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MASTER'S THESIS

Peculiarities of automobile-building corporations' activity

(based on materials of «Toyota Motor Corporation»)

Program Subject Area 8.03050301 International Economics Master's Program

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ЗМІСТ

TABLE OF CONTENTS

INTRODUCTION

Actuality of the research. Toyota is a Japanese multinational automotive manufacturer headquartered in Toyota, Aichi, Japan. In 2017, Toyota's corporate structure consisted of 364,445 employees worldwide and, as of September 2018, was the sixth-largest company in the world by revenue. As of 2017, Toyota is the largest automotive manufacturer. Toyota was the world's first automobile manufacturer to produce more than 10 million vehicles per year which it has done since 2012, when it also reported the production of its 200-millionth vehicle. As of July 2014, Toyota was the largest listed company in Japan by market capitalization and by revenue.

Toyota is the world's market leader in sales of hybrid electric vehicles, and one of the largest companies to encourage the mass-market adoption of hybrid vehicles across the globe. Toyota is also a market leader in hydrogen fuel-cell vehicles. Cumulative global sales of Toyota and Lexus hybrid passenger car models achieved the 10 million milestone in January 2017. Its Prius family is the world's top selling hybrid nameplate with over 6 million units sold worldwide as of January 2017.

The aim of the course project is exploration of peculiarities of automobile-building corporations' activity. According to the purpose of the course project, the following **tasks** are set:

- to highlight modern tendencies of the world automobile market development;
- to analyze competitive environment of the world automobile building industry;
- to determine characteristics of international and state regulation of the world automobile market;

- to analyze financial and economic activity of Toyota Motor Corporation;
- to determine Toyota Motor Corporation's international competitiveness;
- to explore Toyota Motor Corporation's investment potential and attractiveness;
- to highlight production and commercial prospects of Toyota Motor Corporation's business development;
- to analyze investment projects of Toyota Motor Corporation;
- to determine the directions of Toyota Motor Corporation competitiveness stimulation on the world automobile market.

The **object** of the research is economic activity of automobile-building corporations.

The **subject** of the project is economics effectiveness of Toyota Motor Corporation activity.

Research methods: While writing the course project, the following methods were used: analysis and synthesis, comparison, research, statistical and graphical methods, logical generalization of results in the formulation of conclusion and others.

Research's database is a set of specialized publications, annual reports of Toyota Motor Corporation, periodical articles and Internet resources that evaluate managerial effectiveness at Toyota.

Research results implementation. *The significance of research for educational purposes* is that the main findings of the research are used for international students training when they study the course “Management of international competitiveness”, which is confirmed with 1) «Довідка про впровадження та використання результатів дипломної магістерської роботи «Особливості діяльності автомобілебудівних корпорацій» (на матеріалах «Toyota Motor Corporation») студента спеціальності 292 Міжнародні економічні відносини освітня програма «Міжнародні економічні відносини»

за другим (магістерським) рівнем Асілену Джеррі» and 2) «Довідка про рекомендації щодо впровадження та використання результатів дослідження по магістерській роботі в освітньому процесі Вищого навчального закладу Укоопспілки «Полтавський університет економіки і торгівлі».

Significance of the research for educational process is confirmed by the «Reference on recommendations for implementation and use of the research results of the master's thesis in educational process of the Higher Educational Establishment of Ukoopspilka «Poltava University of Economics and Trade» and is as follows: in teaching the discipline «Management of international competitiveness of companies», the ways of improving competitive strategies of international companies entering the markets of developing countries proposed by the author are taken into account; they are also used in practical classes.

Academic programs, plans and themes correlation. The thesis paper has been created as a part of the scientific research in «Contemporary globalization processes: driving forces, megatrends and contradictions» (0113U006220) investigated by International Economics Department. The author’s contribution is an original approach to considering the ways of Toyota’s possible further expansion to Cineese market.

Diploma thesis results approbation. The most significant research results were presented at scientific conference of students and young scientists majoring in «International Economic Relations» «Актуальні проблеми теорії та практики міжнародної економіки в умовах глобальної трансформації» (Poltava, December 4th, 2018).

Publication: Asilenu J. Evaluation of international company competitiveness of Toyota Motor Corporation / J. Asilenu // Актуальні проблеми теорії та практики міжнародної економіки в умовах глобальної трансформації : матеріали наукової конференції студентів та молодих вчених спеціальності «Міжнародна економіка» (м. Полтава, 10 жовтня 2017 року) / за заг. ред. Н. Г. Базавлук – Полтава : ПУЕТ, 2017. – С. 119-125.

CHAPTER 1
ANALYSIS OF THE WORLD AUTOMOBILE MARKET

1.1. Modern tendencies of the world automobile market development

The world automobile market remains strong with the global sales of passenger cars and trucks crossing the 90 million mark for the first time last year, the Wall Street Journal reported. China is the largest market with the sales figure reaching 28.88 million in 2017, according to car news provider yiche.com. These are the world's 10 largest car markets and what models sell best in these markets. According to Anfia (Italy's association of automobile industries), 1.97 million cars were sold in the country in 2017, a 7.9 percent increase from the previous year. The local brand Fiat Panda sold 113,087 units in the first 10 months of 2017, becoming the bestselling model. France, a Renault Clio stands on display during the press day of the 2018 Busan International Motor Show in Busan, South Korea, June 7, 2018. The country's car sales volume increased 4.7 percent year-on-year, to 2.1 million units in 2017. The bestselling car was Renault Clio. A Volkswagen AG Gol vehicle moves along the assembly line at the company's manufacturing facility in Sao Bernardo do Campo, Brazil, Oct 23, 2012.

As Brazil revives from the economic downturn, the automobile sector also recorded growth in 2017. Last year, the figure saw a 9.23 percent year-on-year rise from 2016, to 2.24 million units. Volkswagen AG Gol, a model specially produced for the country, remained the bestselling car for 16 years in a row in 2017. Top 10 largest car markets in the world. A Ford Fiesta is displayed ahead of the 2013 North American International Auto Show in Detroit, Jan 13, 2013.

Last year, the UK car sales volume went down 5.7 percent from a year

earlier, to 2.54 million units, a decline for the first time since 2012. The bestselling car was Ford Fiesta with 75,814 units sold in the first 10 months of 2017.Germany, in 2017, 3.44 million cars were sold in the country, up 2.7 percent year-on-year. Volkswagen Golf was the bestselling car. According to Society of Indian Automobile Manufactures, the country's car sales volume hit a record high to 4.01 million units in 2017, rising 10 percent from a year earlier.

As Indian people's living standards improve and the consumption power increases, the country will surpass Japan in sales numbers by 2020. The bestselling car was Maruti Suzuki Alto. The Japan, the number of vehicles, including passenger cars, buses and commercial vehicles, sold was 5.23 million units, up 5.3 percent year-on-year. Toyota Corolla took the crown among the car sales volume. In 2017, the USA car sales volume slid 1.8 percent from a year earlier, to 17.24 million units, ending a growth for seven consecutive years. The bestselling car was Ford F-Series. China topped the global car market for nine consecutive years, with 28.88 million cars selling last year. The local brand Wuling Hongguang and Haval H6 were the bestselling cars.

The automobile industry makes up a substantial portion of U.S. gross domestic product each quarter. As such it captures a great deal of attention from investors, politicians, and economists for its driving forces across the economy. Ford is well known for creating the first automobile and the process for manufacturing through the assembly line. Since the first automobile, auto manufacturing has grown to become a substantial contributor to the U.S. economy with General Motors, Ford, and Fiat Chrysler rounding out the big three. The term auto or auto sector however can at times be difficult to differentiate in the vast ocean of economic data and investing options. Below is a breakdown of some key insights on the auto industry including how it can be analyzed differently by economists versus investing analysts. Near the end of the 19th century several companies dabbled with automobile manufacturing but the automobile industry

didn't really take off until the Ford Company created the first Model T from an assembly line in 1913. Assembly line manufacturing was a groundbreaking development that made automobiles affordable for consumers and allowed Ford to improve working conditions for employees while simultaneously increasing the volume of its automotive production per day.

The industry has gone through several ups and downs including effects from the 1930s Great Depression and a post-2008 Financial Crisis fallout that resulted from default carryovers. What has emerged in the 21st century is a strong auto industry led by three top manufacturers in the United States: General Motors, Ford and Chrysler. In the United States, economic data is tracked by monitoring companies and industries through the North American Industry Classification System (NAICS). This classification system helps produce the Bureau of Economic Analysis' quarterly gross domestic product report which identifies the auto industries contribution primarily through the detailing of durable, motor vehicles and parts. Consequently, motor vehicles performance also affects other major sectors such as transportation, oil, and food and beverage. It can also be broken down further for NAICS classification in the areas of auto retail, third-party auto servicing, automobile design, and auto finance. In 2018, motor vehicles and parts accounted for 518.1 billion USD of the 18.566 trillion USD in total U.S. GDP. This translates to 28%.

The Organization Internationale des Constructeurs d'Automobiles (OICA) ranks the United States as the second-largest producer of automobiles, second only to China in the number of motor vehicles produced per year. In 2017, the U.S. had an annual production of 11.19 million passenger and commercial vehicles combined. China topped this list with 29.02 million. Data from to Statist, shows the U.S. ranking sixth in 2018 for total passenger car production alone at 2.8 million. China topped the rankings of this list with 23.71 million passenger cars produced, followed by Japan, Germany, India, and South Korea.

The U.S. automotive sector employs over 1.7 million people and pays over 500 billion USD in annual compensation. Thus, its human resources also have a big impact on the economy. As a large part of all economies, auto manufacturing gets a lot of attention. Two areas where it is receiving the most attention in 2019 include the production of electric cars and international tariffs. International tariff issues across North America appear to be resolved but new and existing import tariffs for European and Chinese automakers could significantly upset production and profits. Meanwhile, electric car production is also taking a larger share of the overall market which has its own affects. When it comes to investing in the auto industry, most analysis boils down to the Global Industry Classification Standard (GICS). Comprehensively, within the 11 broadest GICS sectors, auto falls within consumer cyclicals. Classified as a consumer cyclical, auto stocks tend to rise and fall with expansions and declines in the U.S. economic cycle. Thus, consumer cyclicals and auto stocks do the best when the economy is expanding and peaking and these stocks do the worst when the economy is contracting and in a recession. Mainly this is because like all discretionary, consumers and businesses spend more in this area when they have a surplus and cut spending in this area first when income is tight. Looking a little deeper, GICS also breaks out consumer cyclicals into automobiles and components which can be further segregated to just auto components and automobiles. In the sub industry GICS classification, GICS also provides for auto parts and equipment, tires and rubber, auto manufacturing, and motorcycle manufacturing. These delineations can be especially helpful for investors looking to invest in specific areas of the auto market. Many investment managers may also use these classifications in various ways to form mutual fund and exchange traded fund (ETF) universes that form the basis for managed fund investing.

In the investing world, auto indexes can also be a byproduct of GICS classifications. Across the investing industry, the top, passive auto index ETF

investment is the First Trust NASDAQ Global Auto Index Fund (CARZ) inventory The top companies by weight in this fund include: Daimler AG, Toyota Motor Corporation, Volkswagen AG, General Motors, Honda Motor, Peugeot S.A., Ford Motor Company, Renault S.A., BMW AG, Hyundai Motor Company.

It's no surprise to state that the car market is fiercely competitive. In 2016, 44 automotive brands were offering nearly 400 different model types to UK consumers. Keeping up with consumer expectations in an increasingly crowded market is difficult, especially as an industry hindered by lengthy production cycles. Time-to-market stretches over many years. A vehicle that looks like a perfect product-market fit at conception, might find that the market has changed by the time it rolls off the product line. Likewise, once a vehicle is in the market it's there for many more years. Manufacturers can't easily roll back the production line to make changes or iterate at the speed that other industries can. However, the slow pace of time-to-market can also be a huge opportunity for automotive brands. Innovative vehicles that address gaps in the market can enjoy years of success while the competition scrambles to catch-up. Case in example, the Nissan Qashqai, the award winning crossover that can lay claim to dramatically changing car buying habits in the UK and beyond. The competition did eventually react by producing their own crossovers, but the Qashqai still remains the best seller against its 21 direct competitors on sale today. Being first to market has clearly ingrained the Qashqai in the minds of buyers.

The automotive industry has undoubtedly enjoyed a fruitful decade of growth, and has so far been immune to outside disruption experienced by other industries like the hotel industry with AirBnB and video rental with Netflix. The biggest threats to the automotive industry has mainly come from within, but that might be about to change. Technology driven trends like electric vehicles, self-driving cars, and rideshare apps are set to shake up the industry in a way that has never been seen before. To remain competitive in such an unchartered landscape

requires new methods of understanding consumers and the market. Today's businesses need to understand consumer behavior at scale, faster than ever before. They need to pinpoint changing buying habits so they react accordingly. And they need to know about the unseen opportunities and threats so they don't become the next Blockbuster.

The rise of the empowered consumer and the old way of selling cars had much in common with the used car salesman standing on the forecourt. The seller held the power in the relationship determining what information was available to the buyer. That isn't the case anymore. Social media and technology has given birth to the empowered customer. With just a few taps of their smartphones, consumers can get all the information they need on any vehicle. They can quickly access trade journalist reviews, compare it to rival models, and see if anyone else is offering the better deal, all while standing in the showroom. More informed customers means more factors now come into the purchase decision. Online research is part and parcel of the car buying process and brands need to ensure they're aligning product positioning, marketing messages and offers with the needs of the consumer and then making in all visible and apparent online.

A new opportunity to understand consumer behavior and the rise of the empowered consumer might feel like a threat to traditional business methods, it's actually a seismic opportunity for those who choose to listen. Every day millions of people take to social media to let the world know about their experiences, thoughts and opinions. The accumulative effect of all this social chatter has created the largest pool of consumer data that has ever existed. Trillions of consumer conversations spread across the web on any topic imagined. For an industry full of passionate consumers like the automotive industry, the opportunity presented by listening on social media is huge. In fact, 38% of consumers consult social media before a car purchase. The buyer signals are already there, it's now on the brands to understand what they mean. Social listening platforms give brands a way of

turning vast unstructured consumer data into digestible and actionable consumer insights. These insights is shaping every aspect of the car development cycle from product design to pricing strategy to marketing messages.

The changing face of automotive consumers, By 2020, 40% of new car buyers will be millennials, of which 88% use the internet to research car purchase. The conclusions are obvious, automotive brands need to be building a strong, credible presence online to connect with the next generation of buyers. However, if goes far beyond simply being visible during the buyer research process. Given the lengthy time-to-market times, knowing the needs and buying habits of the next generation of car buyers is vital for the decisions that are being made today. How price sensitive are millennials? These are the types of questions that brands can start to answer with social listening. By tuning into the conversations had by millennials, brands can get a better understanding of how their approach needs to adapt to accommodate their growing financial power.

Competitive intelligence and brand associations, Perhaps one of the most compelling uses for social listening is to gain insights on competitors. We can all look at car sales figures at the end of the year and speculate why certain models performed well, while others floundered. Sales data tells you what happened, but not always why it happened. By monitoring online conversations about the competition, automotive brands can start to understand what factors influenced purchase decisions and provide insights in time to react. Measuring share of voice online is a good indicator of which brands are generating the most consumer interest. Furthermore, social listening can surface the common associations with each brand. Certain brand associations are deeply embedded in the minds of consumers. Volvo produces safe cars. Honda vehicles are reliable. Land Rover has heritage. Jaguar is synonymous with luxury and exclusivity. Brand associations have informed purchase decisions for years and manufacturers are right to cultivate them through their marketing messages. But what happens when brand

associations aren't positive? Škoda is a prime example of a brand that was failing due to negative brand associations. In the late 90s, despite regularly winning industry awards, Skoda was widely known as an embarrassing car to own. Research by Millward Brown found that 60% of people would not even consider buying a Skoda. Skoda's approach was to tackle these negative associations brand head on. Its advertisements famously used a self-deprecating tone when talking about its reputation, and showed people surprised at the quality of the new models.

In practice this strategy started with a piece of market research that gave Skoda honest look at what consumers thought of the brand. By understanding what consumers were saying, Skoda were able to spot a gap in the market – drivers who weren't overly brand conscious, who looked for value for their money and a reliable car. Today, similar market research on brand perception can be conducted quickly, cost efficiently and at scale by using social listening. Analyzing the adjectives and phrases used by consumers online when talking about different car brands can help manufacturers find gaps in the market and a unique ways to position the brand. It can help them spot their existing strengths in the eyes of the consumers, and opportunities to differentiate from the competition. As Škoda has shown, brand reputations are not set in stone. To stay in control and succeed going forward, automotive brands are going to need to ensure they're always listening to consumers. Market research in no longer something that can be commissioned, conducted and filed away. It needs to be continuous, scalable and powered by real-time insights. Social listening delivers that, but it's up to the manufacturers to take the opportunity and turn it into action.

There are also future challenges and opportunities, Apart from sales volume growth, four challenges will shape the near and medium. The industry response to these challenges could raise profitability by EUR 2 billion in a base case scenario. These challenges will matter much more for established markets than for emerging ones. Complexity and cost pressure. The increase in regulations with respect to

environmental and safety standards will raise costs but also increase complexity, as they need to be managed apart from domestic markets. The growing number of derivatives serving different vehicle segments and markets based on a single platform also raises complexity. At the same time, OEMs will have to develop alternative powertrain technologies for lower-emission vehicles without knowing what will end up being the prevailing technology of the future. This will require significant investment. Given all these pressures, plus flat net price development due to less budget available for new features, it will be more difficult for OEMs to differentiate themselves with new features while extracting economic value from these forces. Diverging markets. Emerging markets' share of global sales will rise from 50 percent in 2012 to 60 percent by 2020, while their share of global profits is also set to rise by 10 percentage points.

However, the location of current production and supply bases is not sufficiently aligned to future sales. Moreover, there is potential for "portfolio mismatch," as smaller vehicle classes are growing more strongly than others, particularly in fast-growing emerging markets. Finally, OEMs need to prepare for the Chinese aftersales market, which will grow an estimated 20 percent per year. Digital demands. When it comes to buying a car, research shows that digital channels are already the primary information source for customers. For many, the next step could be online purchasing. This might be an opportunity for OEMs, but it also means the potential threat of competition from online retailers and puts pressure on the existing dealership structure. The growing role of digital also applies to the driving experience. Consumers want to combine mobility with communication. This could be an opportunity for OEMs, but only if they can figure out how to make money from this desire. Shifting industry landscape. As OEMs seek to develop alternative powertrain technologies, suppliers will likely provide more of the value-added content per car. In addition, OEMs need to ensure that their suppliers' production footprints – especially in emerging markets – match

future market demands and their own production plans. OEMs in Europe have one unique challenge: managing the restructuring that is clearly required. Beyond base case assumptions, these challenges could give rise to further risks to automotive profits. Recent restrictions on China's pharma and dairy industries could foreshadow a tightening of regulations to the automotive industry. Therefore, assuming a negative scenario, which might induce a 50-percent margin drop, a negative profit impact of up to EUR 15 billion is possible.

