative valuation within the industry.

$(\text{Market price per share} / \text{earnings per share}) * 100$

Table 4.7

Years	2019	2020	2021	2022	2018
<b>Pak-Suzuki</b>	26.66	(6.45)	(8.38)	10.88	(2.71)
<b>Toyota</b>	7.08	6.90	15.38	7.68	5.69
<b>Honda</b>	10.5	8.9	27.8	21.7	11.8

### Pre Covid-Analysis

Before the COVID-19 pandemic, the price-earnings ratio (P/E ratio) for Pak-Suzuki, Toyota, and Honda in the years 2018, 2019, and 2020 showed variations in the market's valuation of the companies relative to their earnings.

**Pak-Suzuki:** The price-earnings ratio is favorable in 2018, which is more than 20. This shows that the stock of Pak-Suzuki is expensive, and prices may fall in the future. The price-earnings ratio is negative, which means the company is losing money.

**Toyota:** The Price-Earnings Ratio Remains Favorable Throughout the Pre-Covid Period.

**Honda:** The Price-Earnings Ratio Remains Favorable Throughout the Pre-Covid Period.

### Post-Covid Analysis

The years 2021 and 2022 reflect the continuing impact of the COVID-19 pandemic on the price-earnings ratios.

**Pak-Suzuki:** The price-earnings ratio is favorable in 2021 and unfavorable in 2022.

**Toyota:** The Price-Earnings Ratio Remains Favorable Throughout the Pre-Covid Period.

**Honda:** The Price-Earnings Ratio Remains Favorable Throughout the Pre-Covid Period.

These trends post-Covid may suggest ongoing challenges for Pak-Suzuki in terms of market perception and valuation, while Toyota and Honda demonstrated fluctuations. Changes in investor sentiment, market conditions, and company-specific factors will likely continue to influence P/E

ratios in the post-pandemic era. Investors and analysts may need to carefully evaluate the reasons behind these fluctuations and assess the companies' prospects.

### **Causes of Changes in Price-Earnings Ratio (P/E Ratio):**

#### **Pak-Suzuki:**

Pre-Covid (2018–2020): The favorable P/E ratio in 2018 indicates that investors had high expectations for Pak-Suzuki's future earnings growth, considering the stock to be expensive. The negative P/E ratios in 2019 and 2020, however, suggest a loss-making scenario, leading to a potential undervaluation of the stock. This negative P/E ratio may be due to net losses or other financial challenges during this period.

Post-Covid (2021-2022): The favorable P/E ratio in 2021, followed by an unfavorable ratio in 2022, may be influenced by ongoing challenges and uncertainties. The negative turn in 2022 could be attributed to factors such as increased losses, market sentiment, or shifts in investor expectations regarding future earnings.

#### **Toyota:**

Pre-Covid (2018–2020): Toyota maintained a consistently favorable P/E ratio throughout the pre-Covid period, reflecting a positive market perception of the company's future earnings potential. The stable P/E ratios indicate that investors have confidence in Toyota's financial performance and growth prospects.

Post-Covid (2021-2022): Toyota's continued favorable P/E ratio post-Covid suggests ongoing confidence in the company's future earnings growth. The fluctuations may be influenced by changes in market conditions, industry trends, or company-specific factors.

**Honda:**

Pre-Covid (2018–2020): Honda also had consistently favorable P/E ratios throughout the pre-Covid period, indicating a positive market perception of the company's earnings potential. Investors maintained confidence in Honda's financial performance and growth prospects during this time.

Post-Covid (2021-2022): Honda's sustained favorable P/E ratios post-Covid suggest ongoing positive market sentiment. Fluctuations may be influenced by external factors, but the overall trend indicates a continued positive view of the company's future earnings potential.

**Summary:**

The analysis of the P/E ratios for Pak-Suzuki, Toyota, and Honda highlights variations in market perception and valuation, both before and after the COVID-19 pandemic. Pak-Suzuki faced challenges with negative P/E ratios, indicating potential undervaluation and uncertainties. In contrast, Toyota and Honda demonstrated favorable P/E ratios, reflecting ongoing confidence in their future earnings potential. The fluctuations in P/E ratios post-Covid suggest the continued impact of external factors and underline the need for investors and analysts to carefully assess the reasons behind these changes. Understanding market sentiment, industry trends, and company-specific factors is crucial for making informed investment decisions in the post-pandemic era.

## **5. Future Enhancements:**

The automobile sector is changing course. Technology advancements, shifting customer preferences, and global disruption are all simultaneously affecting the automobile sector on a number of fronts. Designing, building, marketing, maintaining, and financing automobiles is still the standard business strategy. However, the automotive sector is also heading towards a whole new world that includes electric automobiles, connected cars, mobility fleet sharing, onboard sensors, new business models, and always-on connectivity. This shift is being pushed by sustainability and shifting customer behaviors.

The automobile industry was severely impacted by the early pandemic lockdowns, when individuals remained at home and drove less, manufacturers and dealers temporarily stopped, and worldwide supply networks came to a complete stop. However, Industry specialists assert that the pandemic has expedited the advancement of digitization in the automobile business, despite the initial pandemic lockdown. The automobile sector has seen disruptions before, and this one is hardly the first. According to many studies it's believed that the preceding economic downturn taught the industry and car suppliers in particular a lot of lessons. The economic slump of 2008–2009 taught suppliers to the automobile industry valuable lessons that made them more robust, more prepared, and able to recover. The manufacturing of automobiles is now being impacted by the lack of semiconductor chips that automakers are dealing with. All things considered, the automobile industry's fundamental economic and technology developments have been greatly accelerated by the ongoing interruptions to operations and supply chains.

