MASTER OF SCIENCE IN
FINANCE

MASTERS FINAL WORK
PROJECT

EQUITY RESEARCH:
PEUGEOT SA

VITOR MIGUEL DOS SANTOS GERALDES

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SUPERVISOR:

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Abstract

This project represents an extensive evaluation of Peugeot SA, according to ISEG's Master in Finance final work project. This equity report was written in accordance with recommendations of the CFA Institute. The reason for choosing the company was the interest in automotive industry and the curiosity to evaluate how the company react to daily threats. This report was written in accordance with the public information available on July 20th, 2017, any information or event subsequent to this date has not been considered. The target price was obtained using an average of valuation methods, more specifically the method of Discounted Cash Flow and Relative valuation method, more known as method of Comparable Multiples. The target price was € 20.67 at 20th July of 2017, representing an upside potential of 3.75%. My recommendation is to Reduce, given the high risk of the company capacity to enter e-cars market and the high dependence of European market. Our risk assessment estimates a high risk for the company.

JEL classification: G10; G32; G34;

Keywords: Equity Research; Valuation; Mergers & Acquisitions; Peugeot SA; Automotive Industry

Resumo

Este projeto representa uma análise extensiva da Peugeot SA, consistindo no projeto de trabalho final do programa de Master in Finance do ISEG. Este relatório foi elaborado de acordo com as recomendações do CFA Institute. O motivo pela escolha da empresa deveu-se ao interesse na industria automóvel e a curiosidade pessoal de entender como a empresa reage as ameaças diárias. Este relatório foi elaborado de acordo com a informação publica a 20 de Julho de 2017, qualquer informação ou evento posterior a esta data não foi considerado. O preço-alvo foi obtido utilizando uma ponderação aritmética de dois métodos de avaliação, mais especificamente o método de Fluxos de Caixa Descontados e o método de avaliação relativo, mais conhecido como método dos múltiplos comparáveis. Com um preço-alvo de € 20.67 a 20 Julho de 2017, representa um potencial de valorização de 3.75%. A recomendação deste trabalho académico é de reduzir, dado o alto risco da empresa na sua capacidade de entrar no mercado de carros elétricos e a sua elevada dependência do Mercado europeu. A nossa avaliação de risco estima um risco alto para a empresa.

Classificação JEL: G10; G32; G34;

Palavras-Chave: Equity Research; Avaliação de Empresas; Fusões e Aquisições; Peugeot SA; Indústria Automóvel

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I would like to thank all my professor, especially to Professor Clara Raposo by allowing me to join the master, to Professor Victor Barros that was a great support during the master thesis.

Also, I would like to thank my girlfriend Beatriz Carneiro and my parents, for always believing in me, especially when no one else did.

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Index

List of Figures

List of Tables

Peugeot SA
Reduce
Recommendation

Peugeot SA:

(2017YE Price Target of € 20.67 (+3.75%), with high risk; recommendation is to reduce)

1. Research Snapshot

REDUCE is our recommendation at the 20th July of 2017 for Peugeot SA (PSA) with a price target of € 20.67 for 2017YE, using the discounted cash flow method. Relative valuation through multiples supports our view that PSA is currently fairly valued. This offers a potential 3.75% upside gain from its latest closing price of € 19.05, although with high risk. The evolution of automotive industry, technologic changes and uncertainty of PSA management decisions regarding operations are key factors to understand this research.

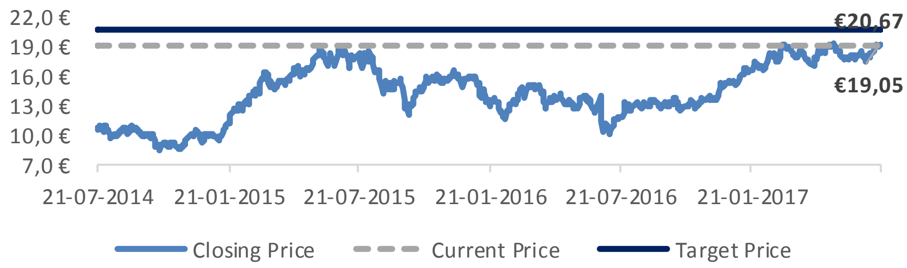


Figure 1 - Share Price
Source: Bloomberg

Peugeot SA - Strong group revenue's drivers: Group PSA has a well-diversified revenue's sources, from automotive division – Peugeot, Citröen, DS, Opel and Vauxhall which correspond to more than 65% revenue's. Automotive equipment which comprises Faurecia participation represents more than 32% and Finance division which serves as intermediary of sales for all brands. Revenue's growth in 2016, -1.18% however, car sales increase by 4.82% YoY. With the incorporation of Opel and Vauxhall sales this numbers should increase significantly.

Chinese and European market dependence: In 2016, 62% of group sales was in Europe and 20% in China and South-East Asia. This high dependence of these particular markets creates a high level risk for the group. With European economy stagnation and China's customer non-loyalty for brands, it is urgent that the management create alternative solutions to maintain revenues. PSA not operating in US also contributes for these uncertainty and makes even harder to become an automotive leader.

Opel and Vauxhall acquisition: The merge of the year, Peugeot SA acquired for €2.2Bn, Opel and Vauxhall. General Motor's decided to sell their operations in Europe in this segment and consolidate their operations in other regions. PSA took the change to increase their portfolio in Europe. It is expected that the acquisition creates € 1.7Bn synergies annually by 2026. However, it might occur the cannibalization effect because most of vehicles segments are similar's.

Electric Vehicles paradigm: Peugeot SA is European leader for low carbon emissions CO2/KM, which is a strength regarding the demanding regulatory required by European Authorities. However, Peugeot SA continuous to not have their e-car despite the increase of global market for these vehicle. All competitors already offers a wide range of electric cars for all type of budgets. It is essential to present a model that can compete with other brands. It was announced by Carlos Tavares, one model in 2019, with a 450 Km battery range which is higher than market average (250 km).

Table 1 - Analyst's Risk Assessment

Low	Medium	High

PSA risk assessment reflects a high risk investment. It is measured by high level of competition domestically and internationally. Also, the growth of electric cars market and Opel acquisition can be crucial to PSA futures.

Table 2 – PSA Market Data 20/07/2017

Key Information	
Closing Price	19.05 €
52-week price range	12.05-19.71
Volume	1319585
1 year Return	54.95%
Shares outstanding	904828
Market Cap.	18.689
Reuters/ Bloomberg	PEUP.PA / UG:FP

Source: Bloomberg

Table 3 - Valuation Output

Valuation	2016YH Target Price
DCF	19.76 €
Multiples (average)	21.57 €
EV/SALES	22.06 €
EV/EBITDA	21.08 €

Source: Student's analysis

2. Business Description

Peugeot SA, is a French automobile manufacturer of passenger and light commercial vehicles (Figure 2), founded in 1896. PSA is Europe's second-largest automobile manufacturer, coming behind VAG, selling 3.1 million vehicles in 2016 across 160 countries. It is one of the largest automobile manufacturer in China, selling 620,000 vehicles in 2016. The company is the European automobile leader for low Carbon Dioxide (CO2) emissions per KM, with 102.4g very below the average market 118g. Currently, PSA has 21 production plants, half of them subsidiaries jointly owned with other car manufacturers, 172,000 employees worldwide. However, with Opel/Vauxhall acquisition, new more 40,000 employees and new 5 production plants.

Peugeot SA is the holding company responsible for the production and sales of Peugeot, Citroën and DS brands vehicles. Through Faurecia capital participation, global leader in automotive equipment, the company also supply other brands and manufacturers with automotive seating, interior systems and emissions control technologies.

To diversify their manufacturing business, Peugeot S.A. also provides retail financing to costumers of the three brands and wholesale financing to Peugeot and Citroën, through Banque PSA Finance (BPF), covering 89% of sales in more than 23 countries - Figure 3.

The Peugeot SA operates in three main business lines: (i) Automobile Division; (ii) Automobile Equipment Division and (iii) Finance Division. (Appendix 6.1)

The **Automobile Division** is the responsible for covering the design, manufacture and sale of passenger cars and light commercial vehicles under Peugeot, Citroën and DS brands. PSA sold 3,146,000 vehicles worldwide in 2016, more 5.8% compared to previous year, with Peugeot being the brand that contributed the most – Figure 4. It is presented in 5 different regions with the European region being the market with highest units sold, 62% of sales with 36% in France. EU accounts for 71% of the Group's production plants, 46% in France. Middle East & Africa Region the market with the highest significant growth – Table 4. This division represents 64.8% and 65.2% of revenues and expenses of the group in 2016.

Another business segment of PSA group is the **Automobile Equipment Division**, representing 32.7% and 33.2% of revenues and expenses of the group, respectively. Through Faurecia group which PSA holds 46.6% of capital and 63.2% voting rights, consists in the largest global automaker equipment comprising, Interior Systems, Automobile Seating and Emissions Control Technologies. In the end of 2015, Faurecia following a disinvest strategy, sold the Automotive Exteriors division by €665 million in order to eliminate debt and focus in the remaining divisions.

Complementing the manufacturing business, the PSA Group also provides financing, insurance, leasing and banking activities from their **Finance Division**, who represents 2.46% of revenues, through the Banque PSA Finance (BPF). BPF operates in more than 23 countries with several partnership agreements and annually covers more than 700 thousand units. Financial services to end customers represents 70.9% of BFP's total loans outstanding and corporate dealers financing represents 29.1%. In 2016, BFP sold 1,500,000 insurance policies and services with an average of 2 contracts per customer financed, making the sixth year running sales growth.

Source: ACEA Market Report Q4-2016

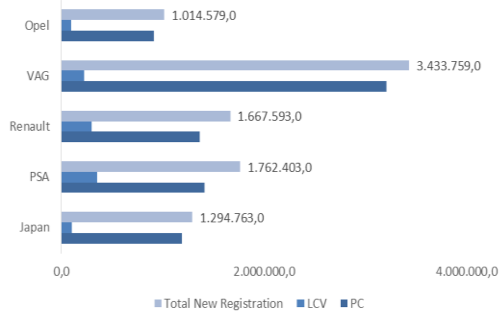


Figure 2- New Registration in EU Dec.2016

Source: Banque PSA data

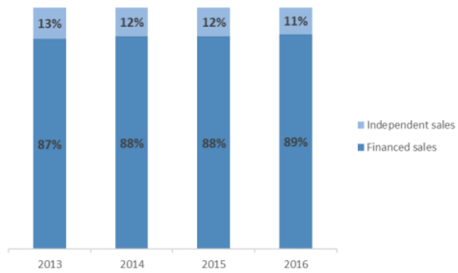


Figure 3 – End-user costumer financing sales

Source: Company data

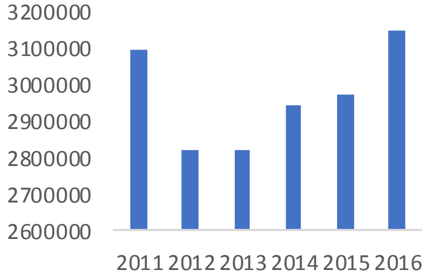


Figure 4- Number of vehicles sold

Table 4 - Sales by Regions at 2016 Units thousands

Regions	Sales
Europe	1930
China and South-East Asia	620
Middle-East and Africa	383
Latin America	184
India-Pacific	20
Eurasia	10

Source: Company data

Key Drivers of Profitability

Excess production, price of raw materials, road infrastructure, macroeconomic conditions and population growth are the most important variables to automotive brands profits. PSA Group, in the last years, were known for low levels of capacity utilization conditioning future profits (Figure 5). In 2016, 30% of purchasing budget of PSA was allocated to raw materials. Those input prices have increase in 2016 but below the hype of 2014. However, PSA exposure to fluctuations in commodity prices is hedge using derivative instruments and optimizing global sourcing with substitute materials,etc.

The growth of population in principal markets of PSA Group influence future profitability and projections of demand and supply – Table 5.

Source: IHS Estimates

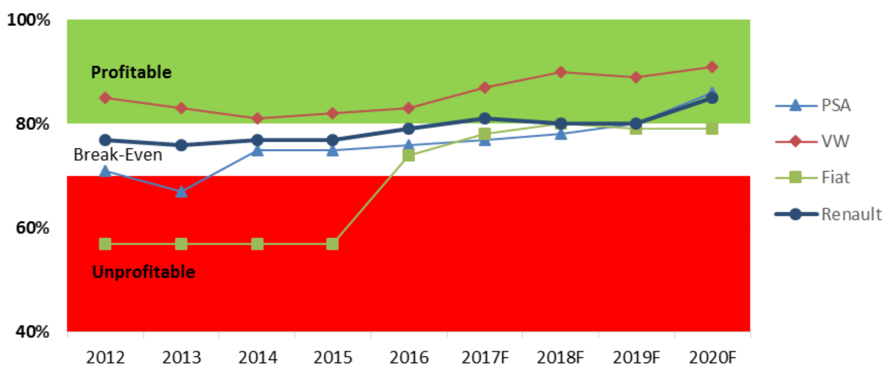


Figure 5 - PSA and Competitors Capacity Utilization

Joint Venture

PSA has 50%-owned joint ventures in China-Dongfeng Peugeot Citroën Automobile (DCPA) and Changan PSA Automobile (CAPSA). It co-operates on engines with Renault, Ford and BMW.

Since 2014, PSA Group strengthen the partnership with Dongfeng Motor covering: 1) joint commitment to propel DPCA growth and aims to triple its volumes to 1.5 million vehicles per year by the early 2020s, 2) create joint R&D center, dedicated to the development of products and technologies for fast growing countries, including China. 3) Create new joint venture to drive the sales of PSA and Dongfeng vehicles in the rest of Asia and possibly in other emerging markets. From this joint venture is possible to create synergies of 400M€ per year for PSA by 2020 and it will be possible to extent for other areas of collaboration.

From 2017 the PSA group and the CK Birla Group sign joint-venture agreements to produce and sell vehicles and components in India by 2020. This long-term partnership will allow both companies to participate in the growth of the Indian automotive market, expecting to reach 8 to 10 million vehicles by 2025 from the current 3 million cars produced in India in 2016.

Table 5 – Principal Markets of PSA Population projections. (Unit: Millions)

Year	2015	2030	2050	2100
World	**7349**	**8501**	**9725**	**11213**
Asia	4393	4923	5267	4889
Europe	738	734	707	646
Latin America and the Caribbean	634	721	784	721
Northern America	358	396	433	500

Source: United Nations, 2015

Group PSA strategy

- Back in the Race

In 2014, Carlos Tavares presented the "Back in the Race" plan (2014-2018), designed to ensure the Group's reconstruction with four operational objectives: 1) Strengthen the DNA of the three brands and increase their value; 2) Execute a core model strategy worldwide based on a highly technology which allows the group to do more with each euro invested, needing less employees (Figure 6); 3) Ensure profitable growth worldwide, even the Latin America that turned to be profitable; 4) Improve the Group's competitiveness, the threshold for profitability was reduced by 1 million vehicles.