So, The world automobile market remains strong with the global sales of passenger cars and trucks crossing the 90 million mark for the first time last year, the Wall Street Journal reported. China is the largest market with the sales figure reaching 28.88 million in 2017, Competitive intelligence and brand associations, Perhaps one of the most compelling uses for social listening is to gain insights on competitors. We can all look at car sales figures at the end of the year and speculate why certain models performed well, while others floundered. Sales data tells you what happened, but not always why it happened Diverging markets. Emerging markets' share of global sales will rise from 50 percent in 2012 to 60 percent by 2020, while their share of global profits is also set to rise by 10 percentage points.

1.2. Competitive environment of the world automobile building industry

Toyota Motor Corporation is a Japanese multinational automotive manufacturer headquartered in Toyota, Aichi, Japan. In 2017, Toyota's corporate structure consisted of 364,445 employees worldwide [4] and, as of September 2018, was the sixth-largest company in the world by revenue. As of 2017, Toyota is the world's second-largest automotive manufacturer. Toyota was the world's first

automobile manufacturer to produce more than 10 million vehicles per year which it has done since 2012, when it also reported the production of its 200-millionth vehicle [5]. As of July 2014, Toyota was the largest listed company in Japan by market capitalization (worth more than twice as much as number 2-ranked Softbank)[6] and by revenue [7][8].

Toyota is the world's market leader in sales of hybrid electric vehicles, and one of the largest companies to encourage the mass-market adoption of hybrid vehicles across the globe. Toyota is also a market leader in hydrogen fuel-cell vehicles. Cumulative global sales of Toyota and Lexus hybrid passenger car models achieved the 10 million milestone in January 2017. Its Prius family is the world's top selling hybrid nameplate with over 6 million units sold worldwide as of January 2017 [9].

The company was founded by Kiichiro Toyoda in 1937, as a spinoff from his father's company Toyota Industries to create automobiles. Three years earlier, in 1934, while still a department of Toyota Industries, it created its first product, the Type A engine, and its first passenger car in 1936, the Toyota AA. Toyota Motor Corporation produces vehicles under five brands, including the Toyota brand, Hino, Lexus, Ranz, and Daihatsu. It also holds a 16.66% stake in Subaru Corporation, a 5.9% stake in Isuzu, a 5.5% stake in Mazda, as well as joint-ventures with two in China (GAC Toyota and Sichuan FAW Toyota Motor), one in India (Toyota Kirloskar), one in the Czech Republic (TPCA), along with several "nonautomotive" companies [10]. TMC is part of the Toyota Group, one of the largest conglomerates in Japan. The company focuses on a set of goals to be achieved over the next 35 years, which address key global environmental issues such as climate change, water shortages, resource depletion and degradation of biodiversity.

The Toyota Environmental Challenge 2050 aims to reduce the negative impact of manufacturing and driving vehicles as much as possible. The challenge

is composed of six individual challenges across three areas: Ever-better cars, ever-better manufacturing and enriching lives of communities.

Toyota plans to reduce global average new-vehicle carbon emissions by 90 percent by 2050, compared to its 2010 global average. To this end, the company is developing next-generation automotive technologies and encouraging their widespread use from the standpoint of energy conservation and diversification of fuel sources.

In an effort to diversify fuel sources, the company is pushing for further advances related to electrified power trains in order to develop next-generation models. It also is promoting development of next-generation batteries that have higher energy density, easier increase in voltage and excellent high-temperature durability, in order to improve the range of EVs and the electric range of hybrid vehicles.

Hydrogen-powered vehicles, such as the Mirai also are central to Toyota's strategy for promoting widespread use of fuel cell vehicles, as well as making 5,680 fuel cell patents freely available and collaborating with other automakers to support the development of hydrogen infrastructure.

Ever-better manufacturing, Toyota has set a goal of reducing all carbon emissions of its plants to zero by 2050. This will be achieved through day-to-day continuous improvements and introduction of low-carbon production methods. The company also will employ renewable power, such as wind and biomass, and hydroelectric, to run its plants.

To reduce water impacts, Toyota is enacting more effective wastewater management and minimizing water consumption, taking into account the conditions in each country and region. It will introduce technologies that reduce industrial water consumption through rainwater use; improve water recycling rates in manufacturing processes, and recycling plant wastewater.

Enriching lives of communities, Toyota will work to establish a "recycling-

based society and systems" through the promotion of a global rollout of end-of-life vehicle treatment and recycling technologies developed in Japan by establishing two recycling projects in 2016.

Some of these activities include using resources more efficiently by using eco-materials, using parts for longer, improving recycling technologies, and building cars from end-of-life vehicles. It also will promote global rollout of end-of-life vehicle treatment and recycling technologies developed in Japan by establishing two projects: Toyota Global 100 Dismantlers Project and Toyota Global Car-to-Car Recycle Project.

In other Toyota news, the automaker invited 171 people to breakfast at what it called the "Toyota Barista Project," designed to educate the public about an energy-harvesting technology commonly called KERS (Kinetic Energy Recovery System), in which energy is captured and stored in a vehicle during braking and reused for accelerating again. Many racecars have implemented the technology because the severe changes in speed on the track essentially result in free fuel without any weight penalty, making the cars faster and more efficient. As more and more cars rely on electric power in the future, KERS will likely become a very familiar term - the Barista Project aimed to show the surprising amount of energy the system circulates.

Toyota estimated that it would be able to generate enough energy to serve one cup of coffee, a half-slice of toast and one-third of a sunny-side up fried egg for 171 people during the demonstration.

The Company also conducts business in finance and other industries. The Company's segments include Automotive, Financial Services and All Other. Toyota sells its vehicles in approximately 190 countries and regions. Toyota's markets for its automobiles are Japan, North America, Europe and Asia. Toyota Motor Corporation (Toyota), incorporated on August 27, 1937, conducts business in the automotive industry. The Company also conducts business in finance and

other industries.

The Company's automotive segment includes the design, manufacture, assembly and sale of passenger vehicles, minivans and commercial vehicles, such as trucks and related parts and accessories. The Company's subsidiaries include Daihatsu Motor Co., Ltd. (Daihatsu), which produces and sells mini-vehicles and compact cars, and Hino Motors, Ltd. (Hino), which produces and sells commercial vehicles, such as trucks and buses. Toyota also manufactures automotive parts, components and accessories for its own use and for sale to others. Toyota's vehicles (produced by Toyota, Daihatsu and Hino) are classified into three categories: hybrid vehicles, conventional engine vehicles and fuel cell vehicles. Toyota's product line-up includes subcompact and compact cars, mini-vehicles, mid-size, luxury, sports and specialty cars, recreational and sport-utility vehicles, pickup trucks, minivans, trucks and buses.

Toyota's subcompact and compact cars include the four-door Corolla sedan. The Yaris, marketed as the Vitz in Japan, is a subcompact car. In Europe, Toyota offers the remodeled Aygo; in Japan, Toyota offers the remodeled Corolla Axio/Fielder, the remodeled Porte and its variant, the Spade and the remodeled Auris, and in India, Asia, China and other markets, it offers Etios and Vios. In addition, Toyota offers the AGYA, which is designed and manufactured by Daihatsu. Mini-vehicles are manufactured and sold by Daihatsu. Daihatsu manufactures mini-vehicles, passenger vehicles, commercial vehicles and auto parts. Mini-vehicles are passenger cars, vans or trucks with engine displacements of approximately 660 cubic centimeters.

So, across the global industry, «Toyota motor corporation» strengthened its leadership in sound financial management, brand value and corporate rankings (table 1.1) [16].

In the calendar year 2016, Toyota (TM) stood as the second-largest automaker by volume in the world after Volkswagen (VLKAY). In fiscal 2017 (April 1, 2016,

to March 31, 2017), the company's consolidated vehicle sales stood at 9.0 million units, 3.3% higher than the 8.7 million units sold in fiscal 2016. Despite an increase in its vehicle sales, the company reported a marginal drop of 2.8% in its fiscal 2017 revenues, which stood at 27.6 trillion Japanese yen. Previously, Toyota reported net revenues of 28.4 trillion yen in fiscal 2016. Unfavorable currency movement during the fiscal year was one of the primary reasons for this drop in Toyota's revenues.

Table 1.1 – Key financial results of Toyota Motor Corporation in 2016-2017

№	Financial statement item	2016	2017	Absolute deviation, billion	Relative deviation, %	Growth rate %
1	Revenue	206,205,987	27597193	86,680	90.17	9.83
2	Net income	8556340	9630407	080,406	76.76	3.24
3	Net income per 1 share,	154,105	197,841	44,736	77.38	2.62
4	Assets	47427597	48,750,186	16,347,940	107.6	7.63
5	Shareholders' equity	168,088,188	150,016,010	18,072,178	112.04	12.04

Source: calculated by the author using [16].

In US dollar terms, Toyota's revenues fell to 236.6 billion USD in fiscal 2017, 5% lower from 247.8 billion USD in the previous fiscal year. Being a Japanese automaker, Toyota reports its earnings in Japanese yen. Therefore, investors should primarily pay attention to the company's financial figures in Japanese yen terms to get a clearer picture of existing trends in its financials figures.

During fiscal 2017, the Japanese yen witnessed strength against a basket of

currencies including the US dollar. As a result, Japanese automakers (FPX) such as Toyota and Honda (HMC) were affected.

In contrast, overseas revenues of European automakers including Volkswagen and Fiat Chrysler (FCAU) rose due to a weak euro against the US dollar. In fiscal 2017, Toyota's revenues from the Japanese market stood at 14.8 trillion yen, 0.5% higher than the previous fiscal year. During the fiscal year ended March 2017, the company sold 2.3 million vehicle units in its home market. This reflected a year-over-year increase of about 10.7% in consolidated vehicle sales in Japan. The lower growth rate of Toyota's retail sales in Japan affected the revenues from its home market (see table 1.2).

Table 1.2 – Worldwide automobile sales market share, %

Period	Toyota,	Ford	Volkswagen	Hyundai,	General Motors	Others
2018	9.46	5.83	7.38	4.76	1.42	70.7
2017	24.8	11.6	6.7	4.6	8.0	44.3
2016	10.8	6.8	10.7	8.3	8.2	55.2
2015	6.98	10.82	4.1	1.0	5.9	71.22

Source: created by author according to the [19].

This statistic represents the number of cars sold worldwide from 1990 through 2017. Additionally, it presents an estimated figure for 2018 and a forecast for 2019. Some 79 million automobiles are expected to be sold by the end 2019.

This statistic represents the number of cars sold worldwide from 1990 through 2017. Additionally, it presents an estimated figure for 2018 and a forecast for 2019. Some 79 million automobiles are expected to be sold by the end 2019.International car sales Along with a recovering automotive industry in the UK, Germany, Sweden, Poland and other European Union member states, it is forecast that increased demand for cars from customers in Asia will successfully

offset tepid growth figures in South Korea and Japan, and help automobile manufacturers sell close to 80 million vehicles by the end of 2019, up from an average of less than 55 million units in the years between 2000 and 2015.

In light of a state that could be dubbed 'peak car' in developed markets, carmakers are particularly keen on tapping into the growing affluence of Asian markets to increase worldwide car sales, where passenger vehicle sales have doubled over the past seven years.

Between 2008 and 2016, car sales were on the rise in Indonesia and India; in China, vehicle sales have quadrupled to a staggering 28.9 million vehicles in 2017. Not only is the country Asia's main producer of automobiles, but it has also emerged as the number one producer of light vehicles (table 1.3).

Chinese joint ventures and leading manufacturers like General Motors or Volkswagen were among the leading passenger car manufacturers in China. It is expected that automakers will undertake unprecedented investment programs to grow their businesses not only in China and India, but also in other emerging ASEAN markets. That said, there will likely be a growth saturation curve in all of these markets.

Toyota remained Japan's leading carmaker in 2018 by selling more than double the number of vehicles by second-place Honda or third-placed Suzuki combined. The Japanese new vehicle market was flat with nearly 5.3 million vehicles sold in 2018. Lexus and Mitsubishi were the most improved top brands while Subaru had the weakest performance in Japan in 2018.

The Nissan Note was the most popular car model in Japan in 2018.In 2018, new vehicle registrations in Japan increased by 0.7% to 5,272,067 vehicles including passenger cars, commercial heavy vehicles and buses.

The Japanese new vehicle market exceeded 5 million vehicles for the second consecutive year and was the highest since the market peaked at 5,562,888 vehicles in 2014. Japan was hit by several natural disasters in 2018 that influenced

the market heavily. Floods often boost the market, as vehicles are replaced but may also negatively affect production and vehicle availability depending on the location of factories and production lines.

Table 1.3 – Key financial results of Toyota Moto Corporation

№	Financial statement item	2016	2017	Absolute deviation, billion USD	Relative deviation, %	Growth rate %
	Revenue	206,205,987	27597193	11,885	106.95	6.95
	Net income	8556340	9630407	12,473	106.95	6.68
	Net income per 1 share, USD	8556340	197,841	0.77	133.30	13.46
	Assets	47427597	48,750,186	6,839	103.30	3.30
	Shareholders' equity	168,088,188	150,016,010	12,002	90.28	9.71

Source: calculated by the author using [2]

Sales of passenger cars and light commercial vehicles decreased for the first time since 2009, as carmakers sold 0.5% fewer vehicles, according to JATO Dynamics figures, based on their data of 54 top markets. Slightly over 400.000 fewer vehicle sales compared to 2017 make for a new total of 86.01 million global car sales. Passenger car and pick up sales were down 0.6% to 81.84 million and LCV sales were up 2.5 to 4.17 million vehicles. Of the major markets double digit growth was recorded by Thailand (+20%), Brazil (+14%) and Russia (+13%), the latter now a larger market than South Korea (+1,4%), while sales declined by double digits in Turkey (-35%) and Argentina (-10%) as these two countries battled economic downturns. But small declines in Europe, United States, and most significantly China had a great impact on global car sales. India on the other hand

set a fourth consecutive annual sales record and finally surpassed Germany to become the world's fourth largest car market. The fastest growing segment worldwide was that of EVs, which increased by more than 73% to over 1.2 million sales (fig 1.1).

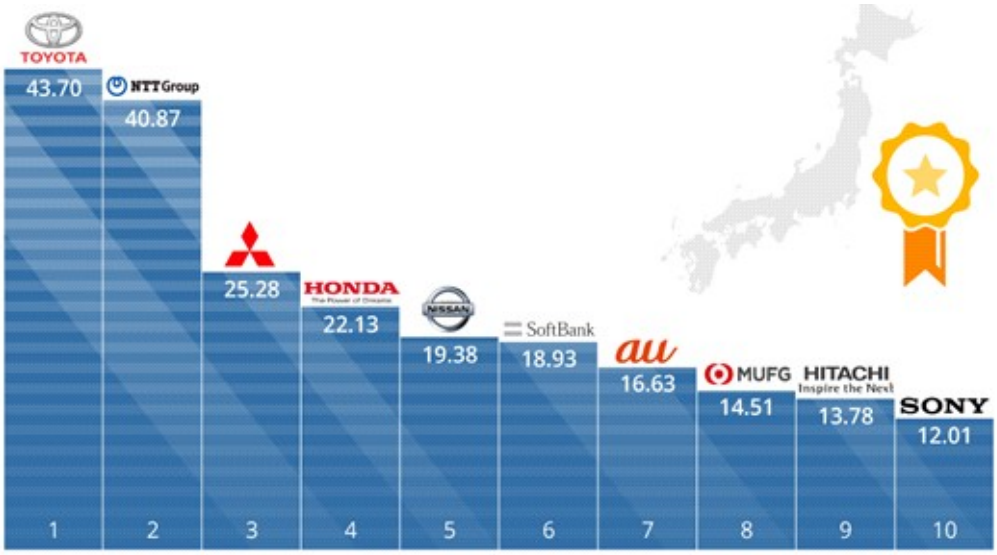

Figure 1.1 – Most valuable Japanese brands in 2018

Vehicle regulations are requirements that automobiles must satisfy in order to be approved for sale or use in a particular country or region. They are usually mandated by legislation, and administered by a government body. The regulations concern aspects such as lighting, controls, crashworthiness, environment protection and theft protection. The first steps toward harmonizing vehicle regulations internationally were made in 1952 when WP.29, a working party of experts on technical requirements of vehicles was created. This resulted in the 1958 Agreement on uniform conditions of approval and mutual recognition of approvals of vehicles, components and parts. There was a new agreement in 1998 whose objectives were to improve global safety, decrease environmental pollution and consumption of energy and improve anti-theft performance of vehicles and related components and equipment through establishing global technical regulations (GTRs) in a Global Registry based on UNECE Regulations or on national regulations listed in a Compendium of candidates, GTR harmonizing them at the

highest level. In 2000, WP.29 became the World Forum for Harmonization of Vehicle Regulations that is a working party of the United Nations Economic Commission for Europe (UNECE).The World Forum for Harmonization of Vehicle Regulations is a working party (WP.29)[1] of the Sustainable Transport Division of the United Nations Economic Commission for Europe (UNECE). It is tasked with creating a uniform system of regulations, called UN Regulations, for vehicle design to facilitate international trade.

So, Toyota is the world's market leader in sales of hybrid electric vehicles, and one of the largest companies to encourage the mass-market adoption of hybrid vehicles across the globe. Toyota is also a market leader in hydrogen fuel-cell vehicles. Cumulative global sales of Toyota and Lexus hybrid passenger car models achieved the 10 million milestone in January 2017. Its Prius family is the world's top selling hybrid nameplate with over 6 million units sold worldwide as of January 2017.

1.3. International and state regulation of the world automobile market

Vehicle regulations are requirements that automobiles must satisfy in order to be approved for sale or use in a particular country or region. They are usually mandated by legislation, and administered by a government body. The regulations concern aspects such as lighting, controls, crashworthiness, environment protection and theft protection. The first steps toward harmonizing vehicle regulations internationally were made in 1952 when WP.29, a working party of experts on technical requirements of vehicles was created. This resulted in the 1958 Agreement on uniform conditions of approval and mutual recognition of approvals of vehicles, components and parts. There was a new agreement in 1998 whose

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The forum works on regulations covering vehicle safety, environmental protection, energy efficiency and theft-resistance. Sustainable transport refers to the broad subject of transport that is sustainable in the senses of social, environmental and climate impacts. Components for evaluating sustainability include the particular vehicles used for road, water or air transport; the source of energy; and the infrastructure used to accommodate the transport (roads, railways, airways, waterways, canals and terminals). Transport operations and logistics as well as transit-oriented development are also involved in evaluation. Transportation sustainability is largely being measured by transportation system effectiveness and efficiency as well as the environmental and climate impacts of the system [1]. Short-term activity often promotes incremental improvement in fuel efficiency and vehicle emissions controls while long-term goals include migrating transportation from fossil-based energy to other alternatives such as renewable energy and use of other renewable resources. The entire life cycle of transport

systems is subject to sustainability measurement and optimization [2].