The majority of the underlying changes in the car industry are being driven by the availability and use of modern technological solutions. The sector as a whole, from automakers to suppliers, has the issue of maintaining the profitability of current operations while also increasing capacity to handle these new advances. Businesses need to strike the correct balance between leading the charge to upend their own business models and maintaining a steady and profitable operation. To maintain a successful company with the need to offer revolutionary ideas and business models companies should focus on these strategies;

- **consumer centricity:** During the pandemic, a number of automakers and dealers found new avenues for direct consumer interaction, and they want to deepen this relationship going forward.
- **Mobility services:** Integrated, convenience-driven services and related mobility alternatives will increasingly replace brands and dealerships as the source of customer loyalty. The future will hold new pay-per-use and subscription-based mobility business models. (Cubiss, 2021)
- **Digital supply chains and smart manufacturing:** Manufacturing networks and supply chains need to become more adaptable, robust, and fully modular. Success in the future will be largely dependent on how you communicate with your suppliers.
- **Adapting to a Changing Workforce:** Automobile businesses need to adapt how they recruit, retain, reskill, and retire employees because the skills they need are changing dramatically. The traditional engineering-heavy skill sets of automotive businesses are evolving, and software expertise will be needed across the whole automotive value chain.

## **6. Conclusion:**

The automotive sector is the backbone of any nation's economy. The thorough financial analysis of Toyota, Honda, and Pak-Suzuki offers a sophisticated perspective on the dynamics of the automotive sector, both before and after the COVID-19 pandemic. This makes a financial analysis of the automotive industry crucial. Owners of various vehicle businesses need to be aware of the variables influencing their company's financial performance. The COVID pandemic has affected the automotive sector significantly, as we have seen it affect a number of businesses. The epidemic has had a significant influence, changed the face of the industry and speeding up digitization. The three companies differing levels of financial stability were evident in the pre-COVID era, but the post-COVID era brought even more attention to the necessity of adaptability and strategic resilience in the face of changing market conditions. The financial ratios influencing the three distinct cars have been examined in this study. Liquidity, profitability, and market ratios to analyze the shift in the company value brought about by COVID have all had an impact on the financial status of the automotive sector.

It has been shown through ratio analysis that the Covid pandemic negatively impacted Toyota, Honda, and Pak-Suzuki's financial ratios. When looking at liquidity ratios, Pak-Suzuki's difficulty keeping its fast ratio above 1 indicates that company may have trouble covering its short-term obligations without using a lot of inventory. This could be a sign of operational inefficiency or trouble paying bills right away. Toyota, on the other hand, showed consistency and a more stable short-term liquidity situation with a consistently favorable fast ratio. Honda's volatility suggests that liquidity management plans need to be continuously reviewed and adjusted. Different tendencies emerged from the analysis of profitability parameters, especially the gross profit margin. Despite difficulties before COVID, Pak-Suzuki significantly improved after it, indicating the effectiveness of cost-cutting initiatives or changes in the dynamics of the market. Toyota saw a drop in its gross profit margin prior to the COVID-19 pandemic, which may have been caused by disruptions associated with the pandemic. Honda demonstrated resilience in the post-COVID period by adjusting to shifting market conditions and maintaining a positive trend. Price-earnings ratios (P/E ratio) and earnings per share (EPS) are two examples of market ratios that shed light on market perception and pricing. The issues faced by Pak-Suzuki in the post-COVID era were

reflected in the company's shifting P/E ratio and negative EPS, which suggested undervaluation and uncertainty. Positive P/E ratios were maintained by Toyota and Honda, indicating continued optimism about their prospects for future profits. The P/E ratio swings during the COVID-19 pandemic highlighted the importance of closely examining the fundamental causes affecting market sentiment. A number of macroeconomic factors, including economic growth, governmental regulations and policies, raw material costs, currency exchange rates, interest rates, energy costs, and technological breakthroughs, have also been examined in relation to the financial success of the auto sector. Essentially, the financial analysis offered here acts as a compass for interested parties, offering insightful information on the financial stability, flexibility, and future possibilities of the sector. Along with difficulties, the post-COVID age has presented chances for development, creativity, and calculated realignment. Companies who successfully negotiate these challenges with flexibility and vision will come out on top and help the automotive industry to continue developing.

Lessons from previous disruptions—most notably the 2008–2009 economic downturn—have made the business more resilient, ready, and flexible. The automobile industry's future depends on how well it manages the fine line between innovation and tradition. Automakers have to adjust to the needs of a quickly evolving environment while continuing to engage in their core business of designing, manufacturing, and selling automobiles. The priorities of consumers are changing to include flexible mobility alternatives, connection, and sustainability. Long-term success will depend on embracing innovations like digital supply chains, connected auto services, and electric vehicles. Striking a balance between developing consumer-centricity through innovative interaction models, investigating alternate transportation options, creating flexible and adaptable industrial networks, and preparing the workforce for the demands of the digital age are crucial. Those who successfully navigate this balancing act will emerge as the leaders in the transformed automobile sector of tomorrow.



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## 8. Appendices

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