PSA completed its reconstruction plan and it exceeds all objectives, at the end of 2015. With a €6 billion of operating free cash flow, a net cash of nearly €5 billion and the automotive operating margin of 5%, PSA completed this strategy very quickly through cost savings allowing fulfilling most of the objectives – Figure 7.

- Refinancing Strategy

The financing strategy of Banque PSA Finance resulted in the implementation of the partnership between BPF and Santander Consumer Finance in 11 countries. This partnership conducted several active debt management transactions in 2015: 1) signing of a new syndicated loan for €700 million maturing in five years; 2) repayment and cancellation of the previous syndicated loans for a total amount of €7,245 million and 3) redemption of several of its existing bonds for a total amount of €1,893 million. This is partnership stands for the creation of dedicated local partnerships and commercial agreements, reinforcing the competitiveness of the three brands in Europe and Brazil.

- Push to Pass

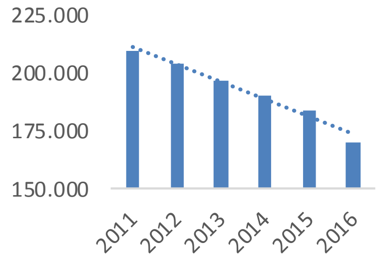
PSA's strategy 'Push to Pass' for the 2016-2021 period aims to meet costumers' mobility needs by anticipating changes in car usage patterns. Driven by evolving customer expectations, the plan will transform the company in order to unleash its full potential, capitalizing also on the efficiency, operational excellence and agility showed during 'Back in the Race' plan. This strategy has three goals: 1) The digital transformation of the Group; 2) The internal performance culture; 3) Corporate social responsibility

To complete 'Push to Pass' plan, the PSA group consider that there are five pillars to be consider in the change of customer expectations from: 1) Product to customer; 2) Ownership to experience; 3) Car to mobility; 4) One business to a portfolio of activities; 5) Local to global.

The vision underlying this strategy described by the Chairman, Carlos Tavares, 'Our digital transformation will make the PSA Group a company connected to its customers'.

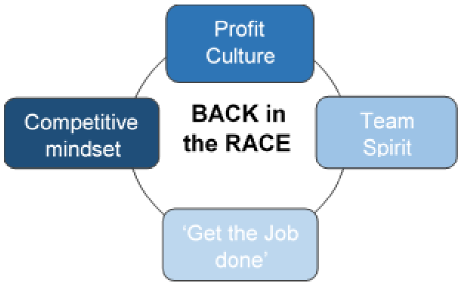
In order to execute the 'Push to Pass' plan, there are five strategic pillars: **Quality first**, the PSA Group targets to be in the Top 3 performances in 2018. **Core model and techno strategy**, one new car, per region, per brand and per year from 2018 to maintain a young vehicle range of 3.5 years. This pillar also considers maintaining our low emission leadership with performing engines. **Brand Power**, by capitalizing the three powerful widely recognized and differentiated Peugeot, Citroën and DS brands to develop the groups business in the operating regions. **Core efficiency**, as engaged in Back in the Race plan it will continue to improve the R&D and Capex efficiency of the Group to reduce overall costs, fixed or variable. **6 strategic regions**, a robust techno and product plan of 120 new products worldwide – Figure 8.

Figure 6 – Total Number of Employees



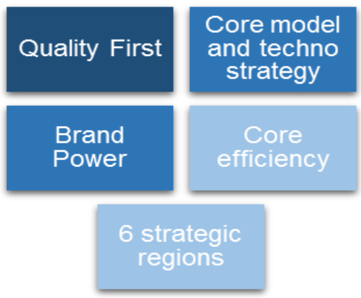
Source: Company data

Figure 7 - PSA's"Back in the Race"



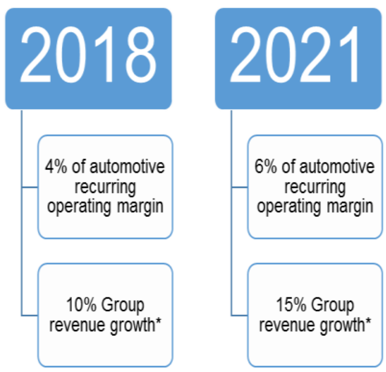
Source: Company data

Figure 8 - 'Push to Pass' Strategic pillars



Source: Company data

Figure 9 - Financial objectives of 'Push to Pass'



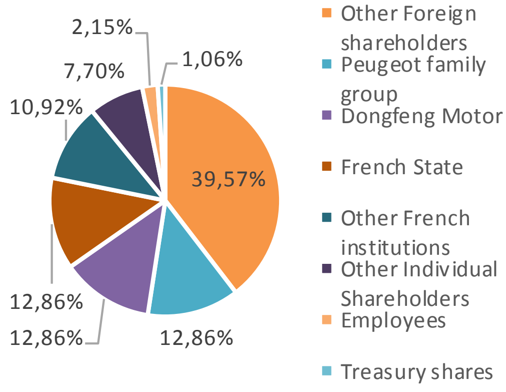
**Group revenue vs 2015 revenue*
Source: Company data

The financial objectives of the 'Push to Pass' plan are operating margins and revenues. For the Operating margins, the PSA expects a 4.5% of automotive recurring operating margin[1] from 2016 to 2018 and a 6% of automotive recurring operating margin, in 2021. Regarding the revenue's goals, the PSA expects a 10% and 15% revenues growth compared to 2015's[2], in 2018 and 2021, respectively – Figure 9.

- PSA acquire Opel and Vauxhall

After all restructuring plans, being well executed by PSA managing board, Carlos Tavares and the remaining staff found the opportunity to acquire General Motors European operations, Opel and Vauxhall for €2.2B including operating and financing activities. These transaction backed by a long-term strategic partnership with BNP Paribas around the joint acquisition of Opel/Vauxhall financing activities, will lead to PSA Group be second largest manufacturer in Europe. Despite PSA's CEO and the prime ministers of France, Germany and Britain affirm that no saving jobs occurs, in order to costs savings. However, many automotive industry analysist affirms that the so needed cost savings of Opel can be executed in short term be fire employees.

Figure 10 - Shareholders structure at 31 Dec. 2016

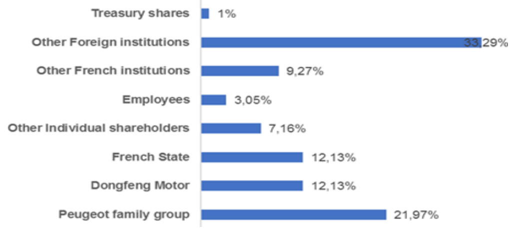


Source: Company data

<u>Ownership Structure</u>

According to Peugeot SA information regarding the ownership structure, at 31 Dec. 2016, the company has a total number of shares outstanding of 859,924,895, with a total share capital of €15,053 million. Several other foreign institutions slice 39.57% shares of the company. The Peugeot family group, Dongfeng Motor and French state holds 12.68%. Private shareholders, other French institution, employees and treasury shares – Figure 10, divide the remaining capital. However, 58.1% of the shares outstanding are floating shares, which belongs to passive investors and remaining capital belongs to strategic entities. Regarding the voting rights is held majority by other foreign institution and Peugeot family group – Figure 11.

Figure 11 – Voting Rights at 31 Dec. 2016



Source: Company data

[1] Recurring operating income related to revenue

[2] At constant (2015) exchange rates

3. Management and Corporate Governance

PSA Group follows a two-tier management structure comprising a **Managing Board**, responsible for strategic and operational management, and a **Supervisory Board**, responsible for oversight and control. This separation is vital to a positive balance between the power of the executive and oversight functions. It also protects minority shareholders with Supervisory Board oversighting all executive decisions to have the best match possible. Also given the well disperse voting rights of PSA Group, with Peugeot family group with the second higher position, benefit the payoff interests of minority shareholders.

Four members compose the **Managing Board**: **Carlos Tavares** serves as Chairman of the Managing Board of PSA Group. Graduated in Engineering on Ecole Centrale de Paris, former group Chief Operating Officer (COO) of Renault-Nissan in 2011. After denied Renault CEO position, the opportunity to lead PSA Group happen. Named Chairman of the Managing Board in March of 2014 and has change PSA Group paradigm (Figure 12). **Jean-Baptiste De Chatillon**, role as Executive Vice President and CFO, has been a member of managing board since 2012. **Jean-Christophe Quémard**, serves as Executive Vice President, Africa-Middle East, he joined PSA in 1986 and has held various positions, in particular, Director of Automobile Platforms and Technologies Department. **Maxime Picat**, is the Executive Vice President, Operational Director Europe, since September 2016 has a seat in the Managing Board. An Executive Committee, organized in a matrix structure by brands, regions and business lines, backs the managing board. (Appendix 6.2)

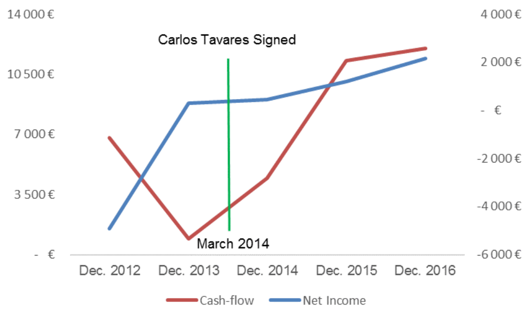


Figure 12 – Financial evolution since Carlos Tavares signed

From the Annual General Shareholders' meeting, it has appointed the members of the **Supervisory Board**. **Louis Gallois** is the Chairman, held several positions in French Government and served as CEO of Airbus between 2006 and 2007. There are other 13 members in the Supervisory board, with six members appointed by the three main shareholders, Peugeot family group, the French State and the DongFeng Motor Group Company. Six independent members, an employee representative, **Jean-François Kondratiuk**, and an employee shareholder **representative.**

Opel/Vauxhall integration creates a challenge that once again, PSA Managing Board must be succeed. After "Back in the Race" completed quickly and "Push to Pass" operational targets expand. The opportunity to become European manufacturer leader appear with Opel but comes with high costs. Transform a chronic money loser, as Opel/Vauxhall to become operational efficient manufacturer will put Carlos Tavares and remaining staff in the biggest challenge of this century.

Figure 13 - PSA's social and environmental policies

Source: Company data

<u>Sustainability and Corporate Social Responsibility</u>

The PSA Group's social and environmental policy is based on continuous dialogue with its stakeholders and the conviction that automobile sustainability can contribute to the creation of value of everyone. (Appendix 6.3)

The CRS of PSA is based on three main pillars, commitment to sustainable mobility, to reduce the environment impacts of vehicle production and use; societal commitment to the regions, in which it operates, to create an ecosystem that promote the growth of employment and the integration of local economic players. The last pillar is a social commitment, with the implementation of innovative and needs-adapted practices enabling employees to enhance and make full use of all their talents – Figure 13.

4. PSA Group acquires GM European operations

Background

PSA Group acquired the chronic money loser, Opel and Vauxhall by €2.2bn to General Motors' being the second-largest carmaker in Europe. The new Group European market share increase close to 17% behind Volkswagen Group (22%).

Both companies principal market is Europe with Opel relying more on UK, through Vauxhall, and Germany, while Peugeot SA has a strong presence in France – Figure 14.

This transaction includes all the car-manufacturing activities of Opel/Vauxhall, which comprise the Opel and Vauxhall brands, six assembly plants and five-part production plants, an engineering center and about 40,000 employees. It includes also, Opel/Vauxhall's finance businesses that satisfy nearly 1,800 concessionaries.

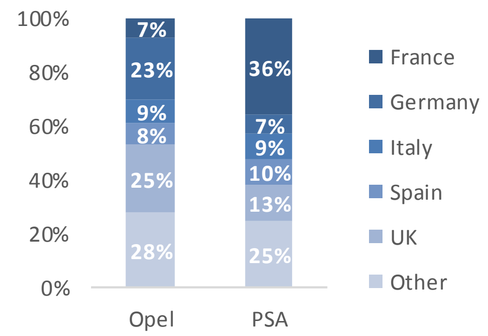


Figure 14- Share of each group's 2016 sales in key European markets

Strengths each Company for the Long-Term

Despite Opel/Vauxhall not having profits since 1999 motivate General Motors searching for buyers. However, an integration between both manufacturers will allow substantial economies of scale and synergies in purchasing, manufacturing and R&D. It is expected by Carlos Tavares €1.7Bn of synergies annually by 2026, but most of them in 2020 – Appendix 7. Also regarding, recurring operating margin by 2% in 2020 and 6% in 2026 and a positive operational free cash flow by 2020. After Brexit, PSA transform one problem into an opportunity. With Vauxhall plants located in UK, PSA could face euro-pound fluctuations issues and UK-EU trade, after all UK is the second largest market in Europe.

Cannibalization effect

This transaction is not just happy news, PSA might face the worst of the problems, cannibalization effect. Opel/Vauxhall and Peugeot/Citroen operate in similar ranges of products – Figure 15. Both companies are positioned in mainstream market with strong presence in small and compact segments. Both lack the presence of SUV's and none of them succeeds in the midsize sedan segment. In addition, Opel/Vauxhall would not give PSA Group access to premium market.

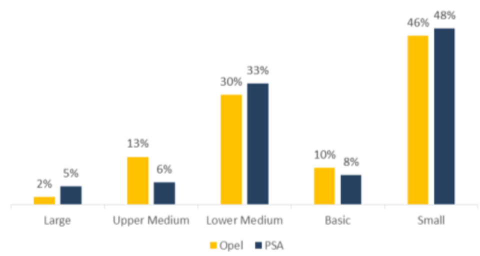


Figure 15 - Share of 2016 Sales in Europe by vehicle size segment

Source: Student's Analysis

New dimension for PSA's financial operations

PSA and BNP Paribas have agreed to jointly acquire Opel/Vauxhall's captive financing activities and have entered a long-term strategic partnership around the Opel and Vauxhall brands. Both each acquire 50/50 of the share capital and Opel/Vauxhall covers 11 European countries, providing services to 1,800 dealers. These transaction allows significant room for value creation through the partnership and alignment of Opel Financing activities given the low penetration rate of main European competitors – Figure 16.