United States: FMVSS (administered by the U.S. National Highway Traffic Safety Administration (NHTSA), which also administers the Corporate Average Fuel Economy (CAFE) standard). Federal Motor Vehicle Safety Standards (FMVSS) are U.S. federal regulations specifying design, construction, performance, and durability requirements for motor vehicles and regulated Automobile safety-related components, systems, and design features. They are the U.S. counterpart to the UN Regulations developed by the World Forum for Harmonization of Vehicle Regulations and recognized to varying degree by most countries except the United States. Canada has a system of analogous rules called the Canada Motor Vehicle Safety Standards (CMVSS), which overlap substantially but not completely in content and structure with the FMVSS. The FMVSS/CMVSS requirements differ significantly from the international UN requirements, so private import of foreign vehicles not originally manufactured to North American specifications is difficult or impossible. FMVSS are currently codified at 49 C.F.R. 571. FMVSS are developed and enforced by the National Highway Traffic Safety Administration (NHTSA) pursuant to statutory authorization in the form of the National Traffic and Motor Vehicle Safety Act of 1966, which is now codified at 49 U.S.C. ch. 301.FMVSS are divided into three categories: crash avoidance (100-series), crashworthiness (200-series), and post-crash survivability (300-series). The first regulation, FMVSS No. 209, was adopted on 1 March 1967 and remains in force to date though its requirements have been periodically updated and made more stringent. It stipulates the requirements for seat belts in road going vehicles [1].

GB standards are the Chinese national standards issued by the Standardization Administration of China (SAC), the Chinese National Committee of the ISO and IEC. GB stands for Guobiao (simplified Chinese traditional Chinese pinyin: Guóbiāo), Chinese for national standard. Mandatory standards are

prefixed "GB". Recommended standards are prefixed "GB/T" (T from Chinese language tuījiàn; 'recommended'). A standard number follows "GB" or "GB/T".GB standards are the basis for the product testing which products must undergo during the China Compulsory Certificate (CCC) certification. If there is no corresponding GB Standard, CCC is not required. The Standardization Administration of the People's Republic of China (SAC; Chinese pinyin: guójiā biāozhǔnhuà guǎnlǐ wěiyuánhuì) is the standards organization authorized by the State Council of China to exercise administrative responsibilities by undertaking unified management, supervision and overall coordination of standardization work in China.

The SAC represents China within the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and other international and regional standardization organizations; the SAC is responsible for organizing the activities of the Chinese National Committee for ISO and IEC; the SAC approves and organizes the implementation of international cooperation and the exchange of projects on standardization. With the development through China's reforms and opening up, in April 2001, the State Council of China decided to set up the General Administration of Quality Supervision, Inspection & Quarantine of the People's Republic of China (AQSIQ), by merging the former CSBTS and the former State Bureau of Import & Export Inspection and Quarantine (CIQ SA) and, at the same time, to establish the Standardization Administration of the People's Republic of China (SAC) and Certification and Accreditation Administration of the People's Republic of China (CNCA) under AQSIQ.

As environmental and energy conservation and traffic accident prevention become global trends, regulations are being strengthened in Japan, To develop the mutual recognition of certification at the level of devices and components which based on the UN Agreement on the Mutual Recognition of Type Approval or Vehicles into a system for the mutual recognition of whole vehicle type approval,

Japan has stepped up the pace of deliberations and activities aimed at preparing a domestic legal framework. For vehicle (bus, truck, and trailer) braking systems, the mandatory installation of vehicle stability control systems on some vehicles, of antilock brake systems (ABS) on all vehicles and the introduction of requirements for the configuration and identification of steering gear are adopted. Measures to combat global warming are critical and continuous environmental issues, and the implementation of measures to increase the use of biofuels, the issuance of automotive fuel economy standards for 2020, and policies such as tax rebates to encourage the widespread use of vehicles compliant with those standards are all being actively examined. Automobile Type Approval Handbook for Japanese Certification. Automobile Type Approval Handbook for Japanese Certification .

The Automobile Type Approval Handbook for Japanese Certification (Blue Book) covers almost all of the Japanese regulations on automobile type approval.

Data can be searched in Japanese as well. In addition, the index, the list of corresponding UN Regulations and Japanese Safety Regulations, etc. partially contain Japanese text. Japanese regulations that you need to refer to in relation with the type approval of passenger cars, buses, trucks, etc. are contained. The Safety Regulations for Road Vehicles and related announcements and circular notices are compiled and presented together in tables, allowing you to quickly find the information you need.

Generally, in order to operate a vehicle on public roads in the UK, the vehicle must be registered and type approved. The Vehicle Certification Agency, an executive agency of the Department for Transport, is charged with issuing type approvals in the UK. In the UK, there are two categories of type approval: an EC type approval, which, once granted, is accepted throughout the EU without the need for vehicles to submit to further inspection, or a national type approval (separated into national small series type approval and individual vehicle approval), which is only likely to be suitable for cars that are imported or

manufactured in low volumes and where the manufacturer only intends to use the vehicles in the UK. With the UK looking to leave the EU in 2019, this has raised questions over whether the UK and the EU will negotiate some form of equivalence arrangements so that the EC type approval approach can continue after Brexit or whether this may result in significant changes to the approval process both for the UK market and for UK manufactured vehicles being exported to the EU. In making an application for type approval, a manufacturer's production processes will be subject to a conformity of production assessment to ensure that all vehicles will be manufactured in accordance with a particular approved specification. Pre-production vehicles will also undergo examinations to ensure that safety and environmental standards are met (including, where appropriate, destructive testing). Where automobile parts are manufactured or sold separately, generally, they must be tested for compliance with the vehicle to which they will be fitted. However, certain component parts can be tested for compliance in isolation (for example, seatbelts). For use on UK roads, vehicles must be registered with the Driver and Vehicle Licensing Agency and hold a Vehicle Registration Certificate (V5C). The person named on the V5C is responsible for the vehicle as the registered keeper of the vehicle and has a number of registration and licensing obligations. Without type approval, a vehicle cannot be registered or licensed by a person in the UK. A V5C is not evidence of ownership of the vehicle and the owner and registered keeper are not always the same. As automotive companies are global businesses the arrangements for the UK generally tend to mirror the global or regional arrangements. Original equipment manufacturers (OEMs) generally have a supply chain structure of Tier 1 (supplying directly to OEMs) and Tier 2 (supplying to Tier 1 suppliers) and so on. For common parts, OEMs tend to be sourced pursuant to pan-European arrangements but will also often have specialist local suppliers located in close proximity to manufacturing sites. In the case of the UK it is also not uncommon to see parts move across the border

between the UK and the EU multiple times as part of the manufacturing process.

Arrangements with suppliers tend to be pursuant to purchase orders, which are governed by general terms and conditions established by an OEM. Typically, the commercial arrangements contemplate that the OEM will place orders for specific components supplied for particular vehicles over the life of a vehicle but do not necessarily include minimum purchase quantities. Prices are negotiated with respect to each vehicle (often annually) and longer-term agreements may be subject to price adjustment mechanics. Larger suppliers and specialist suppliers for hard-to-source components can often have more bespoke arrangements reflecting their relevant bargaining power. For major OEMs design and engineering tend to be done internally, although it is not uncommon to see licensing or collaboration arrangements between OEMs for the use of new technology.

All vehicles made for sale in Canada and all vehicles imported into Canada must meet the Canada Motor Vehicle Safety Standards. Manufacturers and importers must follow the Motor Vehicle Safety Regulations and related safety standards, technical standards documents and test methods. The National Safety Mark shows that a vehicle or a child car seat meets the necessary standards. The centre of the logo has a unique number for the manufacturer or importer.

The automotive sector is one of the most regulated industries in the EU, and indeed elsewhere. Regulations relating to safety, the environment, the type approval of vehicles and taxation have already added significantly to manufacturing costs. The large number of new initiatives in the Commission's pipeline - including new CO_2 standards for the post-2020 period - will increase manufacturing costs further. 1.16 The fact that past regulations have imposed costs on the industry has been extensively documented - by the Commission, technology consultants, universities and other commentators. Although estimates differ, it is clear that the costs are high.1.17 McKinsey estimated that between 1998-2011 regulatory content and other improvements such as ESP, airbags, fuel efficiency

improvement and weight reduction increased production costs by 3-4% per annum.7 More recent environmental regulations are expected to add a further 6% to the average manufacturing costs by 2015 and 16% by 2020.81.18 Those cost increases have not been reflected in increased prices. Car prices have, over the same period, increased only in line with inflation.

The Indian automobile industry is the tenth largest in the world. It has an annual production of approximately 2 million units. There has been a sustained growth in the automotive sector of India following the economic reforms of 1991 which opened up 100 percent Foreign Direct Investment in this sector. The competitiveness in the automotive sector has been increasing since then. The industry has been growing annually at 20 per cent. India is set to be a key player in the automotive sector.

The automotive regulations in India are governed by the Ministry of Shipping, Road Transport & Highways (MoSRT&H) which is the nodal ministry for regulation of the automotive sector in India. Along with MoSRT&H, ministries such as Ministry of Environment & Forests and Ministry of Petroleum & Natural Gas also have a vital role in the formulation of automotive regulations and standards in India. The principal instrument governing the automotive sector in India is the Motor Vehicles Act, 1988 (MVA) along with the Central Motor Vehicles Rules 1989 (CMVR). The Act governs emission norms and safety standards in India and consolidates the law pertaining to motor vehicles. The CMVR provide the rules that explain the MVA in detail. MoSRT&H has constituted two committees to recommend and advise the ministry on issues relating to Safety and Emission Regulations. These committees are - Central Motor Vehicles Rules-Technical Standing Committee (CMVR-TSC) and Standing Committee on Implementation of Emission Legislation (SCOE). Central Motor Vehicles Rules-Technical Standing Committee (CMVR-TSC) was formulated to receive draft recommendations from other committees, such as Automotive

Industry Standards Committee and Bureau of Indian Standards, and to finalize and approve safety recommendations made by such committees. The joint secretary of MoSRT&H is the Chairman of CMVR-TSC. CMVR-TSC comprises of representatives from Ministry of Heavy Industries and Public Enterprises, Bureau of Indian Standard (BIS), Automotive Component Manufacturers Association of India (ACMA), Select State Governments, Testing agencies, SIAM and other invitees. The purpose of CMVR-TSC is to finalize and approve the draft standards and norms submitted by various committees. The CMVR-TSC is assisted by the Automotive Industry Standards Committee (AISC) and Bureau of Indian Standards (BIS).

AISC is a committee set up by MoSRT&H. The purpose of establishing this committee was to review the safety standards with regard to motor vehicles in India on a periodic basis and to give recommendations. The Chairman of this committee is the Director of Automotive Research Association of India (ARAI) which is one of the testing agencies constituted under CMVR-TSC. The AISC safety standards are formulated and prepared by separate Panel comprising of representatives of various stakeholder associations such as Department of Heavy Industries, Department of IPP, Department of RT&H, BIS, Vehicle Research and Development Establishment (VRDE), SIAM, ACMA and ARAI. The representative of ARAI is the member secretary of this committee.

For preparing safety standards, consideration is on various aspects such as the status of technology, time frame required for implementation, necessity of a particular regulation in relation to the safety and emission issues, etc. AISC submits the draft safety standards in the form of recommendations to CMVR-TSC for final approval. The CMVR – TSC looks into the recommendations of AISC and either approves or sends the recommendations to AISC for amendments. After approval CMVR-TSC submits its final proposal to MoSRT&H. MoSRT&H then takes the final decision for incorporation of the recommendations in CMVR. The

National Standards for Automotive Industry are prepared by Bureau of Indian Standards (BIS). These standards are submitted for approval to the CMVR-TSC. After approval the CMVR-TSC sends it to MoSRT&H for final approval. The standards formulated by AISC are also converted into Indian Standards by BIS. The standards formulated by both BIS and AISC are considered by CMVR-TSC for implementation. Standing Committee on Implementation of Emission Legislation (SCOE) is another committee along with CMVR-TSC that was formulated under the MoSRT&H. This committee was established for the purpose of recommending emission norms. This committee is established to discuss the future emission norms and to recommend norms for in-use vehicles to MoSRT&H. This committee finalizes the test procedures and the implementation strategy for emission norms and advises MoSRT&H on any issue relating to implementation of emission regulations.

The CMVR-TSC and SCOE recommend the safety standards and emission norms for implementation by the MoSRT&H. The standards and norms that are finalized by the CMVR-TSC are then sent for approval of the Secretary (MoSRT&H) and the Minister. After approval by the Ministry, and based on the recommendations from CMVR-TSC and SCOE, MoSRT&H issues notification for necessary amendments / modifications in the in Central Motor Vehicle Rules. The finalized standards and norms are notified through General Statutory Rule/Statutory Order. Under Rule 126 of the CMVR, various test agencies are established to test and certify the vehicles based on the safety standards and emission norms prescribed by the Ministry. Every manufacturer of motor vehicle has to submit a prototype of the vehicle to be manufactured to any of the test agencies mentioned hereafter. After testing the vehicle for compliance of all standards and norms, the test agency shall grant a certificate to the manufacturer. The test agencies are – Automotive Research Association of India, Pune (ARAI), Vehicle Research & Development Establishment, Ahmednagar, Central Farm

Machinery Testing and Training Institute, Budni, Indian Institute of Petroleum, Dehradun, Central Institute of Road Transport, Pune and International centre for Automotive Technology, Manesar.

The Indian standards and norms are at par with international standards to the extent that there is a sustained growth in the automotive sector. But there is a need to consolidate the laws further by bringing a master legislation in force that would govern and regulate all committees in force India rather than the committees being governed by various Ministries.

Thus, vehicle regulations are requirements that automobiles must satisfy in order to be approved for sale or use in a particular country or region. They are usually mandated by legislation, and administered by a government body. The regulations concern aspects such as lighting, controls, crashworthiness, environment protection and theft protection. Internationally harmonized regulations, United States: FMVSS (administered by the U.S. National Highway Traffic Safety Administration (NHTSA), which also administers the Corporate Average Fuel Economy (CAFE) standard).

Federal Motor Vehicle Safety Standards (FMVSS) are U.S. federal regulations specifying design, construction, performance, and durability requirements for motor vehicles and regulated Automobile safety-related components, systems, and design features. GB standards are the Chinese national standards issued by the Standardization Administration of China (SAC), the Chinese National Committee of the ISO and IEC. As environmental and energy conservation and traffic accident prevention become global trends, regulations are being strengthened in Japan,

To develop the mutual recognition of certification at the level of devices and components which based on the UN Agreement on the Mutual Recognition of Type Approval or Vehicles into a system for the mutual recognition of whole vehicle type approval.

Conclusions for chapter 1

Thus, Toyota is the world's market leader in sales of hybrid electric vehicles, and one of the largest companies to encourage the mass-market adoption of hybrid vehicles across the globe. Toyota is also a market leader in hydrogen fuel-cell vehicles. Cumulative global sales of Toyota and Lexus hybrid passenger car models achieved the 10 million milestone in January 2017. Its Prius family is the world's top selling hybrid nameplate with over 6 million units sold worldwide as of January 2017. Vehicle regulations are requirements that automobiles must satisfy in order to be approved for sale or use in a particular country or region. They are usually mandated by legislation, and administered by a government body.

CHAPTER 2
ACTIVITY OF THE COMPANY TOYOTA MOTOR CORPORATION IN THE WORLD AUTOMOBILE MARKET

2.1. Analysis of financial and economic activity of Toyota Motor Corporation

The main objective of the analysis is to evaluate the efficiency of assets, revenues, expenses and results of the company's performance during the investigated period, and identify the factors that positively or negatively influenced financial results.

Analysis of the structure and changes in the value of assets is made by comparison of the asset statements in 2016 and 2017 (see Table 2.1). According to the table, absolute growth and 2017 compared to 2016 have to be calculated taking into account each type of asset.

If the 2017 compared to 2016 in total assets 1.0 (Ca) is less than one, it indicates contraction of enterprise's economic activity during the investigated period. If the 2017 compared to 2016 in total assets 1.0 (Ca) is less than the 2017 compared to 2016 in:

Inventories (1.2 Ci < 1.0 Ca) (provided Chat the company's economic activity is not seasonal, and basic operating cycle is not more than 12 months), it is essential to conduct additional research in order to determine the structure of inventories. Disproportionate growth i8556340n inventories leads to accumulation of excess inventory, increase in finished goods in a warehouse, etc;

Long-term investment is greater that inventories (1.2 Ci < 1.1 Cinv), feasibility and effectiveness of relevant investments need to be checked.

A growth in inventories disproportional to the increase in assets may indicate a slowdown of turnover, diversion of financial resources and the deterioration in financial performance of the company.

Table 2.1 – Analysis of assets structure and dynamics at The Toyota Motor Corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017–2016)	2017 compared to 2016
1.	Non-current assets, including:	730,271	1,156,406	426135	0.0016
1.1	Intangible assets	10,834,680	11,707,160	872480	1.081
1.2	Property, plant and equipment	10945267	11357340	412073	1.0 38
1.4	Long-term investment	10834680	11707160	872480	1.081
1.5	Other non-current assets	730271	1156406	426135	1.583
2.	Current assets, including:	18209553	17833695	-375858	0.979
2.1	Inventories	2061511	2388617	327106	1.158
2.2	Accounts receivable	7464239	2558750	-4905489	0.342
2.3	Cash and cash equivalents	2030428	2006075	-24353	0.988
2.4	Other current assets	6653375	10880253	4226878	1.635
3.	Deferred (Prepaid) expenses	1333345	796207	-537138	0.597
4.	Total assets	47427597	48,750,186	1322589	1.027

Source: calculated by the author

Asset is an economic resource. Anything tangible or intangible that can be owned or controlled to produce value and that is held by a company to produce positive economic value is an asset.

It covers money and other valuables belonging to an individual or to a

business. Examples of asset are:

- Cash at bank and in hand – Tangible
- Inventory – Tangible
- Land – Tangible
- Software – Intangible
- Website – Intangible
- Patented technology – Intangible

Assets are important as they can help you to generate revenue, increase your business' value, facilitate the running of your business.

According to Table 2.1, assets structure and dynamics and 2017 compared to 2016 have to be calculated considering assets structure and indicators.

A noncurrent asset is an asset that is not expected to turn to cash within one year of date shown on a company's balance sheet and it can be seen that the noncurrent assets increased 0.0016 in 2017 compared to 2016.

An intangible asset is an asset that is not physical in nature. Goodwill, brand recognition and intellectual property, such as patents, trademarks, and copyrights, are all intangible assets, there is an increased of 1.081 in 2017 compared to 2016.

The property, plant, and equipment (PP&E) account, also known as tangible fixed assets, represents the non-current, physical, illiquid assets that are expected to generate long-term economic benefits for a firm including land, buildings, and machinery. There is an increased of 1.0 38 in 2017 compared to 2016.