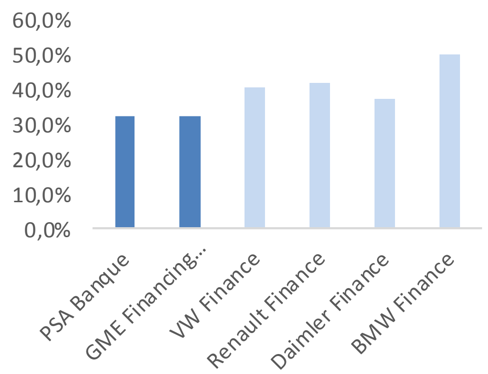


Figure 16 – Financing Penetration Rate in Europe

Financial Position after the transaction

In 2016, the company had net cash position of €6,813 million up €2,253 million compared to 2015. The Group continued actively managing its debt which allows the possibility to make this transaction and remain the solid financial position. The first phase €1,13 billion will be financed by PSA's available cash, and the remaining €650 million paid with Company equity warrants to General Motors group over the next 5 years. Despite the considerable price of the acquisition, Mr. Tavares leave ample headroom for further profitable growth opportunities internationally.

5. Industry Overview and Competitive Positioning

INDUSTRY OVERVIEW

In 2016, the global growth fallen to 2.3 percent, the weakest year performance since the global financial crisis. The global economy managed to navigate its way through troubled water, geopolitical risks remained high in 2016, as result of the Brexit vote. The still-inflamed Middle East and the political election of Donald Trump as a President of U.S. VW's and other brands emission scandals contributed to significant changes in automotive industry, with more restricted legislations to reduce the CO2 emissions over time, changing company's strategies increasing their costs in R&D for clean vehicles.

The impact of the 2008 crisis on the automotive industry has been more severe than for other industry except housing, finance and prompted large-scale government intervention around the world. The automotive industry is one of main drivers of global macroeconomic growth, stability and technological advancement. In 2016, 77 million passenger cars were sold worldwide, 5.5% more than in the same period of last year, for the new commercial vehicles increased 11.7% in EU (2,326,552 units). Total world new passenger car registration, the leader of registration is Asia, particularly China with 29.8%. European and North America follow the leader with 22.5% and 22.4%, respectively. (Figure 17). In terms of major companies, PSA Group are far from the brands, which sells the most with 4.8%[1], such as Toyota (10.9%), VW Group (11.1%), etc.

<u>The European Union: Automotive Industry</u>

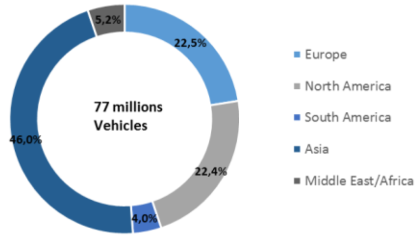
Within the European perimeter, the passenger car and commercial vehicles production increased by 2.7% and 11.7%, respectively, being the world's second largest producer after China. Regarding the PC registrations in EU increased by 6.8%. The main player of passenger car in EU is Germany producing, 5.5 million units and France being the player with significant growth, 4.4% contributed mainly by Peugeot SA and Renault SA.

Regarding the average CO2 emissions in EU per unit, 119.6 CO2/Km, the European Automobile Manufacturers Association (ACEA) affirms that is needed proper implementation for emissions-testing legislation. Growth of production in EU, driven by an increase in domestic demand and expects to improve economic conditions and consumer confidence in Eurozone. Employing over 12.2 million people (5.6% of EU employed population), the automobile industry generates a trade surplus over €100 billion (Figure 18) and this sector is a key driver of knowledge and innovation, being the EU's largest private contributor to R&D, with an annual investment of around €44.7 billion.

<u>Asian Countries: Automotive Industry</u>

Last year, Asian countries accounted 35 million registrations of passenger vehicles with an increase of 11%, being the region, which counts 46% of global vehicle registration. China contributed 30% of world new passenger car registration, through imported and local produced cars, very above other Asian countries – Figure 19. Passenger cars represents 80% of the total automotive industry and this growing trend started in the end of 80's. In contrast with European regulation of CO2 emissions, China regulations are in term of fuel consumption with 6.9 L/100km in 2015 and a target of 5 L/100km in 2020. Production in China has developed in two ways, through joint ventures with foreign brands and with local automakers. The automotive industry generates a trade deficit over 33€ billion.

Figure 17 - Light Passenger Car Registration Market Share by Region 2016



Source: IHS, ACEA-ACEA Economic and Market Report Q4 2016

Source: ACEA

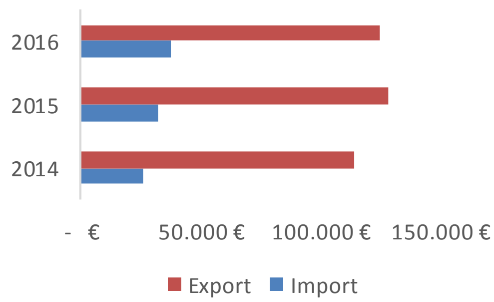


Figure 18 - EU Passenger Car Trade in Value (€ Million)

Source: ACEA Economic and Market Report Q4 2016

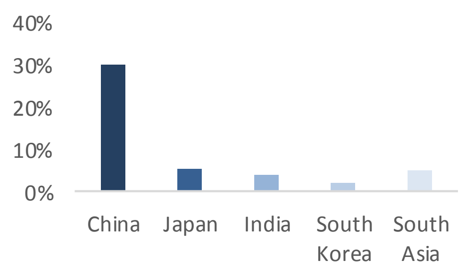


Figure 19 - Asian Countries Global Vehicles Registration weight

[1] – Already includes Opel/Vauxhall car sales of 2016

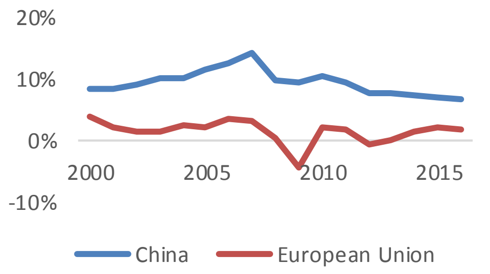
Demand Outlook

European Demand

<u>Macroeconomics condition</u>

The automotive industry, which is highly sensitive to general economic growth and consumer confidence, given it high, operating leverage and low average margins. Automaker margins are highly influenced by the economic cycles, making the GDP, employment, population prospectus, government policies, road infrastructures and financing conditions some of the indicators closer to future projections of growth. After an increase of 1.5% in Europe (Figure 20) it is expected by IMF a stabilization over the next few years, however is expected much uncertainty in Europe by geopolitical concerns.

Figure 20 - EU and China GDP Growth

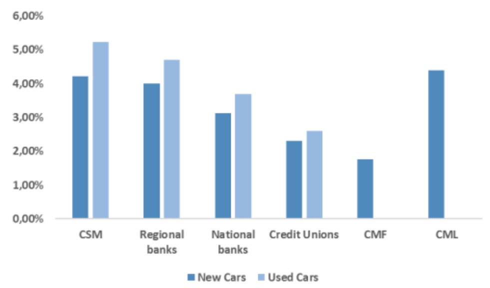


Source: IMF

<u>Financing conditions</u>

Alternative financing services have a positive impact for vehicles sales and its sales even more important after 2008 crisis, given the decrease of generalized costumers' income of principal markets. Nowadays, the financial condition for costumers become even more attractive due the low credit conceded by banks after 2008 crisis, the car manufacturing financing gain market share with wider offer of services, insurance and leasing, and lower interest rates for new cars, 16% less than for used. With a historical increasing global demand for auto financial services, automakers competed with traditional financing services being even cheaper for the costumer – (Figure 21).

Figure 21 - Interest rates on New and Used cars



Note: CSM = Community small banks;
CMF = Car manufacturing financing;
CML = Car manufacturing leasing.

Source: Q1 2017Auto financing report, Evolution Finance

<u>Governments Policies</u>

With automakers, selling vehicles worldwide it becomes more challenging to respect each country government regulations. Environment and protectionism policies have a negative impact of global demand, for instance, Russia increasing import tariff, U.S renegotiate the North American Free Trade Agreement and Europe CO2 emissions reduction to 95g/km per vehicle by 2020.

<u>Foreign Exchange</u>

Car manufacturers have their production plants spread worldwide and sell in every part of the globe and it must consider the different currencies of each market. It is essential to Auto Companies hedge their currency risk in the financial markets, however nowadays, the European companies have a strong position in terms of the value of EUR/CNY being lower when compared to 5 years ago. Figure 22. Even though European auto manufacturers increased their exportations, most of big players, locate their production plants in strategic emerging countries to reduce transportation costs.

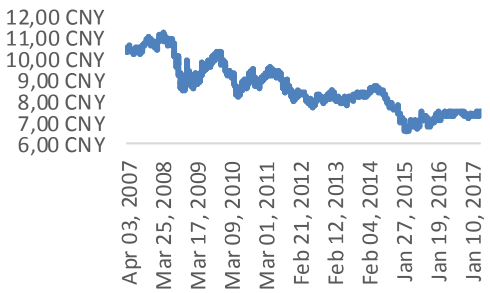


Figure 22 - EUR/CNY Exchange Rate

Chinese Demand

Macroeconomic Conditions

China's economic growth contribute with 25% to the World economy being the most important player in automotive industry. In the last 16th years the average GDP growth was 9.42% (Figure 20), also the GDP per capita increased exponentially after 2nd millennium. (Figure 23).

These values show the importance for auto manufacturers their localization in China, making nowadays joint ventures with local manufacturers to enter the Chinese market. According to Ministry of Public Security for every 100 households, there are 31 private cars, being a market with a huge potential.

Source: World Bank Data

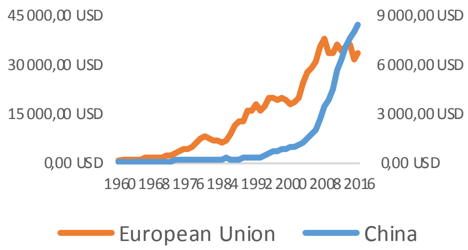


Figure 23 - EU and China GDP per capita (U.S Dollars)

Financing Conditions

Auto-finance rate of penetration in China in 2016 was around 35%, very below mature markets such Europe, U.S and Japan with penetration rates above 50% - Figure 24. This lack of development in automotive finance industry allows a large room for growth. Chinese automotive finance market is still dominated by commercial banks and auto finance companies, which together represent more than 80% of market share.

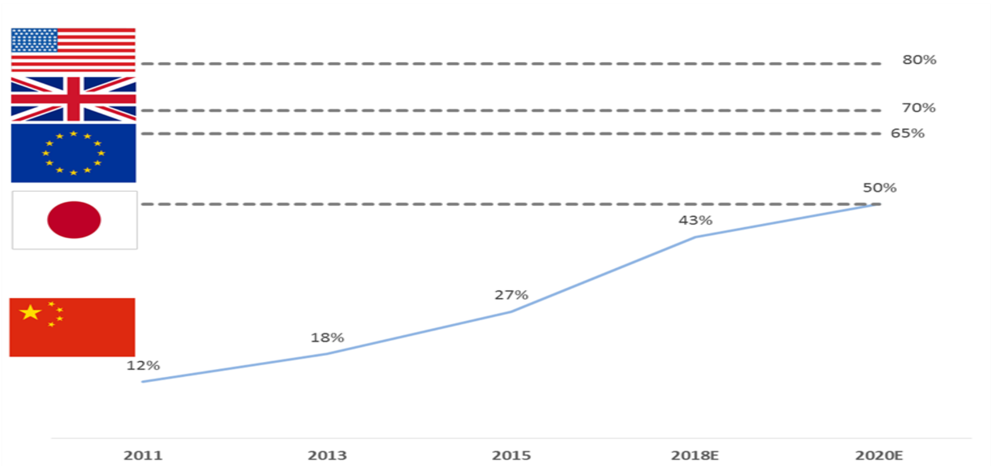


Figure 24 - Penetration Rate of China Auto Retail Finance Products
Source: Deloitte China Automotive Service

Road Infrastructure

According to PwC research, the urbanized population rate grew from 27% (1991) to 58% (2016), also the public expenditure on infrastructure projects remained strong, however tends to be counter-cyclical, correlating negatively with economic growth. After the 90's, China highly invested in highways and expressways which is essential for automotive industry development – Figure 25. According to most recent news from Chinese government, China is prepared to invest $720 billion on 303 transport infrastructure.

Source: Ministry of Transportation; China Statistical Yearbook 2016

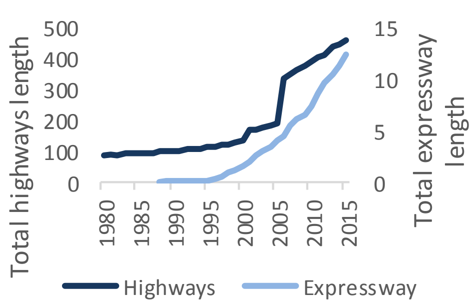


Figure 25 - Total Expressway and Highway length in China
Units in 10 000km

Consumer Behavior

Chinese automotive consumers choose their vehicles based on price, performance, quality and fuel consumption. When compared with western consumers, Chinese consumers have less brand loyalty and are less concerned with new alternative green engines. Boston Consulting Group analysis revealed that, over 75% of consumers would change brand when they purchase the new vehicle.

Government Support

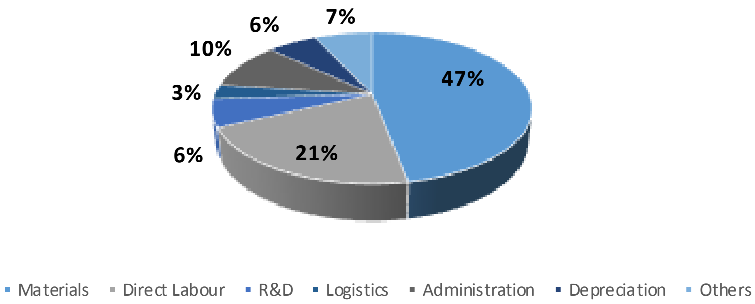
Chinese government policies are very behind of Western countries to reduce CO2 emissions, since the main environment policy applied is petrol consumption reduction providing consumers with a subsidy of 430€, for cars purchased with an engine which consumes less than 5.9L/100 km. In addition, there are a small move to reduce C02 emissions, the government waived the vehicle purchased tax for new -energy vehicles by the end of 2014.

Supply Outlook

Production factors

To produce vehicles, automakers need raw materials that are divided into raw materials that are negotiated with vendor (steel and plastic) and raw materials that are quoted as market prices for commodities traded in organised markets (aluminium, copper, lead or precious metals). Manufacturers are highly dependent on raw materials, since on average almost half of CoS are raw materials, becoming this factor essential to be managed to reduce production costs – Figure 26. Machinery and labour costs also affect the production costs being one of the reasons why brands locate their production plants in Asian's countries were labour costs are significant lower.