A long-term investment is an account on the asset side of a company's balance sheet that represents the company's investments, including stocks, bonds, real estate and cash. There is an increase of 1.081 in 2017 compared to 2016.

Inventories are the goods and materials that a business holds for the ultimate goal of resale, there is an increase of 1.158 081 in 2017 compared to 2016.

Accounts receivable is the balance of money due to a firm for goods or services delivered or used but not yet paid for by customers and it can be seen that

there has been increase of 0.342 in 2017 compared to 2016. Cash and cash equivalents refer to the line item on the balance sheet that reports the value of a company's assets that are cash and its can be seen that there has been increase of 0.988 in 2017 compared to 2016.

Deferred expense and prepaid expense both refer to a payment that was made, but due to the matching principle, the amount will not become an expense until one or more future accounting periods and its can be seen that there has been increase of 0.597 in 2017 compared to 2016.

Total assets refers to the total amount of assets owned by a person or entity. Assets are items of economic value, which are expended over time to yield a benefit for the owner. It can be seen that there has been increase of 1.027 in 2017 compared to 2016 and it is good for Toyota Motor Corporation.

While analyzing changes in company's equity, changes in structure and volume of financial performance are estimated (see Table 2.2).

According to Table 2.2, absolute growth and 2017 compared to 2016 have to be calculated considering various equity indicators.

If the 2017 compared to 2016 in total stockholders' equity is lower than the 2017 compared to 2016 in total assets (1.0 Ca > 1.0 Cse), it indicates a decrease in funding sources. If the net cash used for investing activities is higher than total assets and total shareholder's equity (7.1Ccia > 1.0 Ca and/or 7.1Ccia > 1.0 Cse), the company should conduct an analysis in order to find out whether its investment was artificially increased or not.

Equity (or owner's equity) is the difference between the value of the assets and the value of the liabilities of something owned. The importance of equity in business is the value after all debts are paid.

On a financial balance sheet or personal net worth statement, equity is shown as the difference between your assets and liabilities. The more equity you have, the higher your value in your business and personal affairs.

Table 2.2 – Analysis of equity structure and dynamics at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Net cash provided by operating activities	2,939,428	2,995,075	55647	1.018
2.	Net cash used for investing activities	628	44,274	43646	0.070
3.	Additional paid-in capital	548,161	484,013	-64148	0.882
4.	Shares reserved	16,746,935	17,514,812	767877	1.045
5.	Comprehensive earnings/income (losses)	16,794,240	17,601,070	806830	1.048
6.	Total stockholders' equity	17,608,407	18,183,076	574669	1.032

Source: calculated by the author with

The total liabilities have increase 0.106 in 2017 compared to 2016 which is bad for the company, they should try and decrease the liabilities.

While analyzing the structure and changes in company's liabilities, negative trends influencing company's development are figured out (see Table 2.3). Great attention should be paid to long-term debt obligations.

According to Table 2.3, 2017 compared to 2016 in long-term and current obligations as well as the total amount of liabilities are identified. An increase of 2017 compared to 2016 in current liabilities, comparing with total assets, 0.1 (Ccl > 1.0Ca) means deterioration of company's solvency. In this occasion, an in-depth analysis should be conducted in order to prevent company's bankruptcy.

A Liability is claim against the assets, or legal obligations of a person or organization, arising out of past or current transactions or actions. Liabilities require mandatory transfer of assets, or provision of services, at specified dates or

in determinable future. Accounting: Accounts and wages payable, accrued rent and taxes, trade debt, and short and long-term loans. Owners' equity is also termed a liability because it is an obligation of the company to its owners. Liabilities are entered on the right-hand of the page in a double-entry bookkeeping system.

Table 2.3 – Analysis of liabilities structure and dynamics at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Long-term debt obligations	9772065	0911506	-8860559	0.093
2.	Current liabilities	16124456	17318965	1194509	1.074
3.	Total liabilities (line1+line 2)	170996521	18230471	-7666050	0.106

Source: calculated by the author with

There are many reasons for limiting the liability of an individual's investment in a business, but perhaps the most significant is in the understanding of risk. By allowing an individual to limit the ultimate extent of his or her risk you are allowing them to understand and quantify the risk of the potential investment. Understanding the extent of "skin in the game" allows you to make an informed decision on whether to make the investment or not. Unlimited exposure to the liabilities of company is a risk too great for the vast majority of individuals. Very few of us have the financial means to be able to afford a risk like that.

The total liabilities have increased 0.106 in 2017 compared to 2016 which is bad for the company; they should try and decrease the liabilities. The coefficient of comprehensive income (Croa) indicates the share of total income that accounts for 1 USD spent on production (see Table 2.4).

If the net cash used for investing activities increases or remains stable (7.1Ccia >=1) and comprehensive income rises (Cci>1), a growth in the coefficient of comprehensive income (Croa>1) indicates effective use of the company's

property. If the growth in the coefficient of comprehensive income (Croa>1) goes along with a decrease in total assets (1>1.0Ca), additional analysis aimed at finding out the reasons of growth in solvency needs to be conducted. The main purpose of such analysis is identifying whether such increase happened due to the sale of company's assets and inventory or due to some other reasons.

Table 2.4 – Return on assets at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Total assets	47,427,597	48,750,186	1322589	1.027
2.	Comprehensive income	2,434,211	1,926,985	-507226	0.791
3.	Difference in coefficients	-	-	-	(Ca – Cci)
4.	Comprehensive income that accounts for 1 USD spent on manufacturing goods/services	0.051	0.039	-12	0.764

Source: calculated by the author with

Apart from that the dynamics of changes in company's total assets (1.0Ca) and comprehensive income (Cci) needs to be compared. If the difference of the coefficients (Cci – 1.0Ca) is positive, an additional check aimed at identifying the necessity to sell company's assets is carried out. If the difference is negative, the causes of growth rate in total assets (increase in the volume of unsold goods, inventories, capital investment or purchase of long-term liabilities) should be found out.

According to the Table 2.5, profitability of every type of company's activity (operating, financing and investing) is carried out.

Table 2.5 – Analysis of the structure and dynamics of financial results at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Net income/revenue	28403118	27597193	-805925	0.971
2.	Cost of sales	21456086	25602821	4146735	1.193
3.	Gross profit (loss)	2,983,381	2,193,825	-789556	0.735
4.	Operating profit / income	2853971	1994372	-859599	0.698
5.	Prepaid expenses and other current expenses	129,410	199,453	70043	1.541
6.	Financial result of operating activities (line 3 + line 4 – line 5)	5966762	4387650	-1579112	0.735
7.	Financing income	2,853,971	1,994,372	-859599	0.698
8.	Financing costs	1,149,379	1,191,301	41922	1.036
9.	Financial result of financing activities (line 7 – line 8)	1704592	803071	-901521	0.471
10.	Other income	12,524	36,222	23698	2.892
11.	Other costs	2,943,682	2,868,485	-75197	0.974
12.	Financial result of the activity before taxation	(+- line 6 +- line 9 +- line 10 – line 11) 4740196	2358458	-2381738	0.497

Source: calculated by the author

Analysis of different types of company's activity allows identifying its influence on company's net revenue. If the company has losses caused by operating activity, the structure of expenses needs to be analyzed in accordance with economic elements. If the company has losses caused by investing activity, factors influencing such losses and methods of losses elimination at joint ventures as well as subsidiaries need to be outlined. Apart from that, company's investment activity should be reduced. If the company has losses caused by financing activity,

the structure of both financing income and costs need to be analyzed. The analysis should indicate possible ways to reduce financing costs. While analyzing financing income, profitability of company's securities should be identified. This sometimes leads to the changes in company's investment portfolio (sale of some securities and purchase of other profitable securities).

If the company has losses conducting other activities which are neither connected with operating nor financing activity, the structure of other income and costs is analyzed in order to outline the ways to eliminate company's losses.

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. Return on assets is displayed as a percentage., the returns on assets in 2017 increase 0.764 compared to 2016 and this is a good sign improvement generated by the assets. While analyzing the structure and dynamics of financial results (see table 2.5).

The financial statements of a company provide a representation of the company's current performance to investors. This information is used to evaluate the overall value of a company and its share price. The income statement is one of the most important financial statements because of its indication of profits, its timely reporting, and its classification of revenues and expenses.

The income statement is important because it clearly states whether a company is making a profit. The total revenues and expenses of a company are listed on its income statement.

Subtracting the expenses from revenues provides the total profit during the given accounting period, usually a year or a quarter of a year. A company must consistently be making a long-term profit to be a good investment choice. This information can only be found on the income statement.

Thus to say that the total financial result of the activities before taxation is

0.497 C*tax* in 2017 compared to 2016. Factor analysis of gross income (loss) identifies the influence of growth (decline) in net income provided by operating activities and cost of sales on net income (loss) (see Table 2.6).

Table 2.6 – Factor analysis of gross income (loss) at The Toyota Motor corporation, 2016-2017, Yen in millions

Net cash provided by operating activities		Cost of sales		Net income (loss)		Increase (decrease) in gross income (loss)		
2016	2017	2016	2017	2016	2017	total (column 6 - column 5)	due to an increase (decrease) in net cash (column 2 - column 1)	Due to decrease (increase) in cost of sales (column 3 - column 4)
1,149,379	1,191,301	21,456,086	20,143,035	2,434,211	1,926,985	-507226	41922	-86949

Source: calculated by the author

Gross income is all a person's receipts and gains from all sources, before any deductions. The adjective "gross", as opposed to "net", in general qualifies a word referring to an amount, value, weight, number, or the like, specifying that necessary deductions have not been taken into account. The amount by which sales revenue exceeds production costs (cost of sales).

Though operating income gives a more accurate picture of a company's profitability, gross income provides a top-line view of a company's production or (in case of a merchant) sales related cost structure. It is a measure of how well (or badly) a company is utilizing its capital, capacity, and other resources, and shows its competitive strengths and weaknesses in comparison with other companies in the same industry.

A high gross income means stability in times of economic downturn because the company can afford to cut prices; a low gross income may mean low creditworthiness or inability to fight off competition.

A falling gross income shows cost of production is raising faster than the

selling price, or that inventory is shrinking due to stealing or spoilage. It is allocated to employees as wages, to lenders as interest, to investors as dividends, to government as taxes, and to the company as reinvestment. When expressed as a percentage of cost of sales, it is called gross margin. Also called gross profit or value added.

Company's financial and economic activity is poor if the company has outstrip growth rate in administrative costs, selling expenses and operating costs comparing to the growth rate of cost of sales.

Therefore, Toyota Motor Corporation Net cash provided by operating activities increase 1,191,301 in2017 compared to 2016, Cost of sales decrease 20,143,035 in 2017 compared to 2016, Net income (loss) in 2017 decrease to 1,926,985 compared to 2016.

Analysis of structure and dynamics of costs (see table 2.7). Cost is an amount that has to be paid or given up in order to get something.

In business, cost is usually a monetary valuation of (1) effort, material, resources, time and utilities consumed, risks incurred, and opportunity forgone in production and delivery of a good or service. All expenses are costs, but not all costs (such as those incurred in acquisition of an income-generating asset) are expenses.

The company, even if it is a home-based or virtual online business, must incur these costs in order to deliver its products or services. As the owner or manager, you must pay people to perform duties that you either cannot or do not have time to do. You must market your business to find and attract customers.

Cost of sales, also known as the cost of revenue, and cost of goods sold (COGS) both keep track of how much it costs a business to produce a good or service to be sold to customer You must pay for the phone you use to call, the computer and Internet you use to write and connect.

The only way your company will not incur costs if it is dormant and not

operating. The total expenses incurred in 2017 by Toyota Motor Corporation has increased 1.000 (C*te*) compared to 2016.

Table 2.7 – Analysis of structure and dynamics of costs The Toyota Motor Corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1	Cost of sales	21,456,086	21,543,035	86949	1.004
2	Administrative costs	2,943,682	2,868,485	-75197	0.974
3	Selling expenses	2943682	2868485	-75197	0.974
4	Other operating costs / expenses	1,149,379	1,191,301	41922	0.962
5	Financing costs	1854007	1783607	-70400	0.962
6	Other costs	2,943,682	2,868,485	-75197	0.974
7	Loss on disposal of tangible and intangible assets	33,329	30,673	-2656	0.920
8	Total expenses (line 1 + line 2 + line 3 + line 4 + line 5 + line 6 + line 7)	33323847	33354071	30224	1.000

Source: calculated by the author

Analysis of company's income structure is conducted in accordance (see Table 2.8).

An increase in total income, assets and capital and decrease in liabilities means effective use of company's assets. A decline in company's total income and increase in its losses and liabilities signify the loss of its solvency.

Table 2.8 – Analysis of income structure at The Toyota Motor Corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Total operating income, including:	2853971	1994372	-859599	0.698
2.	Net cash provided by operating activities	4,460,857	3,414,237	-1046620	0.765
1.2	Other operating income	129,410	199,453	70043	1.541
2	Financing income	2,853,971	1,994,372	-859599	0.698
3	Other revenue	-5,573	33,601	28028	-6.029
4	Operating surplus (deficit)	2,853,971	1,994,372	-859599	0.698
5	Total income (line 1 + line 2 + line 3 + line 4)	8556340	9630407	1074067	1.125

Source: calculated by the author

Operating income is a company's profit after subtracting operating expenses or the costs of running the daily business. Operating income can also be calculated by deducting operating expenses from gross profit whereby gross profit is total revenue minus cost of goods sold. Operating income is An accounting figure that measures the amount of profit realized from a business's operations, after deducting operating expenses such as wages, depreciation, and cost of goods sold (COGS).

Total income, the sum of all money received by an individual or

organization, including income from employment or providing services, revenue from sales, payments from pension plans, income from dividends, or other sources., the total income of Toyota Motor Corporation has increased 1.125 (C*te*) in 2017 compared to 2016 and this is a good performance for the company.

So, analyzing Toyota motor corporation financial and economic activities, we can take this into consideration analysis of assets structure and dynamics, equity structure, liability structure, return on assets, financial result, gross income, cost structure and income structure and this chapter explain the position of the company it can be seen that there has been increase of 1.027 in 2017 compared to 2016 and it is good for Toyota Motor Corporation. The total liabilities have increase 0.106 in 2017 compared to 2016 which is bad for the company, they should try and decrease the liabilities. Return on assets is displayed as a percentage., the returns on assets in 2017 increase 0.764 compared to 2016 and this is a good sign improvement generated by the assets. Toyota Motor Corporation Net cash provided by operating activities increase 1,191,301 in2017 compared to 2016, Cost of sales decrease 20,143,035 in 2017 compared to 2016, Net income (loss) in 2017 decrease to 1,926,985 compared to 2016.the total income of Toyota Motor Corporation has increased 1.125 (Cte) in 2017 compared to 2016 and this is a good performance for the company.

2.2. Toyota Motor Corporation's international competitiveness analysis

Competitiveness is the ability of a company, country, or a product to compete with others. Competitiveness pertains to the ability and performance of a firm, sub-sector or country to sell and supply goods and services in a given market,

in relation to the ability and performance of other firms, sub-sectors or countries in the same market.

In recent years, the concept of competitiveness has emerged as a new paradigm in economic development. Competitiveness captures the awareness of both the limitations and challenges posed by global competition, at a time when effective government action is constrained by budgetary constraints and the private sector faces significant barriers to competing in domestic and international markets.

The Global Competitiveness Report of the World Economic Forum defines competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country.

Competitiveness becomes international when it pertains to two or more countries. Such process is captured by definitions of competitiveness which move from a general perspective to more specific understandings at the firm and country levels. There are several definitions of competitiveness that must be considered before one can build a particular understanding of international competitiveness.

Competitiveness includes efficiency (reaching goals at the lowest possible cost) and effectiveness (having the right goals). It is this choice of industrial goals which is crucial. Competitiveness includes both the ends and the means toward those ends. "International competitiveness, thus, can be understood as the balance between efficiency and effectiveness in the economic realm [7; 12].

To determine the international competitiveness of the company the following methods should be used:1 analysis, Porter five forces analysis, Boston Consulting Group analysis (matrix) etc.

SWOT analysis (alternatively SWOT matrix) is a structured planning method used to evaluate the strengths, weaknesses, opportunities and threats involved in a project or in a business venture. To analyze the strengths, weaknesses, opportunities and threats of the Toyota Motor the method of SWOT

analysis should be used (table 2.9)

Table 2.9 – SWOT matrix for Toyota Motor

Strengths	Opportunities
• Strong Human Resource • Innovative Organizational Culture • Strong Brand Image • Strong Diversified Portfolio • Advanced Technology	• The growth of Developing Nations • Green Vehicle Technology • Growing Concern for Environmental Pollution
Weaknesses	**Threats**
• Patent infringement • Too low profit margin • Main competitors are also largest buyers • Focus on too many products	• Saturated smartphone markets in developed countries • Rapid technological change • Declining margins on hardware production • Breached patents • Price wars

Source: created by author according to the [23; 24; 25].

The main strengths of Toyota Motor Corporation are the following:

1. Strong Human Resource – A Company needs skilled and professional human resource to grow bigger. Toyota is blessed with huge human power throughout the world. They have invested in getting resources, and the return they get is big. As of December 2015, they have 348,877 skilled human resources around the world.

2. Innovative Organizational Culture While it comes to advanced operating

system and functional strategies, Toyota will always be on the top. From widely practiced management system to lean manufacturing details, Toyota has set examples for the fellow companies.

3. Strong Brand Image – This is obviously one of the most important strong points of Toyota. Whenever people look for cars, they search for the brand name Toyota, and that has kept them far ahead of their competitors.

Strong Diversified Portfolio – Cars means Toyota. They have a large number of varieties of their product. From electric cars to hybrid cars, Toyota has spread its wings to all types of cars in this market.

4. Advanced Technology – Toyota is not only a car manufacturing company, but they are also considered as an innovator. Their hi-fi technology has introduced hybrid cars in the market. The green vehicle technology of Toyota has been adorned by customers in large scale when they consider the environmental concern and price of petrol.

5. Global Supply Chain – They has outlets, branch companies, manufacturing factories around the world. The strong and global supply chain of Toyota is really one of the greatest strength of this company.

6. High Production Capability – Toyota is giving serious competition to its contemporaries on this point as they have a high production capacity of producing cars, almost 10 million per year.

The main weaknesses of Toyota are the following:

1. Dependence on Suppliers – as Toyota has suppliers around the world; they have to depend on them. It makes the production a bit sloth.

2. Not Grabbing Markets – Toyota has developed green vehicle technology, but it has been failed in grabbing the actual market where it would be implemented accurately. The market of China and India can be the best for launching these vehicles, but there is still time.

3. Negative Publicity – This happens due to large vehicle recalls. Any type

of vehicle recalls affecting the automaker, and Toyota is no exception. Also, the recall rates are higher in Toyota, and that can cause more negative publicity.

4. Poor Brand Recognition – There are 4 different flagships of Toyota - Hino, Lexus, Daihatsu, and among these, Lexus and Toyota have been successful in making the brand recognition.