Figure 26 – Cost Drivers in Auto Industry



Source: Automotive Engineering Partners

Changes of Prices

Automotive manufacturers set prices based on their production costs but also the how fuel price affect consumers behaviour – Figure 27. Given the low operating margins an increase of vehicle prices increases the supply of units. Government policies such as, import tariffs and taxes cause a major impact on cars supply, with electric vehicles having tax benefits in most of EU countries. Oil prices and car manufacturers have a negative relationship not affecting only demand but also the supply, being nowadays less importance with new alternative engines.

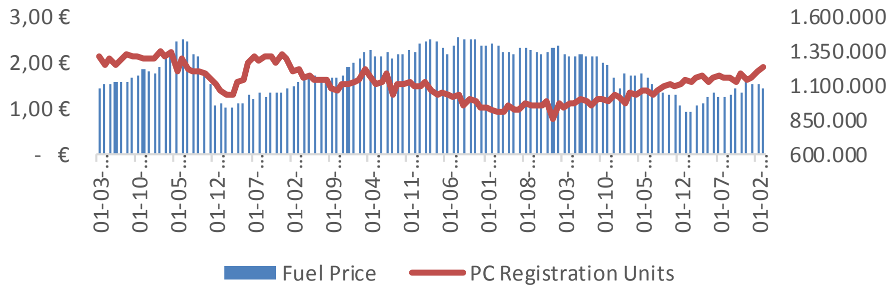
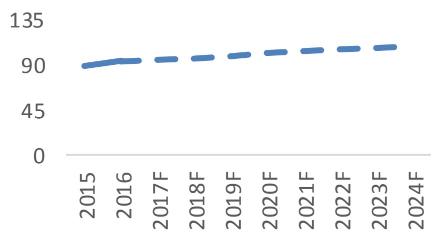


Figure 27 - Fuel price and Passenger Car Registration MoM
Source: OECD data

Network and Dealer Global Production

A spread worldwide network of dealer is essential for companies to reach new markets and segments. Companies through joint ventures gain access the emerging countries where they can increase sales and reduce production costs with lower labours costs, in exchange, they provide the expertise to local manufacturers. Global light vehicle production in 2016 growth by 3% to 91 million units compared to last year. It is expected that grows by 17.6% from 91 million units in 2016 to 107.4 million units in 2023 – Figure 28. This high-expected growth of light vehicles occurs given new emerging countries development in the automobile market and the well spread network of dealer in those countries. In addition, the new alternative engine will contribute.

Figure 28 – Light Vehicle Production forecast (Units: Millions)



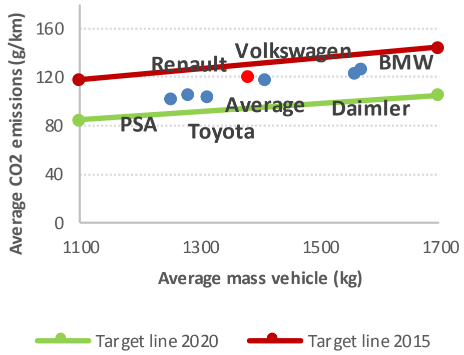
Source: IHS Automotive Global Summary

COMPETITIVE POSITIONING

European regulations lead to digitalization

European automobile industry invests annually €44.7 billion into R&D, much of that in fuel-efficiency technologies. Regulations influence highly in automobile manufacturer's future growth since they must change their production structure with high capital requirements to compete in a new automobile market. European Commission reached an agreement of carbon dioxide (CO_2) emissions reduction to 95 g/km on average per new car by 2020 – Figure 29. This regulation will benefit the implementation of hybrid and electric engines and the automobile manufacturers that have a low CO_2 emission, such as PSA brands that leads cleanest brands worldwide.

Figure 29 - Top-selling EU passenger cars manufacturers groups for 2016



Source: European Environment Agency

Table 2 – SWOT Analysis

Strenghts:	Weakness
- French manufacturer leader and second European; - Strong reputation of Peugeot and Citroen; - Joint-ventures with Dongfeng, Changan (China) and CK Birla (India); - Environmental friendly cars; - Experienced staff.	- Inability to leverage its innovations in the luxury segment (DS launches); - Inexistence in USA and market share decrease in China (16%); - High dependence in European market (65%); -Small Luxury segment when compared with competitors (VW, GM, Toyota and Daimler).
Opportunity	**Threats**
- 50/50 joint venture with Dongfend, Changan and CK Birla for most important emerging countries; - Acquisition of Opel (Europe) and electric engines; - Decrease of fuel prices; - Establish partnership with domestic manufacturers in emerging countries.	- Raw materials and commodities dependence; - Strong competition among rivals: VW, Toyota, Renault, Ford; - Alternative engines – Technology efficiency improvements; - Exchange rates.

European and Chinese Rivalry

Manufacturer's competition for sales and margins are the hugest challenge nowadays given the entire changing scheme in production chain. New engines, environment regulation and matured markets makes one the key challenges of PSA Group. European market for PSA will be the key opportunity to become the largest manufacturers, after the Opel acquisition, having the needed to become even more efficient to achieve higher operating margins. Regarding the environment regulations, PSA is the brand manufacturer better positioned to achieve 2020 target.

However, in the Chinese market the situation is different, with more than 500 brands operating, the PSA Group have a poor position on the top selling brands (20th selling 2016), having the necessity to supply vehicles with more quality components to achieve higher market share in premium market, maintaining the small and lower medium size vehicle supply. Moreover, the company must be committed to develop electric cars to compensate the generalized decline of combustion engines – Figure 30. (Appendix 8)

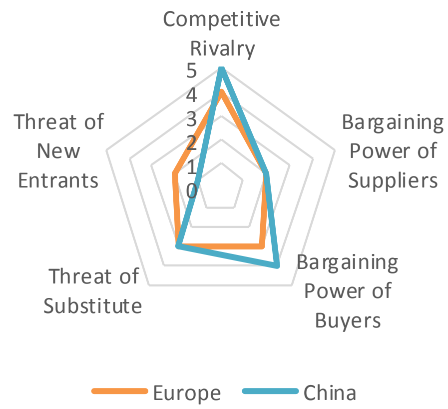


Figure 30 - Porter's Five Forces

Source: Student's analysis

Global Product Launches

Automotive Industry forecasts indicates a clear growth over the following years, which indicates higher operating margins for auto companies. Emerging countries will take a major place on that growth, making essential to big manufacturers swift their products launch adjusted to buyers' preferences. PSA strategy to achieve brands' global ambitions plans to launch 121 new products for the next 4 years. VW Group sustainable strategy promise 30 new electric models by 2025 and Renault Group considered India as a priority market, planning to launch at least one new model for the next five years, becoming the number one European brand.

Competitors Strategies

- Volkswagen AG

European leader and World second largest car manufacturer represents 22.5% of European market share and 13.5% worldwide. VW Group is one of the key pillar of world automobile industry with a strong presence in every markets which affects other manufacturer's strategies. VW main Strategy 2025, consists in four target dimension, excited customers, excellent employer, role model for environment and competitive profitability. Also it is projected to increase distribution ratio for 30% and a ROI over 15%.

- Renault & Nissan

Before PSA and Opel transaction, Renault was the second largest car manufacturer in Europe. Renault-Nissan partnership are one of the largest worldwide manufacturer representing 9% of worldwide market share. Currently Renault SA, have 5 brands in their portfolio, Renault, Dacia, Lada, Alpine and Renault Samsung Motors. The partnership, over the last years had highly invested in electric vehicles, being nowadays the undisputed leader in zero-emissions mobility – Figure 31. It is assumed by leadership of the company that the main strategy remain constant, boosting innovation for the vehicle future, launch at least 10 models with autonomous drive by 2020.

- Fiat Chrysler Automobiles (FCA)

The company comprises 12 brands with a wide range of vehicle segments and it represents 6.9% of European market share. The main strategy divides by their segments, mass-market vehicles, Maserati and global luxury brands. Actual strategy of FCA, 2014-2018 focus on the globalization of Jeep and Alfa Romeo, volume growth, continued platform convergence and cost efficiencies. Also the leadership is focused in improving their capital structure after the separation of Ferrari.

Figure 31 – Competitors Key Figures

Competitors	Market Share	Zero-Emission vehicles Sales (thousands)	Average emissions CO2/km
PSA	17,1%	4,2	**102,4**
VW	**22,5%**	9,2	118,26
Renault-Nissan	14,4%	**49,8**	105,3
FCA	6,9%	1,3	116,3

6. From Fossil to Electric

Cars powered by gasoline and diesel are major polluters. The Volkswagen emissions scandal shown worldwide, that faith in diesel as a more environmentally friendly fuel was a flop. UK joined France in pledging to end the sale of new gas and diesel cars by 2035. All new cars sold in Europe will be battery-electric after 2035, driven by government support, falling battery costs and economies of scale – Figure 32.

Nowadays, the cost of ownership for an electric car are more expensive than diesel/petrol cars, due the high cost of battery costs and low distance concern.

Drivers' most concern is maximum length distance batteries allow, being 100-200 km today, but expected to reach 600 km over the next decade. Majority of consumers requires 400 km range from Battery-Electric vehicles to shift from diesel/petrol cars – Figure 33.

However, the potential shift to electric cars underpinned by falling battery costs are being study by carmakers as Volvo, after 2019 will only launch electric and hybrid. VW, Daimler and BMW despite their intentions to challenge the EV leader, Tesla, they are years above, since only BMW, i3, isn't based on a combustion-engine car. Currently Tesla, is selling vehicles with a range of more than 400km for 91k € and in will began to delivery in EU, Model 3 for 35k €.

Source: ING Bank – Breakthrough of electric vehicle threatens European car industry

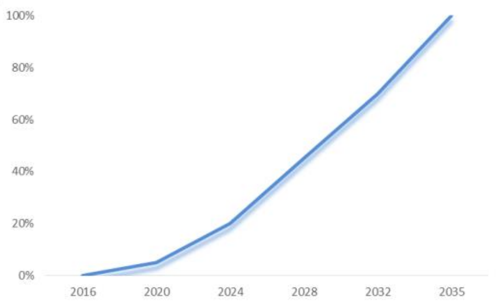


Figure 32 - Share of BEV new registration in Europe

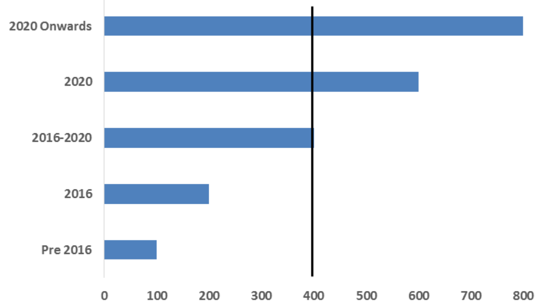


Figure 33 - Range of BEV (Units: Kilometers)
Source: ING Survey with over 52,000 Dutch

European car manufacturers face the challenge of the century, lose their competitive advantage of the internal combustion engine development to have lower opportunities in electric powertrains. Pressure on electric motors and batteries innovations will make their margins squeeze, making already this segment dominated by North-America and Asia, in which Europe represent a minor role – Figure 34.

Despite the minor role of Europe market, most of European carmakers have their strategies defined to gain their share market on these new market – Table 6. The most ambitious European carmaker is Volkswagen with forecasts of 2-3 million annual electric car sales by 2025 which corresponds to 30 % of today's sales challenging the sector leader Tesla.

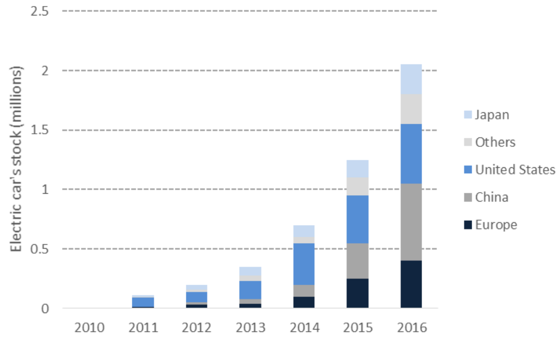


Figure 34 - Evolution of the global electric car stock
Source: IEA – Global Electric Vehicle Outlook

OEM	Announcement
Tesla	0.5 million annual electric car sales by 2018 1 million annual electric car sales by 2020
Volkswagen	1 million annual electric car sales by 2020 2-3 million annual electric car sales by 2025
Renault-Nissan	1.5 million cumulative sales of electric cars by 2020
Volvo	Launch only cars with electric/hybrid after 2019 1 million cumulative electric car sales by 2025
BMW	0.1 million electric car sales in 2017 and 15-25% of the BMW Group's sales by 2025
Daimler	0.1 million annual electric car sales by 2020
PSA Group	4 electric vehicles launched by 2019

Table 6 – OEM's electric vehicles strategy
Source: Student Analysis

7. Valuation

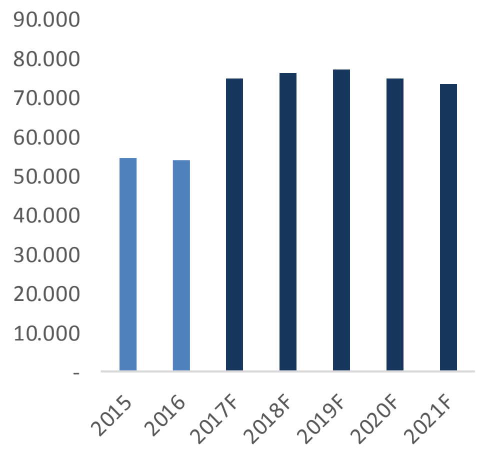
Peugeot SA Valuation Price is €20.67, at 20 July of 2017YE, using two methods. Discounted Cash Flow (DCF) approach give a target price of €19.76 with an upside potential of 3.75%, with a **REDUCE** recommendation. With another valuation method, Relative Valuation through multiples supports our first approach with a target price of €21.57 which is consistent with a recommendation of **REDUCE**. Both valuation methods allow us to consider PSA share well valued given the price of €19.05 at 20th July of 2017 – Figure 34.

Discounted Cash Flow Valuation Method: Free Cash Flow to the Firm

Using a DCF valuation it was achieved a target price of € 19.76, with this valuation method determines the value of a share and cash flow available for distribution for shareholders. Using the WACC rate as a discounted rate to discount future FCFF, allows to determine the Enterprise Value of the company minus the market value of Debt reaching the market value of Equity.

Forecasting company's financial statements for the next 5 years combined with forecasted discounted rate permitted to compute FCFF. However, there are several items essential with influenced the FCFF.

Figure 35 - Revenue Forecast (units: Million Euros)



Revenue

PSA Group has three automotive brands with different car-segment and customer type. Also within the five brands, each of them has a different market share between countries. Despite automotive manufacturer, there other forms of revenue as, components parts and financial services. These diversified forms of revenue make essential to forecast revenue by segments – Figure 35. Sales is expected to increase in the first three years and decrease afterward, mainly given automotive business line, due the lack of efficient transition to electric cars manufacturer.