The main opportunities of Toyota are the following:

- The growth of Developing Nations – Perspectives is changing, and now, people are more inclined to buy cars. In the developing nations, the demand for cars is exuberating.

- Green Vehicle Technology – Maybe slower, but the green vehicle technology is gaining popularity around the world. If Toyota focuses on this area, they will get much revenue from this innovation.

- Growing Concern for Environmental Pollution – People, around the world, is getting more concerned about the environmental degradation and are also willing to do their bit. This is the high time to popularize Toyota's environment-friendly.

The main threats of Toyota are the following:

- Number of Competitors– Toyota is competing with huge names in the market, like Volkswagen, Ford, Mitsubishi, and Hyundai. It makes quite hard to make strong feet in the market.

- High-priced Raw Materials – As the cost of raw materials is increasing, that is also increasing the cost of the end product.

- Lower Profits – The continuous threat of exchange rates is always there. When the revenues are sent back to Japan in the Yen that becomes quite lower profit in comparison to other currencies.

The main objective of the analysis is to evaluate the efficiency of assets, revenues, expenses and results of the company's performance during the investigated period, and identify the factors that positively or negatively influenced financial results (table 2.10).

Table 2.10 – Analysis of assets structure and dynamics at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Non-current assets, including:	730,271	1,156,406	426135	0.0016
1.1	Intangible assets	10,834,680	11,707,160	872480	1.081
1.2	Property, plant and equipment	10945267	11357340	412073	1.0 38
1.4	Long-term investment	10834680	11707160	872480	1.08
1.5	Other non-current assets	730271	1156406	426135	1.583
2.	Current assets, including:	18209553	17833695	-375858	0.979
2.1	Inventories	2061511	2388617	327106	1.158
2.2	Accounts receivable	7464239	2558750	-4905489	0.342
2.3	Cash and cash equivalents	2030428	2006075	-24353	0.988
2.4	Other current assets	6653375	10880253	4226878	1.635
3.	Deferred (Prepaid) expenses	1333345	796207	-537138	0.597
4.	Total assets	47427597	48,750,186	1322589	1.027

Source: calculated by the author

According to Table 2.10, assets structure and dynamics and 2017 compared to 2016 have to be calculated considering assets structure and indicators. A noncurrent asset is an asset that is not expected to turn to cash within one year of date shown on a company's balance sheet and it can be seen that the noncurrent assets increased 0.0016 in 2017 compared to 2016.

An intangible asset is an asset that is not physical in nature. Goodwill, brand recognition and intellectual property, such as patents, trademarks, and copyrights, are all intangible assets, there is an increase of 1.081 in 2017 compared to 2016.

While analyzing changes in company's equity, changes in structure and volume of financial performance are estimated (see table 2.11).

Table 2.11 – Analysis of equity structure and dynamics at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Net cash provided by operating activities	2,939,428	2,995,075	55647	1.018
2.	Net cash used for investing activities	628	44,274	43646	0.070
3.	Additional paid-in capital	548,161	484,013	-64148	0.882
4.	Shares reserved	16,746,935	17,514,812	767877	1.045
5.	Comprehensive earnings/income (losses)	16,794,240	17,601,070	806830	1.048
6.	Total stockholders' equity	17,608,407	18,183,076	574669	1.032

Source: calculated by the author

According to Table 2.11, absolute growth and 2017 compared to 2016 have to be calculated considering various equity indicators.

If the 2017 compared to 2016 in total stockholders' equity is lower than the 2017 compared to 2016 in total assets (1.0Ca > 1.0Cse), it indicates a decrease in funding sources. If the net cash used for investing activities is higher than total assets and total shareholder's equity (7.1Ccia > 1.0Ca and/or 7.1Ccia > 1.0Cse), the company should conduct an analysis in order to find out whether its investment was artificially increased or not.

While analyzing the structure and changes in company's liabilities, negative trends influencing company's development are figured out (see Table 2.12). Great attention should be paid to long-term debt obligations.

Table 2.12 – Analysis of liabilities structure and dynamics at The Toyota Motor corporation, 2016-2017, Yen in millions

№	Indicator	2016	2017	Absolute growth rate (2017 – 2016)	2017 compared to 2016
1.	Long-term debt obligations	9772065	0911506	-8860559	0.093
2.	Current liabilities	16124456	17318965	1194509	1.074
3.	Total liabilities (line1+line 2)	170996521	18230471	-7666050	0.106

Source: calculated by the author

According to Table 2.12, 2017 compared to 2016 in long-term and current obligations as well as the total amount of liabilities are identified.

An increase of 2017 compared to 2016 in current liabilities, comparing with total assets, 0.1 (Ccl> 1.0Ca) means deterioration of company's solvency. In this occasion, an in-depth analysis should be conducted in order to prevent company's bankruptcy.

International competitiveness can be defined as a process in which higher levels of competitiveness are achieved at different levels, that is, at firm, regional and national levels. As such, competitiveness becomes international when it pertains to two or more countries. Such process is captured by definitions of competitiveness which move from a general perspective to more specific understandings at the firm and country levels. There are several definitions of competitiveness that must be considered before one can build a particular understanding of international competitiveness.

For a firm to experience long-term sustained competitive advantage it must invest in human resources and deploy its scarce assets in the Strategic alignment Corporate innovation. For a firm to experience long-term sustained competitive advantage it must invest in human resources and deploy its scarce assets in the core

areas that can most effectively provide the underpinning of a sustained competitive advantage.

A firm's external environment involves both geographic factors and cultural elements. Location and resources are crucial geographic factors influencing both national and corporate success, with population characteristics and institutional arrangements making up the most meaningful components of the cultural elements affecting both the success of firms and of nations.

Resources, population and institutional factors are dynamic, manifesting a number of feedback loops. For example, institutional incentives stimulate technological discoveries, which, in turn, enable firms to pursue resource substitution policies, thereby modifying production possibilities.

During the period after the Second World War, at least through the 1980s, Japan and Japanese firms seemed to have successfully adapted themselves to the competitive forces of emerging global markets. In spite of a poor natural resource base, a dramatically altered set of institutional arrangements (a combination of democratic government, free-markets and the rule of law) created a propitious atmosphere for innovative behaviour.

Nowhere were adaptations to this altered environment more apparent than in the Japanese automobile and semiconductor industries and no firm was more successful, admired and emulated than Toyota Motor Corporation.

Toyota Motor Corporation: The Smart Investment Toyota plans to have zero gas fueled cars by 2050.TM has a lower P/E ratio than most primary competitors supporting the suggestion to buy. Revenue growth for the last 4 years has been over 30% for TM.

There are dozens of well-known automobile manufacturers, so what makes Toyota Motor Corporation (NYSE:TM) the one to invest in? Toyota is continuing to stay on top of the market as technology continues to advance. Recently, according to Yahoo! Finance, Toyota announced their plan to stop selling gasoline

cars by the year 2050. Although this is an ambitious plan, it is also a good indicator of how well Toyota is managing to stay on top of the technology. The corporation's finances have proven that they had a rocky past couple of years and are making a significant comeback. Two weeks ago, Toyota was once again named the Most Valuable Global Automotive Brand. The chart below shows the historical prices for Toyota over the last five years. This chart is a good indicator of Toyota's continual growth. As you can see, there is a tiny dip in stock price in mid-2015, however, it is turning itself around. The company has very good ratios,

Thus, the main strengths, of Toyota Motor Corporation are Strong Human Resource, Innovative Organizational Culture, Strong Brand Image, Strong Diversified Portfolio, Advanced Technology. Goodwill, brand recognition and intellectual property, such as patents, trademarks, and copyrights, are all intangible assets, there is an increase of 1.081 in 2017 compared to 2016.A noncurrent asset is an asset that is not expected to turn to cash within one year of date shown on a company's balance sheet and it can be seen that the noncurrent assets increased 0.0016 in 2017 compared to 2016.Toyota Motor Corporation: The Smart Investment Toyota plans to have zero gas fueled cars by 2050.TM has a lower P/E ratio than most primary competitors supporting the suggestion to buy. Revenue growth for the last 4 years has been over 30% for TM.

2.3. Toyota Motor Corporation's investment potential and attractiveness

Before selling the business, a preliminary analysis of the prospects of company sale may be carried out, taking into consideration strengths and weaknesses, risks and opportunities of the business, as well as a general

atmosphere on capital and financial markets. Thereby, a possibility of attracting and investor/buyer is assessed, in view of M&A drivers in the industry, characteristics of the company, along with the situation in the stock exchange and financial markets. Strategies of leading financial investors, mainly private equity funds, are also taken into account to help our clients form their own development strategies in view of attracting new investors [5].

For organizations fueled by new ideas and constant change, the Innovation Potential Indicator bridges the gap between what you know about someone in the present, and their future potential for innovation and creativity. Organizations need new ideas and ways of working to keep business fresh and competitive, helping them to survive, especially in tough times. Harnessing people's ability and motivation to innovate from an early stage in their lifecycle in an organization is a great way fast-track their development – and to ensure your business doesn't go stale. The Innovation Potential Indicator allows you to select and develop key people and teams to power innovation throughout your organization [21].

Toyota has been involved in many global motorsports series. They also represent their Lexus brand in other sports car racing categories. Toyota also makes engines and other auto parts for other Japanese motorsports including formula Nippon, Super GT, formula 3 and formula Toyota series. Toyota also runs a driver development program known as TDP (Toyota Young Drivers Program) which they made for funding and educating future Japanese motorsports talent [75]. Toyota Motorsport GmbH, with and headquarters in Cologne, Germany) was previously responsible for Toyota's major motorsports development including Formula One. Toyota Motorsport GmbH also developed cars for World Rally Championship and Le Mans Series.

Toyota enjoyed success in all these motorsports categories. In 2002, Toyota entered Formula One as a constructor and engine supplier, however despite having experienced drivers and a larger budget than many other teams, they failed to

match their success in other categories, with five second places their best results. On 4 November 2009 Toyota announced they were pulling out of the sport due to the global economic situation.

Investment risk can be defined as the probability or likelihood of occurrence of losses relative to the expected return on any particular investment. To analyze the impact of risk on investment performance is to develop possible measures to prevent the occurrence of the expected financial losses.

Achieving of this goal greatly depends on the quality of investment risk identification, namely the combination of the adverse factors that can lead to a decline in revenues, an increase in capital investment requirements and the corresponding decrease in investment income.

In connection with this investment analysis involves compiling an exhaustive list of risks for each of the project and evaluate appropriate structure of expected financial losses. The efficiency of this process is based primarily on a clear classification of risks, their grouping and aggregation potential impact on investment performance (table 2.13).

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings.

Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment". Return on assets of Toyota Motor Corporation within the year 2014 to 2015 was 4.3% which yielded 0 point which is acceptable in terms of performance [16].

Return on equity (ROE) is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Table 2.13 – Sequence of calculations to identify the coefficients of investment potential and investment risk at the enterprise

Indicator	Sequence of calculations (in accordance with financial statements)	Weights	Points
Investment potential			
1. Profitability indexes		0,4	0.4
1.1. Return on assets, %	$\frac{\text{Net Profit}}{(\text{Assets 1} + \text{Assets 2})/2} x100 = 4.033$	0,2	0
1.2. Return on equity, %	$\frac{\text{Net Profit}}{(\text{sh.equity 1} + \textit{sh.equity 2})/2} x100 = 5.490$	0,2	0
1.3. Return on sales, %	$\frac{\text{Net Profit}}{\textit{Revenue}} x100 = 9.499$	0,2	1
1.4. Product profitability, %	$\frac{\text{Net Profit}}{\text{Cost of goods sold}} x100 = 15.435$	0,2	1
1.5. Return on current assets, %	$\frac{\text{Net Profit}}{(\text{Current Assets 1} + \text{Current Assets 2})/2} x100 = 7.943$	0,2	0
2. Indicators of liquidity and solvency		0,3	2
2.1. Current liquidity ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}} = 2.471$	0,25	2
2.2. Quick liquidity ratio	$\frac{\text{Current Assets - Inventories}}{\text{Current Liabilities}} = 2.098$	0,25	2
2.3. Absolute liquidity ratio	$\frac{\text{Cash and cash equivalents}}{\text{Current Liabilities}} = 0.448$	0,25	2
2.4. The value of working capital	Current Assets - Current Liabilities = 65,687,100	0,25	2
3. Indicators of capital structure		0,3	0.4
3.1. Coefficient of autonomy, %	$\frac{\text{sh.equity}}{\textit{Balance}} x100 = 73.936$	0,2	2
3.2. Maneuverabilityequity ratio	$\frac{\text{Current Assets - Current Liabilities}}{\text{sh.equity}} = 0.415$	0,2	-2

Continuation of the Table 2.13

3.3. Provision of inventories by working capital	$\frac{\text{Current Assets - Current Liabilities}}{\text{Inventories}} = 3.950$	0,2	-2
3.4. Current assets provision by working capital, %	$\frac{\text{Current Assets - Current Liabilities}}{\text{Current Assets}} x100 = 58.537$	0,2	2
3.5. Investment ratio	$\frac{\text{sh.equity}}{\text{Noncurrent assets}} = 1.525$	0,2	2
Investment risk			-1.2
1. Coefficient of financial risk	$\frac{\text{Total liabilities}}{\text{sh.equity}} = 0.352$	0,2	-1
2. Debtratio	$\frac{\text{Current Liabilities}}{\text{Current Assets}} x100 = 40.462$	0,2	2
3. Payables and receivables ratio	$\frac{\text{accounts receivable}}{\text{accounts payable}} = 89.830$	0,2	0
4. Current liabilities ratio	$\frac{\text{Current Liabilities}}{\text{Current Liabilities} + \textit{Noncurrent Liabilities}} = 5.002$	0,2	-2
5. Long-term liabilities ratio	$\frac{\text{Noncurrent Liabilities}}{\text{Current Liabilities} + \textit{Noncurrent Liabilities}} = 0.199$	0,2	-2

Note. Net profit = net income = net earnings
Cost of sales = Costs of goods sold
Source: Appendices A, B, C

$$IAE = IP \text{ Ч } P_{IP} + IR^{n} \text{ Ч } P_{IR}$$

$$IAE = 084$$

Return on sales (ROS) is a ratio used to evaluate a company's operational efficiency; ROS is also known as a firm's operating profit margin.

In this case the investment attractiveness of an enterprise IAE is 0.84, which is low (fig. 2.1).

This measure provides insight into how much profit is being produced per dollar of sales. An increasing ROS indicates that a company is growing more efficient, while a decreasing ROS could signal looming financial troubles. Toyota Motor Corporation within the year 2014 to 2015 was 9.49% which yielded 1 point which is also satisfactory in terms of performance [18].

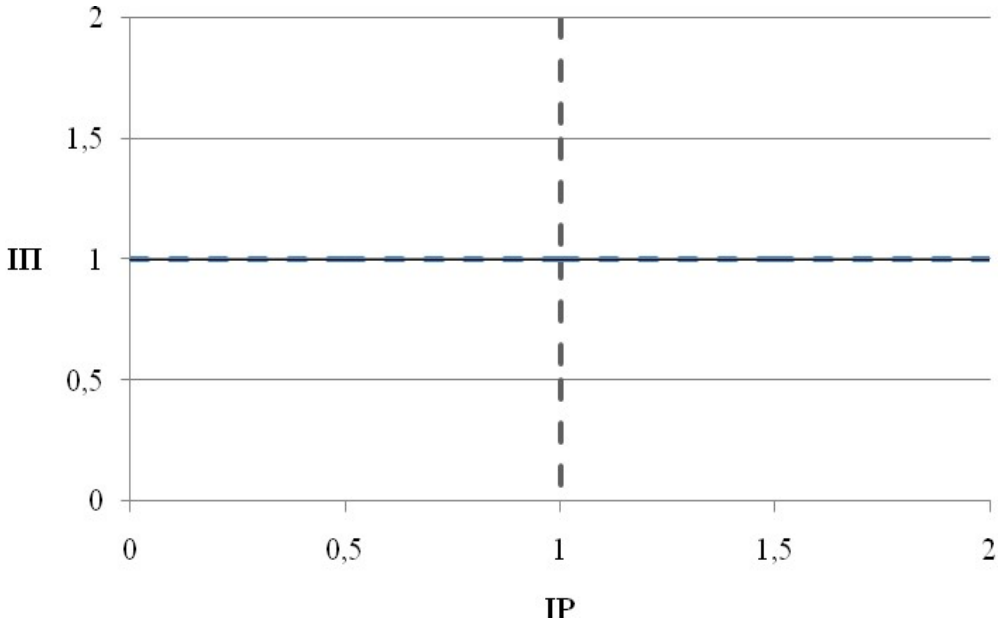

Figure 2.1 - Matrix of determination enterprise's investment potential (IP) and investment risk (IR) areas

Product profitability, simply defined, is the difference between the revenues earned from, and the total costs associated with, a product over a specified period of time. Product profitability analysis requires that all relevant costs are traced to products and then matched to their corresponding revenues. Such analysis can then inform a wide range of management decisions such as product pricing and product portfolio analysis. As for Toyota Motor Corporation, the product profitability within 2014 to 2015 amounted to 15.435% with a score point of 1 which is satisfactory in terms of company's performance [14].

This ratio indicates how profitable a company is relative to its total assets. The return on assets (ROA) ratio illustrates how well management is employing the company's total assets to make a profit. The higher the return, the more efficient management is in utilizing its asset base. The ROA ratio is calculated by comparing net income to average total assets, and is expressed as a percentage. Toyota Motor Corporation ROA within 2014-2015 was 7.943% with a score point of 1, which indicates satisfactory in terms of company's performance [16].

The current ratio is a liquidity ratio that measures a company's ability to pay

short-term and long-term obligations. To gauge this ability, the current ratio considers the current total assets of a company (both liquid and illiquid) relative to that company's current total liabilities. The formula for calculating a company's current ratio, then, is: Current Ratio = Current Assets / Current Liabilities.

2014 to 2015 the current ratio of Toyota Motor Corporation was 2.471, which has a score point of 2 that indicates good performance for the company. The current ratio is called "current" because, unlike some other liquidity ratios, it incorporates all current assets and liabilities [3].

Quick Liquidity Ratio is the total amount of a company's quick assets divided by the sum of its net liabilities and its reinsurance liabilities. Quick assets are liquid assets such as cash, short-term investments, equities, and corporate and government bonds nearing maturity. The quick liquidity ratio shows the amount of liquid assets an insurance company can tap into on short notice. Toyota Motor Corporation had 2.098 within 2014 to 2015 which lead to a score point of 2 that indicates good performance by Toyota. The quick liquidity ratio is an important measure of an insurance company's ability to cover its liabilities with relatively liquid assets. A company with a low quick liquidity ratio that finds itself with a sudden increase in liabilities may have to sell off long-term assets or borrow money in order to cover its liabilities. For example, an insurance company may find itself with a sudden increase in liabilities if a hurricane causes significant damage to its policy holders [15]. Absolute liquid ratio extends the logic further and eliminates accounts receivable (sundry debtors and bills receivables) also. Though receivables are more liquid as comparable to inventory but still there may be doubts considering their time and amount of realization. Therefore, absolute liquidity ratio relates cash, bank and marketable securities to the current liabilities. Since absolute liquidity ratio lays down very strict and exacting standard of liquidity, therefore, acceptable norm of this ratio is 50 percent. It means absolute liquid assets worth one half of the value of current liabilities are sufficient for

satisfactory liquid position of a business. Toyota had 0.448within 2014 to 2015 which lead to a score point of 2 that indicates good performance by Toyota Motor Corporation [1].

The working capital ratio is the same as the current ratio. It is the relative proportion of an entity's current assets to its current liabilities, and is intended to show the ability of a business to pay for its current liabilities with its current assets. A working capital ratio of less than 1.0 is a strong indicator that there will be liquidity problems in the future, while a ratio in the vicinity of 2.0 is considered to represent good short-term liquidity. In 2014 to 2015, Toyota Motor Corporation had over 65million working capital with a score point of 2 which indicates good performance for Toyota [24].

The capital structure is how a firm finances its overall operations and growth by using different sources of funds. Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure. As for the capital structure of Toyota Motor Corporation the indicators show that they performed low which indicates a moderate level of risk for investor [2].

Investment ratios which are used to assess the performance of a company's shares, for example, price earnings ratio, earnings per share and earnings yield. In addition to being of great interest to the ordinary shareholders, investment ratios are also of interest to potential investors, analysts and competitors. However, when looking at the financial statements of a company many users can suffer from information overload as there are so many different financial values. This includes revenue, gross margin, operating cash flow, EBITDA, pro forma earnings and the list goes on. Investment valuation ratios attempt to simplify this evaluation process by comparing relevant data that help users gain an estimate of valuation.

In 2014 to 2015, Toyota Motor Corporation Investment ratios were 2.52%

with a score point of 2 which indicates good performance for Toyota [10].

Debt Ratio is a financial ratio that measures the extent of a company's or consumer's leverage. The debt ratio is defined as the ratio of total – long-term and short-term – debt to total assets, expressed as a decimal or percentage. It can be interpreted as the proportion of a company's assets that are financed by debt. The higher this ratio, the more leveraged the company is, implying greater financial risk. At the same time, leverage is an important tool that companies use to grow, and many businesses find sustainable uses for debt. A debt ratio of greater than 100% tells you that a company has more debt than assets. Meanwhile, a debt ratio of less than 100% indicates that a company has more assets than debt. Used in conjunction with other measures of financial health, the debt ratio can help investors determine a company's risk level. Toyota Motor Corporation had a debt ratio of 40.4% with a score point of 2 wish indicates good performance by Toyota [4] (table 2.14).

Table 2.14 – Scale of qualitative evaluation of investment attractiveness of any enterprise

Level	*Expected evaluation*
Critical	0,0-0,4
Low	0,3-1,0
Average	1,0-1,4
High	1,5-2,0

Source: made by author

So, the evaluation of investment attractiveness of any enterprise is a complex task that requires a comprehensive problem-oriented approach to its solution, which should be based both on the analysis of the current financial condition of the company and identify its development prospects. To visualize investment attractiveness of any enterprise, investment attractiveness matrix has to be constructed (Fig. 2.1). The matrix reflects correlation of the expected estimates

in investment potential and investment risk and predicts future directions for strengthening and development of investment attractiveness depending on the nature of enterprise's investment activity. Given the options of relationship of investment potential (IP) and investment risk (IR), the investment attractiveness of the company can be differentiated in the following areas of distribution: Zone I – low levels of investment potential and investment risk; Zone II – high investment potential and low level of investment risk; Zone III – high levels of investment potential and investment risk; Zone IV – high level of investment risk and low investment potential. Active investing is appropriate for companies which are characterized by high investment potential in zones II and III. Moreover, if two companies show identical rates of investment potential, investing in the company, which has a relatively low of investment security rate, tends to be more profitable and riskier.

Conclusions for chapter 2

In conclusion, the evaluation of investment attractiveness of any enterprise is a complex task that requires a comprehensive problem-oriented approach to its solution, which should be based both on the analysis of the current financial condition of the company and identify its development prospects. the main strengths, of Toyota Motor Corporation are Strong Human Resource, Innovative Organizational Culture, Strong Brand Image, Strong Diversified Portfolio, Advanced Technology. Goodwill, brand recognition and intellectual property, such as patents, trademarks, and copyrights, are all intangible assets, there is an increase of 1.081 in 2017 compared to 2016.A noncurrent asset is an asset that is not expected to turn to cash within one year of date shown on a company's balance

sheet and it can be seen that the noncurrent assets increased 0.0016 in 2017 compared to 2016.Toyota Motor Corporation: The Smart Investment Toyota plans to have zero gas fueled cars by 2050. Toyota has been involved in many global motorsports series. They also represent their Lexus brand in other sports car racing categories. Toyota also makes engines and other auto parts for other Japanese motorsports including formula Nippon, Super GT, formula 3 and formula Toyota series.

CHAPTER 3
BUSINESS PERSPECTIVES OF TOYOTA MOTOR CORPORATION

3.1. Production and commercial prospects of Toyota Motor Corporation's business development

Overall effectiveness or efficiency of company's management and its use of assets is estimated with a set of factors that characterize return on assets, property, solvency and liquidity of the company (Table 3.1).

Return on assets for "Toyota Motor Corporation" is 0.6 in 2016 and 2017. its means that the company is able to use their assets to generate more profit. Evaluating Company's effectiveness, taking into account industry specifics (see table 3.1)

Table 3.1 – Evaluating Company's effectiveness, taking into account industry specifics

Asset turnover ratio	Return on activity ratio	Return on equity ratio	Evaluating the effectiveness of the light industry specifics
High	High	High	Outstanding for all businesses
Low	High	Average	Outstanding for mining companies
Low	Average	Average	Outstanding for agricultural enterprises
Average	High	Low	Outstanding for companies construction
High	Low	Average	Outstanding for manufacturing, food processing, trade companies
Low	Low	Low	Poor for all businesses

ROA ratio shows the amount of net profit per currency assets and characterizes the efficiency of assets. The decrease in this indicator may point to a

detention rate of economic growth and company development.

The rate of assets profitability is characterized by the return on total capital ratio. Return on equity ratio shows the share of net income in equity. High ratio indicates profitable activity of the company and its investment attractiveness. This ratio characterizes efficiency of investing money in the company. Return on activity ratio indicates business opportunities for a company to expand its production and characterizes company's profitability.

Return on equity at "Toyota Motor Corporation" in 20016 and 2017 is 1.6 and 1.5 this means that the company did well in 2016 better than 2017 in terms of return on equity.

Return on "Toyota Motor Corporation" business activities in 2016 and in 2017 is 6.4 and 9.2 this shows that business activities in the company in 20 17 is able to bring more profit to the company than 2016.

Assets turn over in 2016 was better than 2017, 0.6 and 0.5. The debt ratio in 2016 and 2017 is 0.6 and 0.3, this means that the company is able to reduce debt in 2017 which is very good because it is the dream of every company to reduce claims against the properties of a company.

Asset turnover ratio characterizes efficiency of resources used and shows how changes in current assets related to changes in income (revenue) from sales.

While analysing company's ratios, some peculiarities within the industry where it operates should be taken into consideration.

This paper lays out the main features of the global automotive industry and identifies several important trends. A boom in developing country sales and production has not yet overshadowed the importance of existing markets in developed regions. Regional integration is very strong at an operational level, yet the industry has recently developed a set of global-scale value chain linkages, and retains national and local elements as well. The paper highlights how global, regional, national and local value chains are nested to create a pattern of global

integration that is distinctive to the industry. We use global value chain analysis to help explain the limits of build-to-order in the industry, the role of regional and global suppliers, the shifting geography of production and how the characteristics of value chain linkages in the industry favour tight integration and regional production. We describe how industry concentration focuses power in the hands of a few large lead firms and discuss the implications of this for value chain governance and the geography of production.

Financial stability ratio describes the ratio of own and borrowed funds. Excess of own funds over borrowed ones indicates that the company has an adequate rate of financial stability and is relatively independent from external financial sources. The share of the equity in the total amount of financial resources should account for at least 50%, or Financial Stability Ratio should not be lower than 1. If Financial Stability Ratio is lower than 1, an additional analysis should be conducted in order to identify the causes of reduction in financial stability (e.g. decrease in revenue, reduction in profits, unjustified increase in inventories, etc.).

The Current Ratio determines the value of all current assets to current liabilities and characterizes the sufficiency of company's working capital to repay its debts during the year.

The value of Current Ratio between 1 and 1.5 indicates that the company eliminates its debts promptly. The critical value of Current Ratio is 1. When Current Ratio is lower than 1, company's liquidity is very low. In this occasion, an additional analysis has to be carried out in order to identify the causes that led to a decrease company's liquidity, and measures to prevent its bankruptcy.

Absolute liquid ratio shows how many units of working capital account per unit of long-term and current liabilities. Absolute liquid ratio characterizes company's opportunity to eliminate current debt with money that are currently available. The ratio determines how much of the company's current debt can be paid off immediately. The ratio should be within the between 0.2 and 0.35. If it is

lower than 0.2 or dynamic index is negative, an additional analysis is carried out. Debt ratio reflects company's dependence on borrowed funds.

Financial analysis is the process of evaluating businesses, projects, budgets and other finance-related entities to determine their performance and suitability. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid or profitable enough to warrant a monetary investment.

When looking at a specific company, a financial analyst conducts analysis by focusing on the income statement, balance sheet and cash flow statement. Financial analysis is used to evaluate economic trends, set financial policy, build long-term plans for business activity, and identify projects or companies for investment. This is done through the synthesis of financial numbers and data.

The process of financial analysis comes with a range of benefits:

Firstly, it allows you to identify the relationship between various elements of the financial statements.Analysis of efficiency of financial and economic activities (see table 3.2).

As an investor, by using this process you can assess the liquidity, profitability, financial strength, and efficiency of an organization. This helps greatly in making good investment decisions.

By using the process of trend analysis, you can compare the year on year performance of the organization.

Fundamental analysis, on the other hand, takes the broader picture into view by including various economy and environmental variables into account. This helps the investors in predicting the future prospects of an organization. To organizations, financial analysis is a tool for identifying their strengths and weaknesses and excelling their growth. For investors, this process is a tool that aids them in making effective investment decisions.

The role of the financial analyst is very challenging, and includes the following:

Table 3.2 – Analysis of efficiency of financial and economic activity of the company 2016-2017

No.	Ratio	Formula	Optimal indicator	Actual ratio		
				2016	2017	Growth factor
1	Return on assets	ROA = Net profit (income) / Total assets	> 0 Increase	0.6	0.6	1
2	Return on equity	ROE = Net income / Shareholder's equity	> 0 Increase (~ 0.13 - 0.24)	1.6	1.5	0.9
3	Return on activity	ROA = Net income / Net cash provided by operating activities	> 0 Increase	6.4	9.2	1.4
4	Assets turnover	AT = Sales revenue / Total assets	Increase	0.6	0.5	0.8
5	Current ratio	CR = Current assets / Current Liabilities	Increase	1.1	1.0	0.9
6	Debt ratio	DR = Total liabilities / Total assets	0.5 - 0.7	0.6	0.3	0.08
7	Capital intensity ratio	CIR = 1 / Assets turnover	<1 Decrease	0.4	0.5	1.1

- Guiding the financial need and requirement of the company;
- Assessing the performance of bonds, stocks, commodities, and other investment instruments. Making decisions regarding market investment;
- Analyzing the performance of securities, insurance;
- Determining future earnings and expenses of business firms;

- Evaluating the effect of tax rates, government policies, competitor strategies, commodity prices;
- Evaluation of managerial effectiveness at the company.

Evaluation of company's managerial effectiveness is done in order to summarize the analysis conducted in the course project and to identify objective and subjective causes of company's losses.

That Analysis of efficiency of financial and economic activities can be explained by using the following items; asset turnover ratio measures the value of a company's sales or revenues relative to the value of its assets. The asset turnover ratio can be used as an indicator of the efficiency with which a company is using its assets to generate revenue. The debt ratio is a financial ratio that measures the extent of a company's leverage. It's defined as the ratio of total debt to total assets, expressed as a decimal or percentage. It can be interpreted as the proportion of a company's assets that are financed by debt.

The higher the asset turnover ratio, the more efficient a company. Conversely, if a company has a low asset turnover ratio, it indicates it is not efficiently using its assets to generate sales. The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average may indicate a higher risk of distress or default. Similarly, if a company has a very high current ratio compared to their peer group, it indicates that management may not be using their assets efficiently. Return on assets in 2017 and 2016 was the same in other words constant 0.6. Return on equity in 2017 fall to 1.5 compared to 2016 which was 1.6. Return on activity increase 69.2 in 2017 compared to 2016 which was 6.2, Assets turnover decrease 0.5 in 2017 compared 2016 which was 0.6.Current ratio decrease

1.0 in 2017 compared to 2016 which was 1.1. Debt ratio decrease 0.3 in 2017 compared to 2016 which was 0.6 and Capital intensity ratio increase 0.5 in 2017 compared to 2016 which was 0.4. Evaluation of managerial effectiveness (see table 3.3).

Table 3.3 – Evaluation of managerial effectiveness at the company, 2017

No	Indicator	Growth factor	Evaluation score
1	Total assets (table 2.1)	1.027	1
2	Property, plant and equipment (fixed assets) (table 2.1)	1.0 38	1
3	Total stockholders' equity (table 2.2)	1.032	1
4	Current liabilities (table 2.3)	1.074	1
5	Gross profit (loss) (table 2.5)	0.735	-1
6	Net income (loss) (table 2.5)	0.971	-1
7	Total income (table 2.8)	1.125	1
8	Total expenses (table 2.7)	1.000	0
9	Comprehensive income that accounts for 1 USD spent on manufacturing goods/services(table 2.4)	0.764	-1
10	Return on assets ratio (table 3.1)	1	0
11	Return on equity ratio (table 3.1)	0.9	-1
12	Return on activity ratio (table 3.1)	1.4	1
13	Current ratio (table 3.1)	0.9	-1
14	Overall Band Score	x	1

To evaluate the managerial effectiveness of Toyota Motor corporation, the following score is allocated to each sector and show how the company is performing Total assets refer to the total amount of assets owned by a person or entity. Assets are items of economic value, which are expended over time to yield a benefit for the owner or company and base on the valuation the company score 1 ,this means that it has enough assets to carry on day to day business the company activities. Property, plant and equipment Toyota Motor corporation score 1. Total stockholders' equity score was 1, Current liabilities is 1, Total income is 1. And in overall the company scored 1 which looks bright for the future. Tot over time to yield a benefit for the owner.

It can be seen that there has been increase of 1.027 in 2017 compared to 2016 and it is good for Toyota Motor Corporation. Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE could be thought of as the return on net assets. ROE is considered a measure of how effectively management is using a company's assets to create profits. ROE is expressed as a percentage and can be calculated for any company if net income and equity are both positive numbers. Net income is calculated before dividends paid to common shareholders and after dividends to preferred shareholders and interest to lenders. Current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables.

Thus, managerial activities in international business environment of Toyota Motor corporation is influence by many factors that has been analyzed here; Analysis of efficiency of financial and economic activities, Evaluation of managerial effectiveness. Return on equity at "Toyota Motor Corporation" in 20016 and 2017 is 1.6 and 1.5 this means that the company did well in 2016 better than 2017 in terms of return on equity. Return on "Toyota Motor Corporation" business activities in 2016 and in 2017 is 6.4 and 9.2 this shows that business activities in the company in 2017 is able to bring more profit to the company than 2016. Assets turn over in 2016 was better than 2017, 0.6 and 0.5. Debt ratio decrease 0.3 in 2017 compared to 2016 which was 0.6 and Capital intensity ratio increase 0.5 in 2017 compared to 2016 which was 0.4.

3.2. Investment projects of Toyota Motor Corporation

Corporate investment projects' strategies specify funds required achieving a competitive advantage, and the monetary results (profits) expected from such decisions. The three common corporate investment strategies are (1) Building, (2) Defending, or (3) Harvesting the firm's market position. Make to order (MTO) is a business production strategy that typically allows consumers to purchase products that are customized to their specifications. The make to order (MTO) strategy only manufactures the end product once the customer places the order, creating additional wait time for the consumer to receive the product but allowing for more flexible customization compared to purchasing directly from retailers' shelves. n finance, an investment strategy is a set of rules, behaviors or procedures, designed to guide an investor's selection of an investment portfolio. Individuals have different profit objectives, and their individual skills make different tactics and strategies appropriate. Some choices involve a tradeoff between risk and return. Most investors fall somewhere in between, accepting some risk for the expectation of higher returns [11, 12].

We begin with Fundamental analysis because it is one of the oldest and most basic forms of investing styles. Primarily used for researching and analyzing equities (individual stocks, rather than mutual fund selection), fundamental analysis is a form of an active investing strategy that involves analyzing financial statements for the purpose of selecting quality stocks. Data from the financial statements is used to compare with past and present data of the particular business or with other businesses within the industry. By analyzing the data, the investor may arrive at a reasonable valuation (price) of the particular company's stock and determine if the stock is a good purchase or not.

Value Investing: Mutual fund and ETF investors can employ the

fundamental investment strategy or style by using value stock mutual funds. In simple terms, the value investor is looking for stocks selling at a "discount;" they want to find a bargain. Rather than spending the time to search for value stocks and analyze company financial statements, a mutual fund investor can buy index funds, Exchange Traded Funds (ETFs) or actively-managed funds that hold value stocks.

Growth Investing: As the name implies, growth stocks typically perform best in the mature stages of a market cycle when the economy is growing at a healthy rate. The growth strategy reflects what corporations; consumers and investors are all doing simultaneously in healthy economies--gaining increasingly higher expectations of future growth and spending more money to do it. Again, technology companies are good examples here. They are typically valued high but can continue to grow beyond those valuations when the environment is right.

A nuanced version of growth investing can be found in the momentum investing strategy, which is a strategy of capitalizing on current price trends with the expectation that momentum will continue to build in the same direction. Most commonly, and especially with mutual funds designed to capture the momentum investing strategy, the idea is to "buy high and sell higher." For example a mutual fund manager may seek growth stocks that have shown trends for consistent appreciation in price with the expectation that the rising price trends will continue.

Technical Analysis: Technical analysis can be considered the opposite of fundamental analysis. Investors using technical analysis (technical traders) often use charts to recognize recent price patterns and current market trends for the purpose of predicting future patterns and trends. In different words, there are particular patterns and trends that can provide the technical trader certain cues or signals, called indicators, about future market movements. For example, some patterns are given descriptive names, such as "head and shoulders" or "cup and handle." When these patters begin to take shape and are recognized, the technical trader may make investment decisions based upon the expected result of the

pattern or trend. Fundamental data, such as P/E ratio, is not considered in technical analysis where trends and patterns are prioritized over valuation measures.