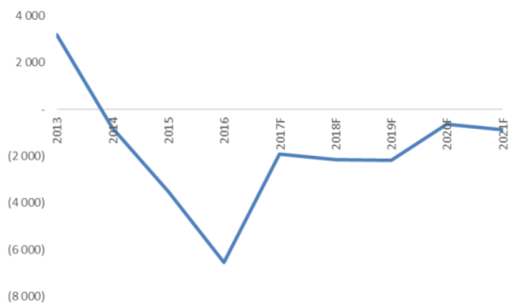
Cost of goods sold (COGS)

In the last 4 years, COGS account for an average of 80% of revenues, however Opel/Vauxhall historical average is 86% forcing the COGS margin of 83% of revenues. This is the key cost of automobile manufacturers, containing costs for developed vehicles and vehicles in progress. The forecast for this item it to decrease over years with Mr. Tavares efficiency plan for the new acquired.

Net Debt

It a debt outstanding of €3.3Bn maturing at 2033 and without any information of intent to issue more debt, Peugeot SA has a negative net debt due the high value of cash accounts and it is expected to grow over the previous years - Figure 36. This unusual net position allows the company to restart to pay dividends and realize investment activities to create additional value.

Figure 36 – Net Debt (Units Million Euros)



Capital Expenditures, Depreciation and Amortization (CAPEX, D&A)

Due Opel/Vauxhall integration on PSA Group, both tangible and intangible assets will increase their accounting value but not due capital expenditures. In 2016, PSA Group expend over €3,5 billion and is expected to grow linked to revenues by 7% annually. Regarding the depreciation rate, it is projected to be 5.1% also connected to revenues.

WACC Assumptions

Weighted average cost of capital method was used to compute the cost of equity and it represents the rate of return required for debt and equity using the weights of equity and debt of PSA's capital structure. A risk-free rate of 2% in the terminal years based on a historical years AAA Eurozone bonds and a market risk premium of 6.4% - Table 7. Also, was assumed a leverage beta of 1.2 based on daily data and a linear regression between CAC Index and Peugeot SA's share. The cost of debt is assumed to be 5.1% based on PSA debt level and an effective tax rate of 34% in 2017 decaying to 28% afterwards. PSA Group has an unusual capital structure with debt ratio of 31.70% decaying to 30% in 2021, but for the terminal year is assumed that it will convey to competitors (VW, Renault, Ford, Toyota, etc.) capital structure.

The WACC rate increases over the forecasted period due the deleveraging procedure, making the WACC assumed in perpetuity being 5.41% After Opel/Vauxhall being fully integrated and not being expected another expansion in large scale, PSA Group perpetuity growth rate of 1.25% is assumed for the terminal period.

Table 7 – WACC Assumptions

COST OF EQUITY	
Risk Free Rate	2,00%
Market Risk Premium	6,23%
Beta Leverage	1,2
Cost of equity [Rf+beta(Rm-Rf)]	9,48%
COST OF DEBT	
Cost of debt	5,10%
Marginal tax rate	28%
After-tax cost of debt	3,67%
CAPITAL STRUCTURE	
Weight of Equity	30%
Weight of Debt	70%
WACC	5,41%

Source: Student's analysis and estimates

Dividend Policy

The company does not have a dividend distribution policy in past. Facing financial issues over the last years, made captive dividend distributions to ensure a solid financial position evolution. However, Mr Tavares announced the introduction of a dividend policy based on a payout ratio of 25% with effect from the 2016 financial year, representing almost €500 Millions paid in 2017.

Selection of Peers

A four-step method was applied to determine the most adequate peers of PSA Group - Appendix 10. Starting with companies with a business structure similar, Automotive and Finance Division. Also revenue range between €50M to €100M and profitability indicators comparison which lead to final peer selection who are VW, Nissan, Renault and BMW - Table 8.

Relative Valuation Approach

Based on a multiple valuation techniques allows to achieve a most accurate result of DCF model. The forward multiples EV/EBITDA and EV/SALES permited to achive a target price of €21.67, corresponding a upside potential of 13.75% from the closing price €19.05. This multiple recommend Reduce – Table 9.

The P/E multiples were not used due the misstament of stock value of comparables and it would affect Group PSA valuation.

Table 8 – Peer Analysis

Company	Peer?
PSA	
Fiat	NO
VW	YES
Renault	YES
BMW	YES
Daimler	NO
Hyundai Motor	NO
Nissan Motor	YES

Source: Student's analysis

Table 9 – Forward Multiple

	EV/EBITDA
PSA	3.5
VW	2.9
Nissan	4.2
Renault	6.3
BMW	3.2
Average	4.15

Source: Bloomberg and Student's analysis

8. Financial Analysis

Ratios	Unit	2015	2016	2017F	2018F	2019F	2020F	2021F
PROFITABILITY RATIOS								
Gross Profit Margin	%	18.6%	19.1%	16.5%	17.0%	17.5%	17.8%	18.0%
EBITDA Margin	%	5.00%	5.99%	6.13%	4.88%	4.82%	3.55%	3.50%
EBIT Margin	%	3.61%	4.83%	5.10%	4.15%	4.10%	2.83%	2.79%
Net Profit Margin	%	2.20%	3.98%	3.87%	3.41%	3.34%	2.39%	2.33%
ROA	%	2.4%	4.8%	4.8%	4.6%	4.4%	3.2%	3.1%
ROE	%	9.8%	14.7%	14.1%	14.6%	13.0%	9.0%	8.6%
LIQUIDITY RATIOS								
Current Ratio	times	0.85	1.04	1.12	1.13	1.17	1.15	1.13
Quick Ratio	times	0.67	0.83	0.87	0.88	0.92	0.90	0.89
Cash Ratio	times	0.47	0.59	0.62	0.60	0.63	0.64	0.63

Overview

The projected financial condition of the group faces hard challenges, it is projected a jump in their P&L volumes, due Opel acquistion. However, due their lack of production efficiency when compared to Group PSA and main competitores will delay them. Also, electric cars market will affect negatively mainly because Group PSA not shift their production and development to electric-engines and battery.

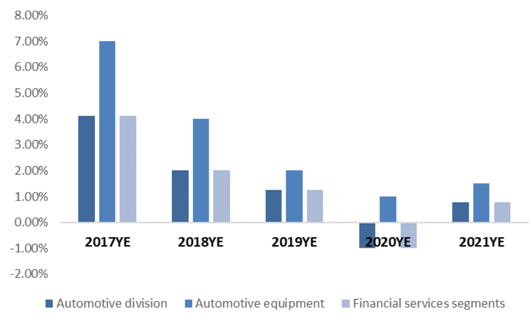


Figure 37 - Segments growth projections

Segments impact

Automotive division, which comprises production and sales of passenger and light commercial vehicles continnuos to be the main revenue's source was it common in all car manufacturers. It is projected a increase only in 2017YE but decaying afterwards due electric cars booming market.

Faurecia which represents Automotive equipment division, had main over the years their revenue volume, supplying other brands. Financial division serve as an intermediarie to finance sales of vehicles, which follows automotive division growth – figure 37.

Financial Position

Since 2013, cash flow from operations had been rising from € 757 millions to € 6,470 millions in 2016. These success was possible by a more accurate management of operations is mainly given cultural changes imposed by CEO, Carlos Tavares. It is projected to decay in 2017YE to € 4,680 millions because integration Opel operation's will need time to create synergies – Figure 38.

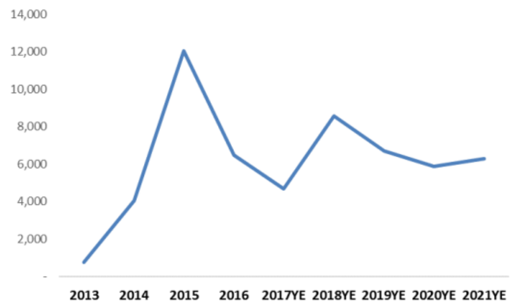


Figure 38- Cash flow Operations

Gross Profit and EBITDA margin

To evaluate the efficiency of a car manufacturer is common to analyse gross profit margin and EBITDA margin, it allow to understand the efficiency of production and also a clear view of company's operating profitability. Regarding gross profit margin, it allows to understand how much money is left from revenues. It permitt to assess the group's financial health – Figure 39.

Distribution of dividends

Poor financial results made the company not distribute dividends since 2010, however financial results start getting better in 2014. But Carlos Tavares and their management team decided to cut off dividends until long-term strategies been correctly applied. "Push to Pass" strategy came back the dividend payout policy with a 25% payout ratio.

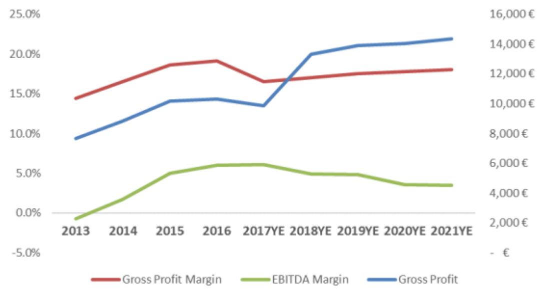


Figure 39 -Gross Profit and EBITDA margin

9. Investment Risks

Market Risk | Macroeconomics (MR1)

Group's earnings are largely dependent on the European market and to a lesser extent the Chinese market. Furthermore, the company's activities in the British, Russian, Brazilian and Argentinian markets exposed it to exogenous risk as currency risk, adverse change in tax/customs regulations and geopolitical events. Despites these threats, global economy is expected to remain stable and non-financial crisis is forecasted which contributed to PSA growth.

Market Risk | Sector (MR2)

Each region has a different growth path and with PSA's highly dependence on European market creates a liability. In 2016, the European economy grow 1.5% and is expected to remain stable next year, while Chinese economy growth 7% and is expected to grow 5% next year. The remaining market where PSA operates are expected to constant. As a counter measure of these risks, internationalization through strategic joint ventures to produce in emerging countries.

Market Risk | Emergence of new demand (MR3)

New forms of mobility such as car-sharing, car-pooling and connected services demanded by customers creates an opportunity to enter a new market, Internet industry. The insufficient control of the advances of the new players creates an exposure of these new business models. This new paradigm affects company's production plans, fluctuating vehicle models' production. However, the company created a program that anticipates changes in market structure which allows to hedge the risk of shortage of engines.

Operational Risk | Customer and Dealer risk (OR1)

The PSA Group is exposed to the risk of customers and dealer default. Sales with a buyback commitment, the risk concerns the difference between the vehicle's estimated resale price and the actual resale price. The company developed a secure payment policy to avoid credit risks for the sales not financed by Banque PSA Finance, which consists on protection mechanisms to fully guarantee the payment of amounts owed by foreign importers.

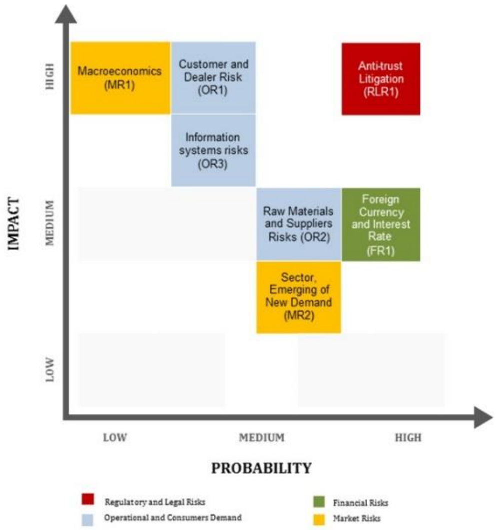
Operational Risk | Raw Materials and Supplier Risk (OR2)

Given that more than 50% of a vehicle's production costs are parts and components purchased from suppliers, it is required technical, quality, logistical and financial performance from suppliers to the PSA Group's overall performance. Suppliers are evaluated, selected and monitored according to a large range criteria. Also, the Purchasing Department assesses the impact of supplier's base on "make-or-buy policy" in order improve profitability. In 2016, around 30% of the purchasing budget was used in raw materials. To counter the supply and economic risk embedded, the company optimize global source, using bulk purchases, searching for alternative materials and implementing financial hedges.

Operational Risk | Information systems risks (OR3)

Company's information systems, including those embedded in vehicles, stem from targeted attacks or malicious activities, anomalies in the behavior of participants, failures or disasters. To counter this risk, PSA uses preventing systems which require several authentication procedures.

Figure 39 - Risk Matrix



Source: Student's analysis

Regulatory and Legal Risk | Anti-trust Litigation (RLR1)

PSA Group is exposed around all countries where operate to legal risks related to competition law. The Group might become subject of investigations by competition authorities and in the event of anti-competitive practices are proven, possible sanctions including administrative fines, criminal penalties or liquidate damages. To avoid these risks, the company has internal and external legal counsel and experts in competition law where it operates.

Financial Risks | Foreign currency and Interest Rate (FR1)

Foreign currency risk is avoided through hedging plans and interest rates risk is mitigated with use of interest swap, cross currency swaps and other interest rate contracts.

Financial Risks | Liquidity (FR2)

PSA Group's continued with its diversified, proactive financing strategy and conservative liquidity policy to meet its general financing needs. To pursuant this policy, it issues bonds and convertible bonds, arranges confirmed lines of credit for its financial security, sells receivables and ensure bank borrowings in France and abroad.

Risks to Price Target & Monte Carlo Simulation

It's essential to perform a sensitivity analysis and a monte carlo simulation to assess the investment risks and its influence on the target price of PSA. The factors test was the WACC, terminal growth and PSA sales forecast and.

		Changes in WACC						
Changes in terminal growth	**19.76**	3.25%	3.85%	4.45%	**5.05%**	5.65%	6.25%	6.85%
	0.50%	22.50	20.69	19.42	18.50	17.78	17.22	16.76
	0.75%	23.54	21.38	19.92	18.87	18.07	17.45	16.95
	1.00%	24.81	22.20	20.49	19.29	18.39	17.71	17.16
	1.25%	26.40	23.17	21.14	**19.76**	18.75	17.99	17.38
	1.50%	28.45	24.34	21.91	20.30	19.15	18.30	17.63
	1.75%	31.17	25.80	22.82	20.92	19.60	18.64	17.90
	2.00%	34.99	27.65	23.91	21.64	20.12	19.02	18.20

Source: Student Analysis

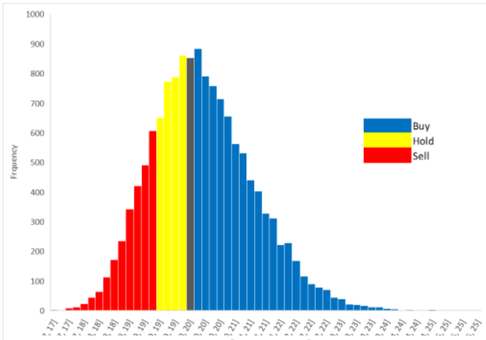


Figure 40 - Monte Carlo Simulation

Appendices

Appendices 1: Balance Sheet Statement

1.1 – Projected Balance Sheet Statements

in million Euros	2015	2016	2017F	2018F	2019F	2020F	2021F
NON CURRENT ASSETS							
Goodwill	1,382	1,514	1,519	1,519	1,519	1,519	1,519
Intangible assets	4,769	5,454	5,890	7,576	7,955	8,353	8,771
Property, plant and equipment	10,894	11,293	11,532	11,776	12,026	12,281	12,541
Investment in companies at equity	2,637	3,014	3,014	3,053	3,099	3,149	3,203
Other non-current financial assets	709	722	730	739	751	763	776
Other non-current assets	1,083	1,375	1,390	1,408	1,429	1,452	1,477
Deferred tax assets	581	593	600	608	617	627	637
Total Non Current Assets	**22,055**	**23,965**	**24,675**	**26,679**	**27,395**	**28,143**	**28,924**
CURRENT ASSETS							
Loans and receivable - finance companies	458	346	346	1,565	1,587	791	798
Short-term investments - finance companies	96	103	112	113	115	117	119
Inventories	3,996	4,347	5,143	6,698	6,749	6,705	6,748
Trade receivable - manufacturing and sales companies	1,555	1,541	1,660	2,174	2,204	2,196	2,217
Current Taxes	119	164	214	217	220	224	227
Other receivables	1,838	1,851	2,166	2,838	2,877	2,867	2,895
Current financial assets	114	628	715	724	735	747	760
Financial Investments	352	110	165	167	170	172	175
Cash and cash equivalents	10,896	12,098	13,032	16,374	17,517	17,645	17,359
Total Current Assets	**19,424**	**21,188**	**23,553**	**30,870**	**32,174**	**31,464**	**31,299**
Total assets of continuing operations	41,479	45,153	48,228	57,549	59,569	59,607	60,223
Total assets of operations held for sale or to be continued in partnership	7,631	-	-	-	-	-	-
Total Assets	**49,110**	**45,153**	**48,228**	**57,549**	**59,569**	**59,607**	**60,223**
EQUITY							
Share Capital	808	860	860	860	860	860	860
Treasury stock	(238)	(238)	(238)	(238)	(238)	(238)	(238)
Retained earnings and other accumulated equity, excluding minority interest	9,985	12,035	13,305	14,775	16,231	16,534	17,107
Minority interest	1,664	1,961	2,423	2,957	3,487	3,864	3,883
Total Equity	**12,219**	**14,618**	**16,350**	**18,354**	**20,339**	**21,020**	**21,612**
NON CURRENT LIABILITIES							
Non-current financial liabilities	4,267	4,526	5,104	6,102	5,796	5,205	4,924
Other non-current liabilities	3,487	3,288	3,324	3,367	3,418	3,473	3,532
Non-current provisions	1,278	1,429	1,445	1,464	1,485	1,509	1,535
Deferred tax liabilities	969	895	905	917	930	945	961
Total non-current liabilities	**10,001**	**10,138**	**10,778**	**11,849**	**11,630**	**11,132**	**10,951**
CURRENT LIABILITIES							
Financing liabilities - finance companies	354	421	426	431	438	445	452
Non-transferred financing liabilities of operations to be continued in partnership - finance companies	2,299	-	-	-	-	-	-
Current provisions	3,197	3,374	3,358	4,400	4,460	4,445	4,487
Trade payables	8,849	9,352	9,977	12,994	13,093	13,008	13,092
Current taxes	164	172	174	176	179	182	185
Other payables	4,880	5,417	5,372	6,997	7,050	7,004	7,049
Current financial liabilities	3,215	1,661	1,792	2,348	2,381	2,372	2,395
Total current liabilities	**22,958**	**20,397**	**21,100**	**27,346**	**27,600**	**27,455**	**27,660**
Total liabilities of continuing operations	32,959	30,535	31,878	39,195	39,230	38,587	38,611
Total transferred liabilities of operations held for sale or to be continued in partnership	3,932	-	-	-	-	-	-
TOTAL EQUITY AND LIABILITIES	**49,110**	**45,153**	**48,228**	**57,549**	**59,569**	**59,607**	**60,223**

Source: Company data and student estimates

1.2 – Common-Size – Projected Balance Sheet Statements

in million Euros	2015	2016	2017F	2018F	2019F	2020F	2021F
NON CURRENT ASSETS							
Goodwill	2.8%	3.4%	3.1%	2.6%	2.5%	2.5%	2.5%
Intangible assets	9.7%	12.1%	12.2%	13.2%	13.4%	14.0%	14.6%
Property, plant and equipment	22.2%	25.0%	23.9%	20.5%	20.2%	20.6%	20.8%
Investment in companies at equity	5.4%	6.7%	6.2%	5.3%	5.2%	5.3%	5.3%
Other non-current financial assets	1.4%	1.6%	1.5%	1.3%	1.3%	1.3%	1.3%
Other non-current assets	2.2%	3.0%	2.9%	2.4%	2.4%	2.4%	2.5%
Deferred tax assets	1.2%	1.3%	1.2%	1.1%	1.0%	1.1%	1.1%
Total Non Current Assets	**44.9%**	**53.1%**	**51.2%**	**46.4%**	**46.0%**	**47.2%**	**48.0%**
CURRENT ASSETS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Loans and receivable - finance companies	0.9%	0.8%	0.7%	2.7%	2.7%	1.3%	1.3%
Short-term investments - finance companies	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Inventories	8.1%	9.6%	10.7%	11.6%	11.3%	11.2%	11.2%
Trade receivable - manufacturing and sales companies	3.2%	3.4%	3.4%	3.8%	3.7%	3.7%	3.7%
Current Taxes	0.2%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Other receivables	3.7%	4.1%	4.5%	4.9%	4.8%	4.8%	4.8%
Current financial assets	0.2%	1.4%	1.5%	1.3%	1.2%	1.3%	1.3%
Financial Investments	0.7%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
Cash and cash equivalents	22.2%	26.8%	27.0%	28.5%	29.4%	29.6%	28.8%
Total Current Assets	**39.6%**	**46.9%**	**48.8%**	**53.6%**	**54.0%**	**52.8%**	**52.0%**
Total assets of continuing operations	84.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total assets of operations held for sale or to be continued in partnership	15.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Assets	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
EQUITY							
Share Capital	1.6%	1.9%	1.8%	1.5%	1.4%	1.4%	1.4%
Treasury stock	-0.5%	-0.5%	-0.5%	-0.4%	-0.4%	-0.4%	-0.4%
Retained earnings and other accumulated equity, excluding minority interest	20.3%	26.7%	27.6%	25.7%	27.2%	27.7%	28.4%
Minority interest	3.4%	4.3%	5.0%	5.1%	5.9%	6.5%	6.4%
Total Equity	**24.9%**	**32.4%**	**33.9%**	**31.9%**	**34.1%**	**35.3%**	**35.9%**
NON CURRENT LIABILITIES							
Non-current financial liabilities	8.7%	10.0%	10.6%	10.6%	9.7%	8.7%	8.2%
Other non-current liabilities	7.1%	7.3%	6.9%	5.9%	5.7%	5.8%	5.9%
Non-current provisions	2.6%	3.2%	3.0%	2.5%	2.5%	2.5%	2.5%
Deferred tax liabilities	2.0%	2.0%	1.9%	1.6%	1.6%	1.6%	1.6%
Total non-current liabilities	**20.4%**	**22.5%**	**22.3%**	**20.6%**	**19.5%**	**18.7%**	**18.2%**
CURRENT LIABILITIES							
Financing liabilities - finance companies	0.7%	0.9%	0.9%	0.7%	0.7%	0.7%	0.8%
Non-transferred financing liabilities of operations to be continued in partnership - finance companies	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Current provisions	6.5%	7.5%	7.0%	7.6%	7.5%	7.5%	7.5%
Trade payables	18.0%	20.7%	20.7%	22.6%	22.0%	21.8%	21.7%
Current taxes	0.3%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%
Other payables	9.9%	12.0%	11.1%	12.2%	11.8%	11.8%	11.7%
Current financial liabilities	6.5%	3.7%	3.7%	4.1%	4.0%	4.0%	4.0%
Total current liabilities	**46.7%**	**45.2%**	**43.7%**	**47.5%**	**46.3%**	**46.1%**	**45.9%**
Total liabilities of continuing operations	67.1%	67.6%	66.1%	68.1%	65.9%	64.7%	64.1%
Total transferred liabilities of operations held for sale or to be continued in partnership	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL EQUITY AND LIABILITIES	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Company data and student estimates

Appendix 2: Income Statement

2.1 – Projected Income Statement

in million Euros	2015	2016	2017F	2018F	2019F	2020F	2021F
Sales Revenue	54,676	54,030	59,744	78,274	79,351	79,074	79,826
Cost of Sales	(44,509)	(43,709)	(49,886)	(64,968)	(65,464)	(65,038)	(65,458)
Gross Profit	**10,167**	**10,321**	**9,858**	**13,307**	**13,886**	**14,036**	**14,369**
Distribution expenses	(1,858)	(1,915)	(2,206)	(3,281)	(3,571)	(4,349)	(4,590)
Administrative expenses	(3,084)	(2,674)	(1,302)	(1,941)	(2,206)	(2,768)	(2,594)
Other operating income	143	117	129	169	172	171	173
Other operating expenses	(3,392)	(3,238)	(3,429)	(5,007)	(5,026)	(4,853)	(5,131)
EBIT	**1,976**	**2,611**	**3,050**	**3,247**	**3,255**	**2,237**	**2,226**
Financial Results	(642)	(268)	(296)	(388)	(394)	(392)	(396)
Profit before tax	1,334	2,343	2,753	2,859	2,862	1,845	1,830
Income tax income/expense	(706)	(517)	(945)	(800)	(801)	(517)	(512)
Share in net earnings of companies at equity	323	118	142	142	108	81	61
Profit after tax from continuing operations	951	1,944	1,950	2,200	2,169	1,410	1,379
Profit (loss) from operations held for sale or to be continued in partnership	251	205	360	472	478	477	481
Consolidated Profit for the period	**1,202**	**2,149**	**2,310**	**2,672**	**2,647**	**1,886**	**1,860**

Source: Company data and student estimates

2.2 – Common-Size – Projected Income Statement

in million Euros	2015	2016	2017F	2018F	2019F	2020F	2021F
Sales Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Sales	81.4%	80.9%	83.5%	83.0%	82.5%	82.3%	82.0%
Gross Profit	**18.6%**	**19.1%**	**16.5%**	**17.0%**	**17.5%**	**17.8%**	**18.0%**
Distribution expenses	3.4%	3.5%	3.7%	4.2%	4.5%	5.5%	5.8%
Administrative expenses	5.6%	4.9%	2.2%	2.5%	2.8%	3.5%	3.3%
Other operating income	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Other operating expenses	6.2%	6.0%	5.7%	6.4%	6.3%	6.1%	6.4%
EBIT	**3.6%**	**4.8%**	**5.1%**	**4.1%**	**4.1%**	**2.8%**	**2.8%**
Financial Results	1.2%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Profit before tax	2.4%	4.3%	4.6%	3.7%	3.6%	2.3%	2.3%
Income tax income/expense	1.3%	1.0%	1.6%	1.0%	1.0%	0.7%	0.6%
Share in net earnings of companies at equity	0.6%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%
Profit after tax from continuing operations	1.7%	3.6%	3.3%	2.8%	2.7%	1.8%	1.7%
Profit (loss) from operations held for sale or to be continued in partnership	0.5%	0.4%	0.6%	0.6%	0.6%	0.6%	0.6%
Consolidated Profit for the period	**2.2%**	**4.0%**	**3.9%**	**3.4%**	**3.3%**	**2.4%**	**2.3%**

Source: Company data and student estimates

Appendix 3: Cash Flow Statement

in millions Euros	2017F	2018F	2019F	2020F	2021F
CF FROM OPERATING ACTIVITIES					
Net Income	2,310	2,672	2,647	1,886	1,860
Amortization, depreciation and impairment losses	2,688	4,266	4,285	4,112	4,390
Change in WC	266	1,961	93	(85)	79
Income Tax	(945)	(800)	(801)	(517)	(512)
Other provisions	360	472	478	477	481
Cash flow from operating activities	4,680	8,570	6,701	5,873	6,298
CF FROM INVESTING ACTIVITIES					
CAPEX	(2,927)	(4,031)	(4,364)	(4,744)	(5,588)
Other assets	-	-	-	-	-
Cash flow from investing activities	(2,927)	(4,031)	(4,364)	(4,744)	(5,588)
CF FROM FINANCING ACTIVITIES					
Dividends paid	(577)	(668)	(662)	(472)	(465)
Equity and reserves	-	-	-	-	-
Financial loans	(296)	(388)	(394)	(392)	(396)
Others	55	(141)	(138)	(136)	(135)
Cash flow from financing activities	(819)	(1,197)	(1,194)	(1,000)	(996)
Cash and cash equivalents at beginning of period	12,098	13,032	16,374	17,517	17,645
Net change in cash and cash equivalents	934	3,342	1,143	128	(286)
Cash and cash equivalents at end of period	**13,032**	**16,374**	**17,517**	**17,645**	**17,359**