Buy and Hold: Buy and hold investors believe "time in the market" is a more prudent investment style than "timing the market." The strategy is applied by buying investment securities and holding them for long periods of time because the investor believes that long-term returns can be reasonable despite the volatility characteristic of short-term periods. This strategy is in opposition to absolute market timing, which typically has an investor buying and selling over shorter periods with the intention of buying at low prices and selling at high prices.

The buy-and-hold investor will argue that holding for longer periods requires less frequent trading than other strategies. Therefore trading costs are minimized, which will increase the overall net return of the investment portfolio.

Portfolios employing the buy and hold strategy have been called lazy portfolios because of their low-maintenance, passive nature.

Core and Satellite is a common and time-tested investment portfolio design that consists of a "core," such as a large-cap stock index mutual fund, which represents the largest portion of the portfolio, and other types of funds the "satellite" fund search consisting of smaller portions of the portfolio to create the whole. The primary objective of this portfolio design is to reduce risk through diversification (putting your eggs in different baskets) while outperforming (obtaining higher returns than) a standard benchmark for performance, such as the S&P 500 Index. In summary, a Core and Satellite portfolio will hopefully achieve above-average returns with below-average risk for the investor [23].

The Dave Ramsey Portfolio. Popular talk show host and generally respected personal finance guru Dave Ramsey has long-supported his four mutual fund portfolio strategy for his listeners and fans. Here's Dave's Investing Philosophy, specifically regarding mutual funds, taken directly from his website:

Dave recommends mutual funds for your employer-sponsored retirement

savings and your IRAs. Divide your investments equally between each of these four types of funds:

- Growth;
- Growth & Income;
- Aggressive Growth;
- International.

Choose a shares (front end load) and funds that are at least five years old. They should have a solid track record of acceptable returns within their fund category. If your risk tolerance is low, which means you have a shorter time to keep your money invested, put less than 25% in aggressive growth or consider adding a "Balanced" fund to the four types of funds suggested. Dave's wisdom is in his simplicity; his delivery and financial methods are easy to understand. However the wisdom stops there. These four mutual fund types will often find fund overlap, which means there is little diversity. Furthermore, lower-risk assets, such as bonds and cash, are completely absent from the portfolio.

Modern Portfolio Theory (MPT) is an investing method where the investor attempts to take minimal level of market risk to capture maximum-level returns for a given portfolio of investments. An investor that follows the tenets of MPT may use a core and satellite approach, as described in number 6 above.

At the core of investment philosophy, every investor would like to achieve the highest possible return possible without taking extreme levels of risk. But how can this be done? The short answer is diversification. According to MPT, an investor can hold a particular asset type, mutual fund, or security that is high in risk individually but, when combined with several other asset types or investments, the whole portfolio can be balanced in such a way that its risk is lower than some of the underlying assets or investments. Post-Modern Portfolio Theory (PMPT): The difference between PMPT and MPT is the way they define risk and build portfolios based upon this risk. MPT sees risk as symmetrical; the portfolio construction is

comprised of several diverse investments with various risk levels that combine to achieve a reasonable return. It is more a big picture view of risk and return. A PMPT investor sees risk as asymmetrical; the way investors feel about losses is not the exact opposite mirror image of how they feel about gains; and each economic and market environment is unique and evolving. PMPT sees that investors do not always act rationally. Therefore PMPT accounts for the behavioral aspects of the investor herd, not just the mathematical model that MPT follows.

Tactical asset allocation is a combination of many of the previous styles mentioned here. It is an investment style where the three primary asset classes (stocks, bonds and cash) are actively balanced and adjusted by the investor with the intention of maximizing portfolio returns and minimizing risk compared to a benchmark, such as an index. This investing style differs from those of technical analysis and fundamental analysis in that it focuses primarily on asset allocation and secondarily on investment selection [23].

Strategy of investment support of company's accelerated growth is focused on providing high rates of operational activities, and an increase in the volume of production and sales. The demand for investment resources, aimed to increase working capital and noncurrent assets, increases under such conditions. Consequently, an increase in real investment is the main priority for the company's strategic investment development.

Investment strategy for sustainable economic development of a company aims to maintain the optimal level of operational activity and increase the level of financial security. In this occasion, the balance between real and financial investment portfolio becomes company's priority.

Anti-crisis investment strategy is designed to provide enterprise financial stabilization during crisis periods. In this occasion, the volume of production and sales is reduced, and financial strategic priority area of the enterprise's development is the formation of sufficient rate of real current investments in order

to restore the production cycle and commercial activity. Toyota is being known world-wide and being accepted as the world most popular car manufacturer. Wherever we go, not even a single soul did not know what a Toyota is. This is what we called as Toyotaism. But, to accomplish this was not that easy compared to how its founds. Toyota had to face several issues and problems also had taken multiple actions to solve them. Hiroshi Okuda had identified 3 issues relating to the management of Toyota. Those management issues are; (1) Lag in product Planning, (2) Declining market share in Japan, and(3) was behind in overseas expansion. Due to these main issues, Toyota had taken several steps for the manufacturer to survive in its own name in own country and also to the world outside. For Toyota to make known of its brand name, a number of development strategies had been taken by Toyota.

The first stage of Toyota's development strategy is Cross-Nation Space Strategy. It is where Toyota implemented a strategy of marketing its product in Japan and in other nations around the world. It is a strategy of blanketing the nations with all Toyota's product. Manufacturing of product for Toyota started in 1938 where its first plant was built which is the Honsha Plant. It is after 20 years of incorporating that Toyota could construct their second plant which was in the year 1959. Upon incorporating, there were three major strategies being taken to ensure their success. First and foremost was to have high quality auto suppliers. Second, was for Toyota to built affiliates like providing housing and entertainment facilities for its own employees and families. This was because Toyota is making its employees and families as their crucial factors of Toyota's success. And thirdly was webbing Toyota dealers in which they developed on their channel of distribution. Strategies applied by Toyota to gain accomplishment on selected markets to improve business and to enact on these markets are plans mostly created by Japanese professionals.

The strategy that commonly based both Toyota Company and most Japanese

corporations is KAIZEN strategy which means continuous development and the influence that it has on the level of product value. "KAIZEN" is an integrative approach, which means a cross-functional approach that appoints the gradual development, management and continuous trade activities and the parameters of value, productivity and effectiveness, with direct involvement of all employees. The product strategy of Toyota is grounded on high quality, on developing new advanced technologies, focusing on further exploration, creativity, but also determination. Toyota is a global leader in research and improvement of advanced automotive skills. Toyota develops intellectual responses to the tasks of the automotive industry in the present day, while assuming concern for future generations.

As regards to the problem of pollutant discharges, Toyota explores concurrently a variety of solutions for scheming less polluting vehicles as well. Toyota has dedicated to develop hybrid structures as a basic factor in producing clean technology cars, combining diverse sources of power. It has made substantial progress in designing engines that use alternate energy sources. One of the most encouraging approaches is combining two unlike sources of energy in a single method with the potential to use both. This way out is known as hybrid technology and is the most favorable way to realize Toyota’s green machine. Hunt for innovative solutions are founded on new technological ideas of this company. Exceptional ideas need a way of countenance, and future technologies has to be tried in terms of real life. Consequently, Toyota develops models such as the Fine-N engine driven by a fuel cell or CS&S roadster ran by a Hybrid Synergy Drive system.

The assembly technology of engines is one of the most appreciated properties of Toyota. Toyota’s performance variety of engines and radical design reflects the high values set by engineers. Toyota’s engines are intended for comfort and performance, while continuously aiming to reduce discharges and optimal fuel

consumption. Today, Toyota may offer its consumers the following benefits: gasoline engines with innovative technology, adjustable rate control valves VV-i and VVT-i, D-4D mutual rail turbocharged engine - now accessible in D-CAT modified to equip Avensis, unique amalgam propulsion system Synergy Drive.

Safety precautions are a priority for Toyota. Unconventional steering systems, brakes, and interruption and traction control help keep rheostat of the car. Each is planned with a Toyota exciting care in terms of wellbeing, using innovative computer simulations and crash trials. Body and chassis are planned to absorb energy from impact and offer a maximum occupant safeguard, besides SRS (Supplementary Restraint System) airbags safety system they used. Toyota made with time many innovations and enhancement in active and passive welfare. From the first active deferment system in the world in 1991, to the promoting of Stability Control System Vehicle in 1995, and to the first screen airbag launched in 1998, Toyota has intended to improve the safety and technology benefits that it bids to its clients. It can be assumed that Toyota's main strategy is the total regulating of the quality using the "zero defects", constant improvement of its produces. Toyota makes sovereign studies on consumer needs, receiving the vote of assurance on their part. Also, this is strengthened by the exceptional results of Toyota automobiles in Euro NCAP safety tests. Customers trust Toyota cars and feel harmless in their wheels. This confidence is the result of the highest values of quality which Toyota plans and produces its cars.

Toyota announced it is expanding its planned investments in America. Through 2020, Toyota will invest 13billion USD in the United States. The five states that are included on this expanded list will see over 600 jobs added. This investment is not to be confused with the separate new plant that Toyota and Mazda are working together on. That Toyota/Mazda plant alone will add 4,000 new jobs to Alabama's economy. The new plant will build a new crossover for Mazda and other existing Toyota models. These latest investments represent even

more examples of our long-term commitment to build where we sell," said Jim Lentz, chief executive officer for Toyota Motor North America. "By boosting our U.S. manufacturing footprint, we can better serve our customers and dealers and position our manufacturing plants for future success with more domestic capacity."

The Toyota global vision is to lead the way to the future of mobility, enriching lives around the world with the safe stand most responsible ways of moving people. Through our commitment to quality, constant innovation and respect for the planet, we aim to exceed expectations and be rewarded with a smile. We will meet our challenging goals by engaging the talent and passion of people, who believe there is always a better way [19].

Toyota Motor is considering investing about 60 billion yen (550 million USD) in Chinese ride-hailing giant DidiChuxing, the Nikkei business daily reported on Wednesday. Japan's top automaker was also looking to set up a new mobility-services company in China, the Nikkei said and continue to evaluate our business strategy from a global perspective in areas of Connectivity, Autonomous, Sharing and Electrification to meet the future needs of our customers, Toyota has made large investments in other ride-hailing firms such as Uber and Grab as traditional automakers race to team up with disruptive tech companies [20].

Thus, Investing strategies are the following. There is no "best investment strategy" except the one that works best for you. Also you don't want to begin a strategy and find that you want to abandon it for some hot new trend you discovered in a magazine article. Don't get confused by all of too-good-to-be-true flavors of the month and stick to the time-tested basics. Safety precautions are a priority for Toyota. Unconventional steering systems, brakes, and interruption and traction control help keep rheostat of the car. Each is planned with a Toyota exciting care in terms of wellbeing, using innovative computer simulations and crash trials. Body and chassis are planned to absorb energy from impact and offer a maximum occupant safeguard, besides SRS (Supplementary Restraint System)

airbags safety system they used.

3.3. Directions of Toyota Motor Corporation competitiveness stimulation on the world automobile market

Harvard professor Michael Porter coined the phrase “generic competitive strategy” in his book, Competitive Advantage: Creating and Sustaining Superior Performance. Since the writing of his book, the phrase has become known in business circles as one of the primary methods of business planning and strategizing for businesses across all industries.

The Generic Competitive Strategy (GCS) is a methodology designed to provide companies with a strategic plan to compete and gain an advantage within the marketplace.

GCS is based on three generic strategies: cost leadership, differentiation, and focus. Each strategy has a different mechanism for reaching success. Companies within the same industry may not choose the same strategy – it is a choice that must be made with the company’s management, based on the desired outcome for success and the company’s strengths. Each strategy has unique components that shape the company.

The GCS is useful when a company is looking to gain an advantage over a competitor. If a company wants to ‘win’ the advantage over other businesses, it does so by winning sales and taking customers away from competitors. An advantage in business, though, does not come easily. It must be developed and established firmly within the framework of a company. Using a business strategy is not a one-off or a weekend exercise; it must become the driving force of the company.

In order to do this successfully, a company must implement a Generic Competitive Strategy. Not confined to a specific industry or company, the

methodology can be used in for-profit companies of any kind, as well as not for profit organizations. No matter what type of business, the principles behind the GCS are universal and can be applied to any company.

The primary benefit using a GCS is to establish a methodology of doing business that will drive the company in a certain direction. Rather than simply maintaining the status quo, a GCS gives a company a blueprint to follow that will create the structure of the company [8].

A business that wants to achieve an edge through cost leadership strategy will become an expert in lowering costs while maintaining prices. The goal should always be to reduce the costs associated with doing business, while continuing to charge the same price as its competitors. This gives the company a greater profit, without having any extra expenses. Another method of maximizing the Cost Leadership position is by lowering the selling point. Because the costs associated with the products are already low, the company is still making a healthy profit. This allows the company to under bid the competitors while still preserving profits.

The differentiation strategy seeks to set a company apart by creating products that are different than a competitor's. The specific ways that a company differentiates itself from the competition will depend on the industry of the company, but may include features, support and functionality. The uniqueness of the company – the differentiation – must only be a feature that a customer is willing to pay a premium price for. A company that focuses on differentiation may be disappointed to realize that their market share is continually changing and comes with a set of risks.

The company that uses the focus strategy is selecting a niche market, and then determining the scope of the focus. Within the focus strategy is the option to use either cost leadership or differentiation. It may be confusing to keep in mind that the focus strategy is dealing with a specific, niche market. Focus does not mean a smaller market simply because the company is small – it means that the

company has chosen to add value to their products and offer them to a select number of customers. Because the company who chooses a focus strategy deals exclusively with their client base, they develop a loyal relationship, which can generate sales and profits for the future [8].

As a market leader in the materials handling equipment and logistics fields, Toyota Industries assists customers worldwide in attaining greater logistics efficiencies by delivering logistics solutions optimally tailored to their specific needs. Under the TMHG management structure, we engage in business under the Toyota BT and CESAB brands. Mutually utilizing the sales and development strengths of each brand, TMHG is promoting business expansion on a global scale. In the field of aerial work platforms, sales of Aichi Corporation, which possesses the top brand in this field in Japan, were negatively affected by a cutback in capital investment by principal customers in the country such as the electric power and telecommunication industries. On the other hand, sales in the leasing industry grew in line with rises in construction demand as well as demand for social infrastructure maintenance work. On the whole, sales of aerial work platforms increased, and Aichi posted sales exceeding the previous fiscal year's level. The company's profits also increased year-on-year as a result of its cost-cutting efforts and profit improvements at its subsidiaries in China.

Toyota and the manufacturing of automobiles. It is also known as the Toyota Production System or just-in-time production. Lean production principles are also referred to as lean management or lean thinking [4]. Engineer Taiichi Ohno is credited with developing the principles of lean production after World War II. His philosophy, which focused on eliminating waste and empowering workers, reduced inventory and improved productivity. Instead of maintaining resources in anticipation of what might be required for future manufacturing, as Henry Ford did with his production line, the management team at Toyota built partnerships with

suppliers [4]. In effect, under the direction of Engineer Ohno, Toyota automobiles became made-to-order. By maximizing the use of multi-skilled employees, the company was able to flatten their management structure and focus resources in a flexible manner. Because the company was able make changes quickly, they were often able to respond faster to market demands than their competitors could. [4].The first principle of Lean is identifying value as perceived by the customer; customers need to be provided with what they want, when they want and where they need it. A company is successful as long as the customers are satisfied. If a company always supplies top quality products and services on time, at the right place, those satisfied customers are going to keep on returning, allowing the business to thrive. One of the major advantages of implementing Lean into organization is getting more done with less people. As waste is reduced there is less space and manpower required to manage [5].

The workflow results in manufacturing cells which puts machines close together so that a single operator can manage many pieces of equipment with the minimal energy. The workers' main task is to enhance skill level and properly maintain the system, once it is implemented. The Lean Approach reduced waste means less transport, less moving, less waiting, less space required and reduces all variations throughout the process. If the LEAN principles are properly set in the organization, the financial benefits are highly significant. A satisfied customer will make any business operate smoothly. The reduction in waste and defects adds additional money which should be set into quality improvement and the better product quality ensures higher profit [4].

Toyota Industries' plastic glazing panoramic roof has been used on TMC's hybrid vehicle Prius a (Prius + in Europe and Prius v in North America). This product retains the beautiful surface quality typical of a glass roof yet is approximately 40% lighter than its glass counterpart, improving vehicle fuel

efficient.

In the materials handling equipment market, an increase in sales in Europe, North America and Japan compensated for weaker sales in China and drove continued growth globally. Based on the conditions of respective markets, Toyota Industries augmented its production and sales activities and launched new products. As a result, unit sales of our mainstay lift trucks for fiscal 2016 increased 17,000 units, or 7%, to a total of 239,000 units over the previous fiscal year. Also, in a bid to expand our business domains, we acquired the lift truck business of Taiwan-based Tailift Co., Ltd. and the sales financing operations for materials handling equipment in the United States. Consequently, net sales increased 79.2 billion JPY, or 9%, to 1,004.1 billion JPY.

In 2001, Toyota issued a document titled Toyota Way 2001, which highlights some of the core principles and values espoused by the management and the workforce. Some of these principles also serve as strategically important in distinguishing Toyota from other companies. For example, principles such as Respect for People, Continuous Improvement, etc are inculcated into the workforce right during times of prosperity and distress.

The automotive market in the world is said to be highly competitive and volatile. Moreover, demand in this market is affected by a number of factors such as social, political and general economic conditions; launch of new vehicles and technologies; and expenses incurred by customers to buy and operate vehicles. These factors can make consumer demand to vary substantially from one year to another across market geographies and for different types of automobiles. Yet, in spite of such uncertainties and still competition, a recent annual report of Toyota shows “increasing unit sales from 2006 to 2008, based on the total unit sales of its products all over the world. But, based on the unit sales per geographic segment, there was a decline in the Toyota unit sales in Japan, from 2,364,000 units in 2006

down to 2,188,000 units in 2008. Despite the decline in the unit sales of Toyota's products in Japan, Toyota's market share (including Daihatsu and Hino) including min-vehicles, and Toyota and Lexus' market share excluding mini vehicles, remained at a high level close to prior fiscal year reflecting the sales efforts of domestic dealers".

The survival of an enterprise depends upon the Managerial effectiveness in international business. Therefore, it is necessary to evaluate the managerial effectiveness of "Toyota Motor Corporation" to know where its stand in the market and how it can improve further in the future its strategies by knowing their shortcomings.