Source: Company data and student estimates

Appendix 4: Key Financial Ratios

Ratios	Unit	2015	2016	2017F	2018F	2019F	2020F	2021F
PROFITABILITY RATIOS								
Gross Profit Margin	%	18.6%	19.1%	16.5%	17.0%	17.5%	17.8%	18.0%
EBITDA Margin	%	5.00%	5.99%	6.13%	4.88%	4.82%	3.55%	3.50%
EBIT Margin	%	3.61%	4.83%	5.10%	4.15%	4.10%	2.83%	2.79%
Net Profit Margin	%	2.20%	3.98%	3.87%	3.41%	3.34%	2.39%	2.33%
ROA	%	2.4%	4.8%	4.8%	4.6%	4.4%	3.2%	3.1%
ROE	%	9.8%	14.7%	14.1%	14.6%	13.0%	9.0%	8.6%
LIQUIDITY RATIOS								
Current Ratio	times	0.85	1.04	1.12	1.13	1.17	1.15	1.13
Quick Ratio	times	0.67	0.83	0.87	0.88	0.92	0.90	0.89
Cash Ratio	times	0.47	0.59	0.62	0.60	0.63	0.64	0.63
EFFICIENCY RATIOS								
Days Sales Outstanding (DSO)	days	9.26	10.46	9.78	8.94	10.07	10.16	10.09
Days Inventories Outstanding (DIO)	days	33.58	34.83	34.72	33.26	37.49	37.75	37.51
Days Payables Outstanding (DPO)	days	72.80	79.48	73.98	67.96	76.92	78.49	78.25
Operating Cycle	days	42.84	45.29	44.50	42.20	47.56	47.91	47.60
Cash Cycle Conversion (CCC)	**days**	**-29.96**	**-34.19**	**-29.49**	**-25.76**	**-29.36**	**-30.58**	**-30.66**
Receivable Turnover	times	39.4	34.9	37.3	40.8	36.2	35.9	36.2
Inventory Turnover	times	10.9	10.5	10.5	11.0	9.7	9.7	9.7
Payables Turnover	times	5.0	4.6	4.9	5.4	4.7	4.7	4.7
Fixed Asset Turnover	times	5.0	4.9	5.2	6.7	6.7	6.5	6.4
Total Asset Turnover	times	1.0	1.1	1.3	1.5	1.4	1.3	1.3
CAPITAL STRUCTURE								
Total Debt to Total Equity	times	0.61	0.42	0.42	0.46	0.40	0.36	0.34
Total Debt to Total Capital	times	0.38	0.30	0.30	0.32	0.29	0.26	0.25
Total Debt to Total Assets	times	0.15	0.14	0.14	0.15	0.14	0.13	0.12
Interest Coverage Ratio	times	2.12	4.58	4.84	5.15	6.77	6.18	8.13
Long-term Debt to Equity	times	0.35	0.31	0.31	0.33	0.28	0.25	0.23
Long-term Debt to Total Capital	times	1.73	1.60	1.55	1.60	1.33	1.10	1.04
Long-term Debt to Assets	times	0.09	0.10	0.11	0.11	0.10	0.09	0.08

Appendix 5: Forecasting Assumptions

Items	2017F	2018F	2019F	2020F	2021F	Description
MACROECONOMIC						
Inflation Rate	1,10%	1,30%	1,50%	1,60%	1,70%	Based on IMF World Economic Outlook, April 2017 - European Union
GDP, constant prices	6,58%	6,17%	6,00%	5,90%	5,80%	Based on IMF World Economic Outlook, April 2017 - China
GDP, constant prices	1,98%	1,80%	1,77%	1,75%	1,72%	Based on IMF World Economic Outlook, April 2017 - European Union
INCOME STATEMENT						
Sales Overview	Looking at the overall picture of the economy and then breaking down the various segments into finer details known as Top Down approach, the sales revenue projection is based on the forecast of the different market segments where PSA operates. Price times Volume will not be used, given the different brands and wide range of vehicle classes. Also PSA have other sources of revenue, as spare parts and financial services. Given that, to forecast the sales, the following segments have been breakdown.					
Passenger cars segment	4,00%	1,50%	1,00%	-1,00%	0,65%	This covers the design, manufacturer and sale of passenger cars. It includes Peugeot, Citroen, DS, Opel and Vauxhall brands. For 2017, PSA expects to grow compared to previous year, with higher growth on Chinese market. Source: Bloomberg
Light commercial vehicles segment	4,20%	2,50%	1,50%	-1,00%	0,90%	This covers the design, manufacturer and sale of light commercial cars. It includes Peugeot, Citroen, Opel and Vauxhall brands. For 2017, PSA expects growth their sales with the new brands integration in UK and Germany. Source: Bloomberg
Automotive equipment	7,00%	4,00%	2,00%	1,00%	1,50%	This correspond to automotive equipment maker Faurecia focus on automotive seating, interior systems and clean mobility. Source: Bloomberg
Financial services segments	4,10%	2,00%	1,25%	-1,00%	0,78%	This covers dealer and customer financing, leasing, insurance and reail savings. Banque PSA has decreasing their net banking revenue over the years, but with Opel/Vauxhall integration is expected to remain constant for 2017. Source: Bloomberg
Cannibalization effect	99,58%	99,68%	99,79%	99,89%	100,00%	Integration of Opel/Vauxhall effect on PSA Group overall sales. Source: Student's analysis
Cost of Goods and Services Sold (COGS)	83,50%	83,00%	82,50%	82,25%	82,00%	It is computed based on last 4 years of PSA and Opel percentage of sales and decreasing with efficiency strategy of PSA. Source: Student's analysis and company data
Selling, general and administrative expenses	2,18%	2,48%	2,78%	3,50%	3,25%	This covers personnel costs, indirect selling expenses and warranty costs. It is computed based on a 4 year historical average as a percentage of sales. It will increase due Opel/Vauxhall integration for the first year. Source: Student's Analysis and company data

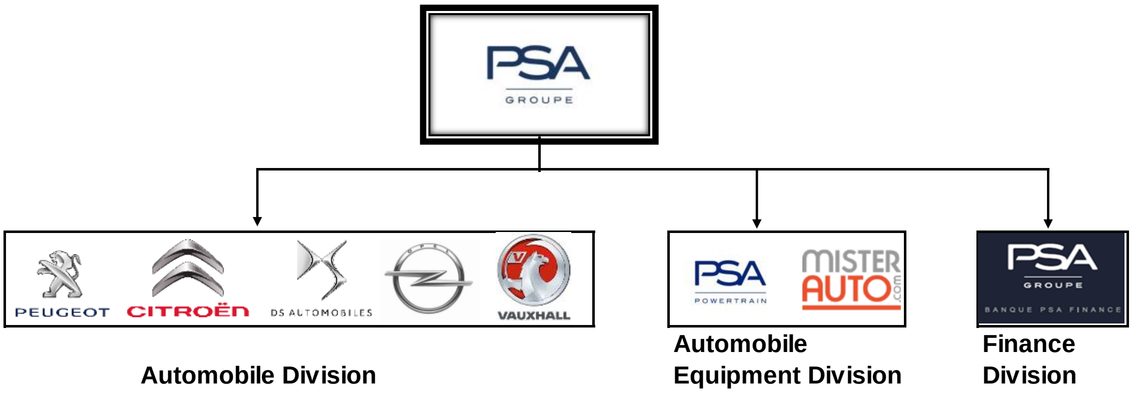
Items	2017F	2018F	2019F	2020F	2021F	Description
INCOME STATEMENT (CONT'D)						
Research and development expenses	3.69%	4.19%	4.50%	5.50%	5.75%	This covers costs of scientific and technical activities, industrial property, and the education and training necessary for the development, production and implementation. It is projected based on a 4 year historical average as a percentage of sales. It expected a small increase due necessity of PSA electric engine.
Non-recurring operating income	0.00%	0.00%	0.00%	0.00%	0.00%	This covers disposals of real estate assets, reversal of impairment loss and provisions. It will remain equal to 2016 nominal value.
Non-recurring operating expenses	0.00%	0.00%	0.00%	0.00%	0.00%	This covers impairment loss , provisions and restructuring costs mainly of workforce reductions. After 2019, due a possible workforce reduction of Opel/Vauxhall staff it is expected a small increase. It is forecasted as a percentage of sales
Financial Results	0%	0%	0%	0%	0%	This covers financial income and expenses. It is expected to remain equal to 2016 nominal value
Income tax	34%	28%	28%	28%	28%	The company uses an income tax rate of 34.32%, including supplementary contributions (31% for the statutory corporation tax in France and a 3.3% for a social surcharge). However the effective tax rate of the corporation is close to 22%. Source: Bloomberg
Share in net earnings of companies at equity	0%	0%	0%	0%	0%	It is expected to remain equal to 2016 nominal value
Other expenses related to the non-transferred financing of operations to be continued in partnership	0%	0%	0%	0%	0%	It is expected to remain equal to 2016 nominal value
Attributable to equity holders of the parent	0%	0%	0%	0%	0%	It is expected to remain equal to 2016 nominal value
Profit (loss) from operations held for sale or to be continued in partnership	0%	0%	0%	0%	0%	It is expected to remain equal to 2016 nominal value
BALANCE SHEET						
Assets						
Goodwill	0.00%	0.00%	0.00%	0.00%	0.00%	It is projected to be equal to 2016 nominal value.
Intangible assets	8.00%	5.00%	5.00%	5.00%	5.00%	This covers capitalized development costs for products under development and for products currently in used and software for internal use. The historical average years growth is 8,00% in 2017 and at 5% afterwards due Opel integration.
Property, plant and equipment	2.12%	2.12%	2.12%	2.12%	2.12%	This covers land and buildings; plant and equipment; leased vehicles; vehicle and handling equipment and assets under construction. It is projected to grow at average rate of last 2 historical years
Investment in companies at equity	1.10%	1.30%	1.50%	1.60%	1.70%	This covers Joint-Ventures and Companies with significant influence. It is projected to grow at inflation rate
Non-current Financial assets	1.10%	1.30%	1.50%	1.60%	1.70%	This covers loans, financial assets classified as at fair value and derivative instruments. It is expected equal to 2016 nominal value
Other non-current assets	1.10%	1.30%	1.50%	1.60%	1.70%	This covers investments in funds. It is to be equal to 2016 nominal value.

Items	2017F	2018F	2019F	2020F	2021F	Description
BALANCE SHEET (CONT'D)						
Loans and receivable - finance companies	0.74%	2.00%	2.00%	1.00%	1.00%	This covers receivables from customer financing and finance leases provided by the finance companies to Peugeot, Citroën and DS. It is projected based on last 2 year historical average as a percentage of sales.
Short-term investments - finance companies	1.10%	1.30%	1.50%	1.60%	1.70%	This covers certificates of deposit held by the securitisation funds. It is projected to be equal to 2016 nominal value.
Inventories turnover	9.7	9.7	9.7	9.7	9.7	This covers raw materials and supplies; semi-finished products and work-in-progress; goods for resale and used vehicles; finished products and replacement parts. It is forecasted based 5 years inventories turnover.
Trade receivable - manufacturing and sales companies	36.0	36.0	36.0	36.0	36.0	It is based on a 4 year historical average as a trade receivable.
Other Receivable	3.63%	3.63%	3.63%	3.63%	3.63%	It is based on a 4 year historical average as a percentage of sales.
Financial Investment	1.10%	1.30%	1.50%	1.60%	1.70%	It is projected to be equal to 2016 nominal
Current Financial assets	1.10%	1.30%	1.50%	1.60%	1.70%	It is projected to be equal to 2016 nominal
Deferred taxes	1.10%	1.30%	1.50%	1.60%	1.70%	It is projected to be equal to 2016 nominal
Current Taxes	1.10%	1.30%	1.50%	1.60%	1.70%	It is projected to be equal to 2016 nominal
Equity						
Share Capital	0%	0%	0%	0%	0%	It is expected to remain equal to 2016 nominal value
Treasury stock	0%	0%	0%	0%	0%	It is expected to remain equal to 2016 nominal value
Retained earnings and other accumulated equity, excluding minority interest	80%	80%	80%	80%	80%	It is expected to remain equal to 2016 nominal value
Minority interest	20%	20%	20%	20%	20%	It is expected to remain equal to 2016 nominal value
Liabilities						
Non-current financial liabilities	8.54%	7.97%	7.35%	6.65%	6.17%	This covers convertible bonds and bonds; Finance lease liabilities and other long-term borrowings. This is forecasted linked to sales because as sales increases more financing is needed
Financing liabilities - finance companies	1.10%	1.30%	1.50%	1.60%	1.70%	This covers debt securities and bond debt; bank borrowings and customer deposits. It is forecasted grow with inflation rate
Non-transferred financing liabilities of operations to be continued in partnership - finance companies	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Current Financial liabilities	3.00%	3.00%	3.00%	3.00%	3.00%	This covers convertible bonds and bonds; Finance lease liabilities and other long-term borrowings; other short-term financing and overdraft facilities. This is forecasted linked to sales because as sales increases more financing is needed
Non-current Liabilities	1.10%	1.30%	1.50%	1.60%	1.70%	This covers liabilities related to vehicles sold with a buyback commitment. It is expected to be equal to 2016 nominal value and adjusted for inflation.
Non-current Provisions	1.10%	1.30%	1.50%	1.60%	1.70%	This covers pensions and other employees benefit obligations. It is expected to be equal to 2016 nominal value and adjusted for inflation
Current Provisions	5.62%	5.62%	5.62%	5.62%	5.62%	This covers warranties, commercial and tax claims which correspond to expected cost of vehicles and replacement parts. It is forecasted as percentage of sales since it is linked to increase in sales
Other payables	10.77%	10.77%	10.77%	10.77%	10.77%	This covers mainly customers prepayments, personnel-related payables and deferred income. Historical average of COGS
Trade Payables	5.0	5.0	5.0	5.0	5.0	It is forecasted as trade payable 4 years historical average
Deferred tax Liabilities	1.1%	1.3%	1.5%	1.6%	1.7%	It is expected to remain equal to 2016 nominal value and adjust for inflation
Current tax Liabilities	1.1%	1.3%	1.5%	1.6%	1.7%	It is expected to remain equal to 2016 nominal value and adjust for inflation

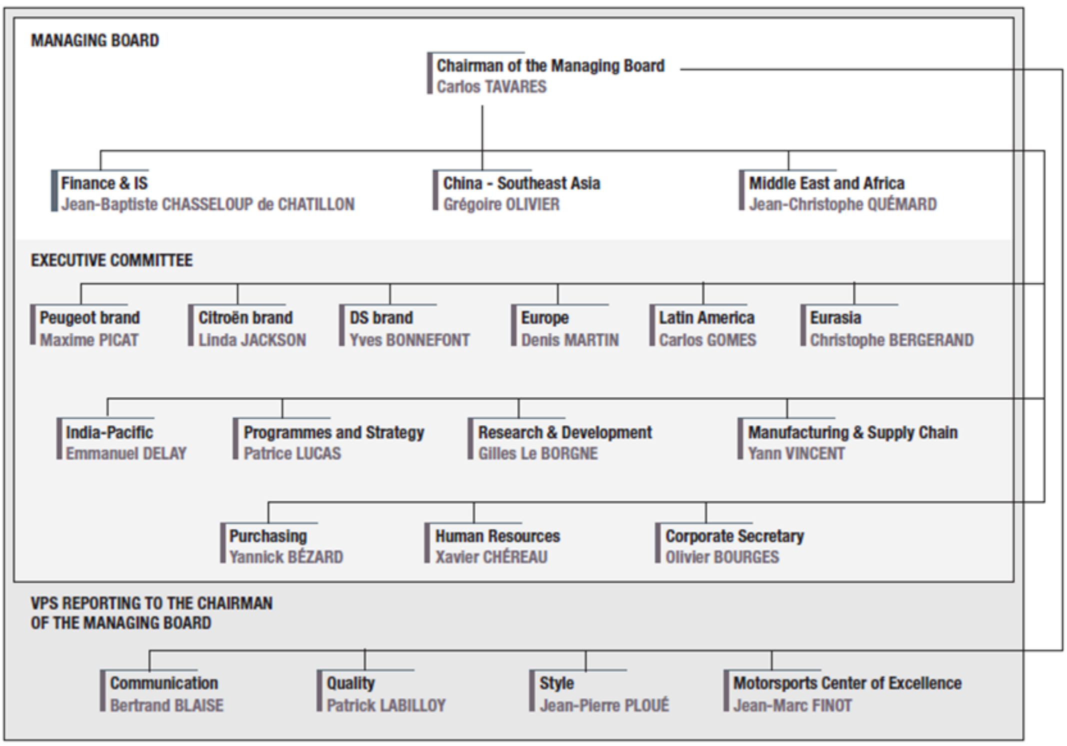
Cash flow Statements						
Dividend payout ratio	25,0%	25,0%	25,0%	25,0%	25,0%	PSA group announced a dividend payout ratio starting 2016.
Depreciation ratio on sales	4,5%	5,5%	5,4%	5,2%	5,5%	It is forecasted as a percentage of sales Source: Bloomberg
Capex ratio on sales	4,9%	5,2%	5,5%	6,0%	7,0%	It is forecasted as a percentage of sales Source: Bloomberg
Valuation						
Risk Free Rate	0,588%	0,588%	0,588%	0,588%	0,588%	AAA Eurozone 10 years bond
Market Risk Premium	5,81%	5,81%	5,81%	5,81%	5,81%	CAPM theory
Beta	1,2	1,2	1,2	1,2	1,2	Reuters and Bloomberg Computations
Cost of debt	7,12%	6,37%	4,98%	3,97%	3,07%	It is projected using book value cost of debt.
Terminal Growth rate	1,98%	1,80%	1,77%	1,75%	1,72%	Besides Opel acquisition, it is forecasted to grow with EURO gdp
Marginal Tax Rate	34%	28%	28%	28%	28%	France tax rate for big corporations
Equity Weight	68%	68%	68%	68%	68%	Source: Bloomberg
Debt Weight	31,70%	31,70%	31,70%	31,70%	31,70%	Source: Bloomberg
WACC	6,65%	6,62%	6,30%	6,07%	5,87%	Student's analysis