"Toyota Motor Corporation" is a limited liability; joint-stock company incorporated under the Commercial Code of Japan and continues to exist under the Companies Act. "Toyota" commenced operations in 1933 as the automobile division of "Toyota Industries Corporation" (formerly, "Toyoda Automatic Loom Works, Ltd."). "Toyota's" business segments are automotive operations, financial services operations and all other operations. "Toyota Motor Corporation" primary markets are Japan, North America, Europe and Asia. "Toyota Motor Corporation" Vehicles sold by Daihatsu and Hino are included in the vehicle unit sales figures set forth below. Japan is one of the leading countries with respect to technological advancements and improvements and will continue to demonstrate such strength. Toyota strives to earn customer satisfaction by introducing products distinctive of Japan's manufacturing ability such as value-added products including Lexus models, hybrid vehicles, vehicles with 3-seat rows and mini-vehicles. Toyota endeavors to secure and maintain its large share of and position atop the Japanese market. "Toyota Motor Corporation" held a domestic market share (excluding mini-vehicles) on a retail basis of 46.0% in fiscal 2015, 46.8% in fiscal 2016 [2].

Although "Toyota Motor Corporation" principle is to conduct production in

regions where it enjoys true competitiveness, it considers Japan to be the source of its good manufacturing practices. “Toyota Motor Corporation” supports its operations worldwide through measures such as the development of new technologies and products, low-volume vehicles to complement local production, production of global vehicle models which straddle multiple regions and supporting overseas factories. “Toyota Motor Corporation” will continue the implementation of the new platform and the new unit for the “Toyota Motor Corporation” New Global Architecture (“TNGA”) globally, with Japan at the core. In Japan, “Toyota Motor Corporation” is implementing flexible production based on market needs, in order to support its large share of domestic sales.

Overall effectiveness or efficiency of company’s management and its use of assets is estimated with a set of factors that characterize return on assets, property, solvency and liquidity of the company (Table 3.4).

Table 3.4 – Evaluating Company’s effectiveness, taking into account industry specifics

Asset turnover ratio	Return on activity ratio	Return on equity ratio	Evaluating the effectiveness of the light industry specifics
High	High	High	Outstanding for all businesses
Low	High	Average	Outstanding for mining companies
Low	Average	Average	Outstanding for agricultural enterprises
Average	High	Low	Outstanding for companies construction
High	Low	Average	Outstanding for manufacturing, food processing, trade companies
Low	Low	Low	Poor for all businesses

Return on assets for “Toyota Motor Corporation” is 0.6 in 2016 and 2017. It means that the company is able to use their assets to generate more profit. Evaluating Company’s effectiveness, taking into account industry specifics (see table 3.4).

ROA ratio shows the amount of net profit per currency assets and characterizes the efficiency of assets. The decrease in this indicator may point to a detention rate of economic growth and company development.

The rate of assets profitability is characterized by the return on total capital ratio. Return on equity ratio shows the share of net income in equity. High ratio indicates profitable activity of the company and its investment attractiveness. This ratio characterizes efficiency of investing money in the company. Return on activity ratio indicates business opportunities for a company to expand its production and characterizes company's profitability.

Return on equity at "Toyota Motor Corporation" in 20016 and 2017 is 1.6 and 1.5 this means that the company did well in 2016 better than 2017 in terms of return on equity.

Return on "Toyota Motor Corporation" business activities in 2016 and in 2017 is 6.4 and 9.2 this shows that business activities in the company in 2017 is able to bring more profit to the company than 2016.

Assets turn over in 2016 was better than 2017, 0.6 and 0.5.

The debt ratio in 2016 and 2017 is 0.6 and 0.3, this means that the company is able to reduce debt in 2017 which is very good because it is the dream of every company to reduce claims against the properties of a company.

Asset turnover ratio characterizes efficiency of resources used and shows how changes in current assets related to changes in income (revenue) from sales.

While analysing company's ratios, some peculiarities within the industry where it operates should be taken into consideration.

This paper lays out the main features of the global automotive industry and identifies several important trends. A boom in developing country sales and production has not yet overshadowed the importance of existing markets in developed regions.

Regional integration is very strong at an operational level, yet the industry has

recently developed a set of global-scale value chain linkages, and retains national and local elements as well. The paper highlights how global, regional, national and local value chains are nested to create a pattern of global integration that is distinctive to the industry. We use global value chain analysis to help explain the limits of build-to-order in the industry, the role of regional and global suppliers, the shifting geography of production and how the characteristics of value chain linkages in the industry favour tight integration and regional production. We describe how industry concentration focuses power in the hands of a few large lead firms and discuss the implications of this for value chain governance and the geography of production. Evaluation of managerial effectiveness (see table 3.5).

Table 3.5 – Evaluation of managerial effectiveness at Toyota Motor, 2017

No	Indicator	Growth factor	Evaluation score
1	Total assets (table 2.1)	1.027	1
2	Property, plant and equipment (fixed assets) (table 2.1)	1.0 38	1
3	Total stockholders' equity (table 2.2)	1.032	1
4	Current liabilities (table 2.3)	1.074	1
5	Gross profit (loss) (table 2.5)	0.735	-1
6	Net income (loss) (table 2.5)	0.971	-1
7	Total income (table 2.8)	1.125	1
8	Total expenses (table 2.7)	1.000	0
9	Comprehensive income that accounts for 1 USD spent on manufacturing goods/services(table 2.4)	0.764	-1
10	Return on assets ratio (table 3.1)	1	0
11	Return on equity ratio (table 3.1)	0.9	-1
12	Return on activity ratio (table 3.1)	1.4	1
13	Current ratio (table 3.1)	0.9	-1
14	Overall Band Score	x	1

To evaluate the managerial effectiveness of Toyota Motor corporation, the following score is allocated to each sector and show how the company is performing Total assets refer to the total amount of assets owned by a person or

entity.

Assets are items of economic value, which are expended over time to yield a benefit for the owner or company and base on the valuation the company score 1 ,this means that it has enough assets to carry on day to day business the company activities. Property, plant and equipment Toyota Motor corporation score 1. Total stockholders' equity score was 1, Current liabilities is 1, Total income is 1. And in overall the company scored 1 which looks bright for the future.

Thus, business that wants to achieve an edge through cost leadership strategy will become an expert in lowering costs while maintaining prices. Return on equity at "Toyota Motor Corporation" in 20016 and 2017 is 1.6 and 1.5 this means that the company did well in 2016 better than 2017 in terms of return on equity. Return on "Toyota Motor Corporation" business activities in 2016 and in 2017 is 6.4 and 9.2 this shows that business activities in the company in 2017 is able to bring more profit to the company than 2016.

Conclusions for chapter 3

Conclusion, managerial activities in international business environment of Toyota Motor Corporation is influence by many factors that has been analyzed here; Analysis of efficiency of financial and economic activities, Evaluation of managerial effectiveness. Return on equity at "Toyota Motor Corporation" in 20016 and 2017 is 1.6 and 1.5 this means that the company did well in 2016 better than 2017 in terms of return on equity. Return on "Toyota Motor Corporation" business activities in 2016 and in 2017 is 6.4 and 9.2 this shows that business activities in the company in 2017 is able to bring more profit to the company than 2016. Assets turn over in 2016 was better than 2017, 0.6 and 0.5.

CONCLUSIONS AND SUGGESTIONS

In conclusion, Toyota is the world's market leader in sales of hybrid electric vehicles, and one of the largest companies to encourage the mass-market adoption of hybrid vehicles across the globe. Toyota is also a market leader in hydrogen fuel-cell vehicles. Cumulative global sales of Toyota and Lexus hybrid passenger car models achieved the 10 million milestone in January 2017. Its Prius family is the world's top selling hybrid nameplate with over 6 million units sold worldwide as of January 2017. Vehicle regulations are requirements that automobiles must satisfy in order to be approved for sale or use in a particular country or region. They are usually mandated by legislation, and administered by a government body. the evaluation of investment attractiveness of any enterprise is a complex task that requires a comprehensive problem-oriented approach to its solution, which should be based both on the analysis of the current financial condition of the company and identify its development prospects. the main strengths, of Toyota Motor Corporation are Strong Human Resource, Innovative Organizational Culture, Strong Brand Image, Strong Diversified Portfolio, Advanced Technology. Goodwill, brand recognition and intellectual property, such as patents, trademarks, and copyrights, are all intangible assets, there is an increase of 1.081 in 2017 compared to 2016.A noncurrent asset is an asset that is not expected to turn to cash within one year of date shown on a company's balance sheet and it can be seen that the noncurrent assets increased 0.0016 in 2017 compared to 2016.

Managerial activities in international business environment of Toyota Motor corporation is influence by many factors that has been analyzed here; Analysis of efficiency of financial and economic activities, Evaluation of managerial effectiveness. Return on equity at “Toyota Motor Corporation” in 20016 and 2017 is 1.6 and 1.5 this means that the company did well in 2016 better than 2017 in

terms of return on equity. Return on “Toyota Motor Corporation” business activities in 2016 and in 2017 is 6.4 and 9.2 this shows that business activities in the company in 2017 is able to bring more profit to the company than 2016. Assets turn over in 2016 was better than 2017, 0.6 and 0.5.

The main **suggestions** for Toyota Motor Corporation are the following.

Stick to the globally accepted TPS Toyota production system in which quality of the car which is produced has more importance. Training the staff for quality assurance Increasing skilled labor level As the market is getting greater consider the customers not the number of cars sold Production of more hybrid cars, will give the company more boost than the present condition as because of the oil price is getting higher day by day As Toyota is an Asian giant in car manufacturing and sales they can get more influence in the Asian market. Potentiality of the Asian market can be utilized by introducing more fuel efficient cars. Advancement in technology can also be recommended as the world is growing smarter and Production of more eco friendly cars. Hiring fresh ideas to the production system More customer centric production and services Increasing production capacity in worldwide plants as it is competing in global market Developing the technology in case of hybrid cell. More globally accepted strategy , by including more non Japanese in the top management level. Updated customer feedback about the performance of the car, will reduce customer dissatisfaction. Starting more plants in Asian countries will reduce the labor coast in production and also the coast of raw materials can be reduced.

Toyota should continue to undertake concerted efforts to strengthen its management platform and raise corporate value.

2) As immediate tasks, Toyota should promote business and cost structure reforms to realize a solid management platform so that it can respond quickly to the changing market circumstances. Specifically, Toyota should maintain a streamlined structure through the reduction of fixed costs and enhance its business

in established markets in developed countries.

3) Toyota should accelerate its business expansion into rapidly growing emerging countries by thoroughly and meticulously monitoring market conditions in respective regions and introducing products suited to the characteristics and needs of each market. Toyota should also strive to establish production and supply structures to realize optimum product price in gand delivery, and to enhance the value chain to provide a wide range of customer services in each country and region.

4) Toyota should consider making Lexus a priority in the Chinese market. This will enable it to become competitive with other car manufacturers in the luxury segment. By increasing production facilities in Asia, this will enable Toyota to have cheaper delivery channels and become closer to the emerging market customer. Toyota should also cut out layers of middle management so that engineers get more authority over what specific customer needs are answered in the design and development of a new car.

5) Toyota should pursue the development of environmentally conscious, energy-saving products while incorporating functions and services demanded by customers (value chain) and delivering them to the global market. Acting on these measures, Toyota should aim for growth in three business units, namely, “solutions” in the areas of materials handling equipment, logistics and textile machinery; “key components” in the fields of car air-conditioning compressors and car electronics; and “mobility” in the domains of vehicles and engines.

6) To support consolidated management on a global scale, Toyota should enhance the power of the workplace and diversity in the use of human resources, and strive to nurture global human resources.

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APPENDICES

APPENDIX A

Consolidated statement of income Toyota Motor Corporation, 2016-2017, Yen in millions

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	FY2017 (For the year ended March 31, 2017)	FY2016 (For the year ended March 31, 2016)	Increase (Decrease)
Net revenues	**27,597,193**	**28,403,118**	**(805,925)**
Sales of products	25,813,496	26,549,111	(735,615)
Financing operations	1,783,697	1,854,007	(70,310)
Costs and expenses	**25,602,821**	**25,549,147**	**53,674**
Cost of products sold	21,543,035	21,456,086	86,949
Cost of financing operations	1,191,301	1,149,379	41,922
Selling, general and administrative	2,868,485	2,943,682	(75,197)
Operating income	**1,994,372**	**2,853,971**	**(859,599)**
Other income (expense)	**199,453**	**129,410**	**70,043**
Interest and dividend income	158,983	157,862	1,121
Interest expense	(29,353)	(35,403)	6,050
Foreign exchange gain (loss), net	33,601	(5,573)	39,174
Other income (loss), net	36,222	12,524	23,698
Income before income taxes and equity in earnings of affiliated companies	**2,193,825**	**2,983,381**	**(789,556)**
Provision for income taxes	**628,900**	**878,269**	**(249,369)**
Equity in earnings of affiliated companies	**362,060**	**329,099**	**32,961**
Net income	**1,926,985**	**2,434,211**	**(507,226)**
Less – Net income attributable to noncontrolling interests	**(95,876)**	**(121,517)**	**25,641**
Net income attributable to Toyota Motor Corporation	**1,831,109**	**2,312,694**	**(481,585)**

APPENDIX B

Consolidated statements of cash flow Toyota Motor Corporation, 2016-2017, Yen in millions

	FY2017 (For the year ended March 31, 2017)	FY2016 (For the year ended March 31, 2016)
Cash flows from operating activities:		
Net income	1,926,985	2,434,211
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation	1,610,950	1,625,837
Provision for doubtful accounts and credit losses	98,666	159,265
Pension and severance costs, less payments	23,253	8,833
Losses on disposal of fixed assets	30,673	33,329
Unrealized losses on available-for-sale securities, net	7,073	9,272
Deferred income taxes	(53,299)	32,889
Equity in earnings of affiliated companies	(362,060)	(329,099)
Changes in operating assets and liabilities, and other	131,996	486,320
Net cash provided by operating activities	**3,414,237**	**4,460,857**
Cash flows from investing activities:		
Additions to finance receivables	(13,636,694)	(13,549,278)
Collection of and proceeds from sales of finance receivables	12,927,981	13,115,854
Additions to fixed assets excluding equipment leased to others	(1,223,878)	(1,282,545)
Additions to equipment leased to others	(2,317,559)	(2,776,671)
Proceeds from sales of fixed assets excluding equipment leased to others	41,238	42,147
Proceeds from sales of equipment leased to others	1,238,278	1,111,727
Purchases of marketable securities and security investments	(2,517,008)	(2,197,477)
Proceeds from sales of and maturity of marketable securities and security investments	1,901,541	3,415,815
Payment for additional investments in affiliated companies, net of cash acquired	44,274	628
Changes in investments and other assets, and other	571,888	(1,062,744)
Net cash used in investing activities	**(2,969,939)**	**(3,182,544)**
Cash flows from financing activities:		
Proceeds from issuance of long-term debt	4,603,446	4,845,872
Payments of long-term debt	(3,845,554)	(4,176,202)
Increase (decrease) in short-term borrowings	273,037	(10,903)
Proceeds from issuance of class shares	—	474,917
Dividends paid to Toyota Motor Corporation class shareholders	(3,697)	(1,225)
Dividends paid to Toyota Motor Corporation common shareholders	(634,475)	(704,728)
Dividends paid to noncontrolling interests	(63,936)	(73,129)
Reissuance (repurchase) of treasury stock, and other	(703,986)	(778,173)
Net cash used in financing activities	**(375,165)**	**(423,571)**
Effect of exchange rate changes on cash and cash equivalents	**(13,486)**	**(199,871)**
Net increase in cash and cash equivalents	**55,647**	**654,871**
Cash and cash equivalents at beginning of year	**2,939,428**	**2,284,557**
Cash and cash equivalents at end of year	**2,995,075**	**2,939,428**

APPENDIX C

Consolidated balance sheets Toyota Motor Corporation, 2016-2017, Yen in millions

	FY2017 (March 31, 2017)	FY2016 (March 31, 2016)	Increase (Decrease)
Assets			
Current assets	**17,833,695**	**18,209,553**	**(375,858)**
Cash and cash equivalents	2,995,075	2,939,428	55,647
Time deposits	1,082,654	1,032,034	50,620
Marketable securities	1,821,598	1,511,389	310,209
Trade accounts and notes receivable, less allowance for doubtful accounts	2,115,938	2,000,149	115,789
Finance receivables, net	6,196,649	5,912,684	283,965
Other receivables	436,867	451,406	(14,539)
Inventories	2,388,617	2,061,511	327,106
Deferred income taxes	—	967,607	(967,607)
Prepaid expenses and other current assets	796,297	1,333,345	(537,048)
Noncurrent finance receivables, net	**9,012,222**	**8,642,947**	**369,275**
Investments and other assets	**11,707,160**	**10,834,680**	**872,480**
Marketable securities and other securities investments	7,679,928	7,439,799	240,129
Affiliated companies	2,845,639	2,631,612	214,027
Employees receivables	25,187	32,998	(7,811)
Other	1,156,406	730,271	426,135
Property, plant and equipment	**10,197,109**	**9,740,417**	**456,692**
Land	1,379,991	1,352,904	27,087
Buildings	4,470,996	4,311,895	159,101
Machinery and equipment	11,357,340	10,945,267	412,073
Vehicles and equipment on operating leases	5,966,579	5,652,622	313,957
Construction in progress	474,188	513,953	(39,765)
Less – Accumulated depreciation	(13,451,985)	(13,036,224)	(415,761)
Total assets	**48,750,186**	**47,427,597**	**1,322,589**

	FY2017 (March 31, 2017)	FY2016 (March 31, 2016)	Increase (Decrease)
Liabilities			
Current liabilities	**17,318,965**	**16,124,456**	**1,194,509**
Short-term borrowings	4,953,682	4,698,134	255,548
Current portion of long-term debt	4,290,449	3,822,954	467,495
Accounts payable	2,566,382	2,389,515	176,867
Other payables	936,938	1,040,277	(103,339)
Accrued expenses	3,137,827	2,726,120	411,707
Income taxes payable	223,574	343,325	(119,751)
Other current liabilities	1,210,113	1,104,131	105,982
Long-term liabilities	**12,762,268**	**13,214,955**	**(452,687)**
Long-term debt	9,911,596	9,772,065	139,531
Accrued pension and severance costs	905,070	904,911	159
Deferred income taxes	1,423,726	2,046,089	(622,363)
Other long-term liabilities	521,876	491,890	29,986
Total liabilities	**30,081,233**	**29,339,411**	**741,822**
Mezzanine equity	**485,877**	**479,779**	**6,098**
Shareholders' equity			
Toyota Motor Corporation shareholders' equity	**17,514,812**	**16,746,935**	**767,877**
Common stock, no par value	397,050	397,050	—
Additional paid-in capital	484,013	548,161	(64,148)
Retained earnings	17,601,070	16,794,240	806,830
Accumulated other comprehensive income (loss)	640,922	610,768	30,154
Treasury stock, at cost	(1,608,243)	(1,603,284)	(4,959)
Noncontrolling interests	**668,264**	**861,472**	**(193,208)**
Total shareholders' equity	**18,183,076**	**17,608,407**	**574,669**
Total liabilities, mezzanine equity and shareholders' equity	**48,750,186**	**47,427,597**	**1,322,589**