<u>Appendix 6: Business and Corporate Structure</u>

6.1: Business Structure



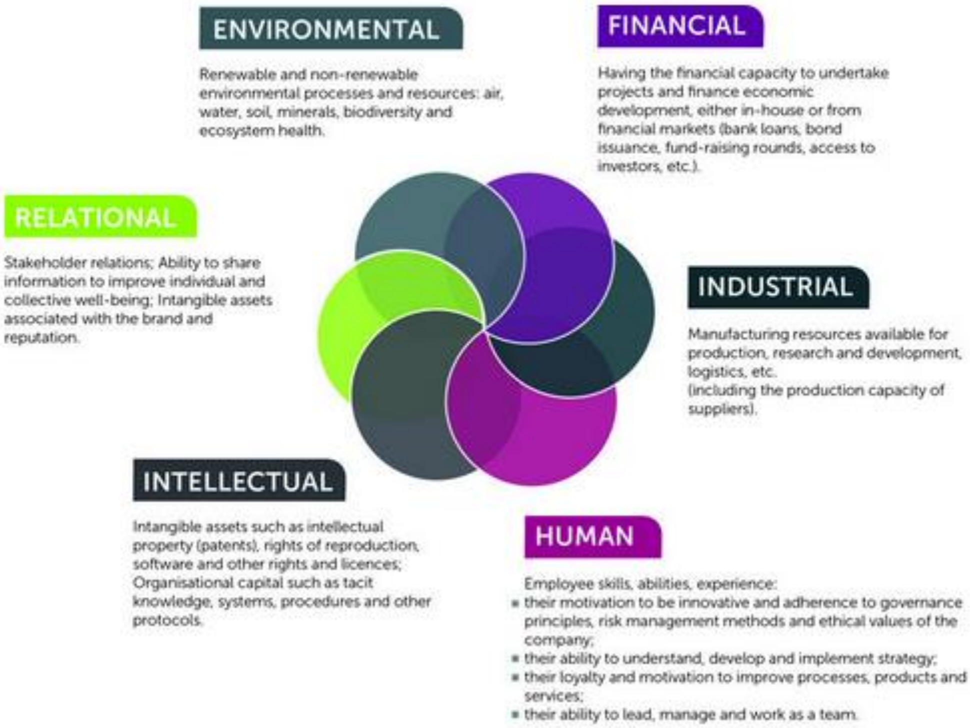
6.2: Corporate Management structure



Source: Company data

6-3: PSA's Corporate Social Responsibility

PSA Group, being the European's second largest carmaker, is a company that creates social, societal and environmental value. In order to develop sustainable and responsible growth, the Group has committed to optimizing the management of all forms of capital.



Source: Company data

Appendix 7: PSA Group and Opel/Vauxhall Synergies

7.1 – PSA & Opel/Vauxhall Partnership already delivering significant results

Cooperation model based on Three Key Pillars	Impact of 3 Joint vehicle Programs from 2017E Onwards
• Joint Purchasing Organization • Joint Product Delevopment & Cross-Manufacturing • Strong Cultural and Engineering Fit	• Opel Crossland X and Citroen C3 Aircross - Launch 2017E (Opel plant) • Opel Grandland X and Peugeot 3008 - Launch 2017E (PSA plant) • B-LCV - Launch 2018E (PSA plant)

7.2 – PSA & Opel/Vauxhall Combination Leads to Mass Market Leadership

Global Sales (MM units)	3.1	+	1.2	=	4.3
European Market Share	10.7% (#3)	+	6.5% (#7)	=	17.1% (#2)
Auto. Revenue (€Bn)	37.1	+	17.7	=	54.8
Auto. EBITDA (€Bn)	4.0	+	0.8	=	4.8

7.3 – Combination to generate Annual Synergies of €1.7Bn and €1.2Bn Working Capital Release

Purchasing	• Scale effects • Technical best practices leading to optimized purchasing • Combination of purchasing functions and European sourcing
R&D	• Convergence of platforms and powertrains • Design to cost • Full digitalization of product development
Manufacturing	• Alignment of industry benchmarks • Plant modernization and improved efficiency
SG&A	• Alignment with industry benchmarks • Multiple areas of joint savings
Capex	• Leveraging gains in manufacturing efficiency and common developments • Optimization of joint capex

- c. €1.7 Bn p.a — Run-Rate Synergies by 2026E
- c. €1.1 Bn p.a — Synergies Expected by 2020E
- c. € (1.6) n — Total Implementation Costs

Appendix 8: Porter's Five Forces

1.1 – Competitive rivalry in EU sector
European Automotive Industry is the 2nd largest market where all manufacturers have some of production plants located, being a region with intensive brand competition for sales and profitability. Western Europe market is expected to remain stable with any significant fluctuation, which contribute for an even more intense struggle to acquire market share. PSA Group after the acquisition of Opel in EU is now the second-largest European manufacturer (18% share) fighting with VW and Renault for sales on a matured market. SIGNIFICANT

1.2 – Competitive rivalry in China and other emerging countries
In contrast with European market, several emerging countries, such as, China and India are booming with expected growth in auto market for 2017 higher than 5%. Given the intensive growth on those countries it becomes a giant opportunities for powerful brands to increase their profitability. In China, domestic brands assume a significant market share (around 40%) however, the best-selling brand is VW. PSA Group (20th position) had in 2016 a huge decrease around 15% making this market very difficult to compete with other domestic and foreign brands.
Another significant issue faced by foreign brands is the high fixed costs due raw materials, high significant investment in production plants representing a high exit barrier, however, through joint ventures with domestic brands those costs are reduced but also the margins. HIGH

2 - Threat of New Entrants EU and China INSIGNIFICANT

Automotive industry needs high capital investment w here it has to build production plants and know ledge to produce engines, fuel and alternative. These need for high capital investment, represent a significant barrier to entry new players since even w ith all capital requirement is needed a strong brand position and a w ell spread distribution systems to consumers buy vehicles. High investment, high fixed costs, stringent environment regulations and licenses represents giant entry barriers for new incoming companies being threat of new entrants a low threat.

3 - Bargaining Pow er of Suppliers EU and China LOW

Auto manufacturers are high dependent on Raw materials becoming very dependent on suppliers. The bargaining pow er of suppliers is low because product differentiation of suppliers is small. Automobile Components are a huge market w ith giant players such as Bosch, Denso, Continental and Faurecia. PSA Group being major shareholder of Faurecia have a direct supplier for their components parts. All these factors represents a LOW bargaining pow er of suppliers.

4- Threat of Substitute MODERATE

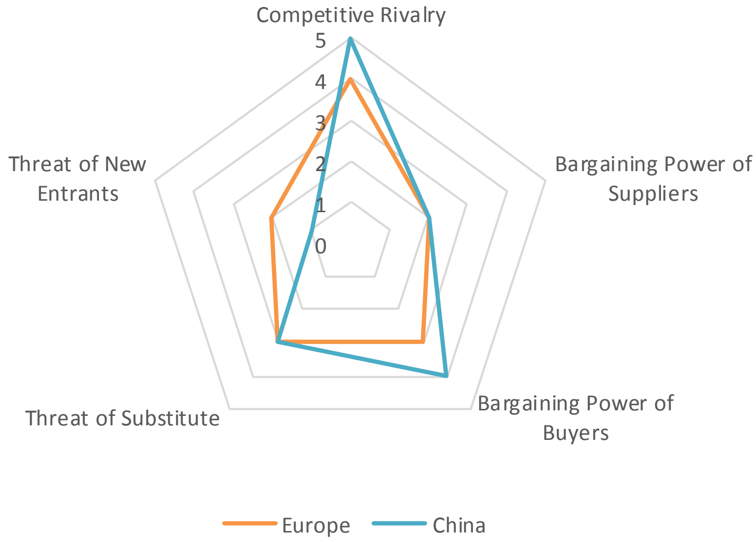
Public transports, bikes, motorcycles and trains are substitutes to transport passengers of PSA. Being cheaper compared to purchase vehicles, no storage costs and no maintenance costs permit these available alternative w ays to go from one place to another. In addition, low cost airlines can be considered substitutes for small and medium distances in countries w ith a w ell spread airports netw ork. How ever, these substitutes to vehicles are not available in certain areas and the comfort of an automobile is still very important for consumers purchasing behavior. Considering all these alternatives, the threat of substitute is MODERATE.

5.1 – Bargaining Pow er of Buyers Europe

European consumers set their preferences for a vehicle based on price, quality and safety giving the pow er to costumers from all different options to purchase and the substitutes buyers have. European buyers w hen compared to Asian buyers are know n to be loyal to brand preferences. PSA supply vehicles for different segments, such as, entry level (Citroën), mid-market (Peugeot) and premium market (DS) w here the core business is entry and mid-market segments w here they lead beside Renault. Buyers that are interested in small and low er medium size vehicle now adays, after Opel acquisition, are very restricted to small amount of brands for the price level. PSA Group also take into account, costumers design and utilities tools preferences w hen it launches a new model. The bargaining pow er of PSA buyers in Europe is Moderate\Significant.

5.2 – Bargaining Pow er of Buyers China

As it has said before, Asian consumer's mainly Chinese buyers are know n for not being loyal to any brand, focusing their preferences mainly on principal factors as price, quality, etc. The threat of substitutes is also moderate in China; how ever, the PSA in China does not have a significant market share to influence consumer decisions, w ith a low er brand penetration such as in Europe. Chinese buyers are relatively young and have less know ledge of cars being especially important for w ell-know n brand given the "trustw orthiness" factor. The bargaining pow er of PSA buyers in China is Significant.



Appendix 9: Peers Selection

The methodology applied to select the comparable companies was first applied taking into account where the companies operate. Firstly, European automotive manufacturers (6 companies) and secondly Asian automotive manufacturers (24 companies) with similar indicator as PSA Group.

European Comparable:
A two-step method was applied to approximate the peers to PSA identity. The first step to select from the comparative companies was companies with business structure similar to PSA Group, with both Automotive Manufacturer and Finance Division, to be perfectly accurate it should be required also Auto Parts production but would reduce to 3 companies. The second filter was companies with more than 1 million unit sales average worldwide in the past 5 years. After both filters applied, it reach a group of 4 comparable companies.

Company	Automotive	Finance	Average Unit Sales	Peer?
PSA	99,5%	0,5%	3.019.251	
Fiat	99,0%	1,0%	3.976.100	✓
VW	87,0%	13,0%	10.121.634	✓
Renault	96,0%	4,0%	2.901.251	✓
BMW	74,0%	26,0%	2.244.351	✓
Daimler	87,0%	13,0%	2.799.128	✓

Asian Comparable:
PSA Group also operate internationally with more focus on Asian Countries which increase the range of comparable companies that operates on Asian market. Given that, it was applied a four-step method to identify the most adequate comparable companies to PSA business structure. The first step applied were for companies that has both Automotive and Finance division. Secondly, companies with a revenue within a range between 50M and 100M which fits to PSA revenue historical volume. Thirdly, it was required that main geographic revenue region are European.
Last but not least step, was required profitability ratios similar to PSA's performance. The ratios considered are ROE, ROA, ROIC.

1ºStep: Business Structure

Company	Automotive	Finance	Average Unit Sales	Peer?
PSA	99,5%	0,5%	3.019.251	
Tata Motors	99%	1%	440.000	✗
Hyundai	85%	15%	4.960.000	✓
Nissan	92%	8%	4.220.000	✓

2ºStep: Revenue Range

Company	Revenue Range: 50M-100M	Peer?
PSA	54M	
Fiat	€111M	✗
VW	€222.5M	✗
Renault	€51M	✓
BMW	€96.8M	✓
Daimler	€157M	✗
Hyundai Motor	€74.2M	✓
Nissan Motor	€98.8M	✓

3º Step: Geographic Revenue

Company	Rest of World	Europe Sales	Peer?
PSA	29%	71%	
Fiat	83%	17%	✗
VW	37%	63%	✓
Renault	36%	64%	✓
BMW	53%	47%	✗
Daimler	59%	41%	✗
Hyundai Motor	68%	32%	✗
Nissan Motor	84%	16%	✗

4º Step: Profitability Ratios

Comparison of Return on Assets (ROA) between comparable Companies

Company	Average ROA	Peer?
PSA	5,25%	
Fiat	1,93%	✓
VW	4,49%	✓
Renault	4,39%	✓
BMW	7,25%	✓
Daimler	7,96%	✓
Hyundai Motor	3,22%	✓
Nissan Motor	4,26%	✓

Note: 5% up and down is considered as an acceptable range

Comparison of Return on Equity (ROE) between comparable Companies

Company	Average ROE	Peer?
PSA	15,03%	
Fiat	11,06%	✓
VW	12,38%	✓
Renault	12,77%	✓
BMW	13,69%	✓
Daimler	15,47%	✓
Hyundai Motor	8,08%	✗
Nissan Motor	11,88%	✓

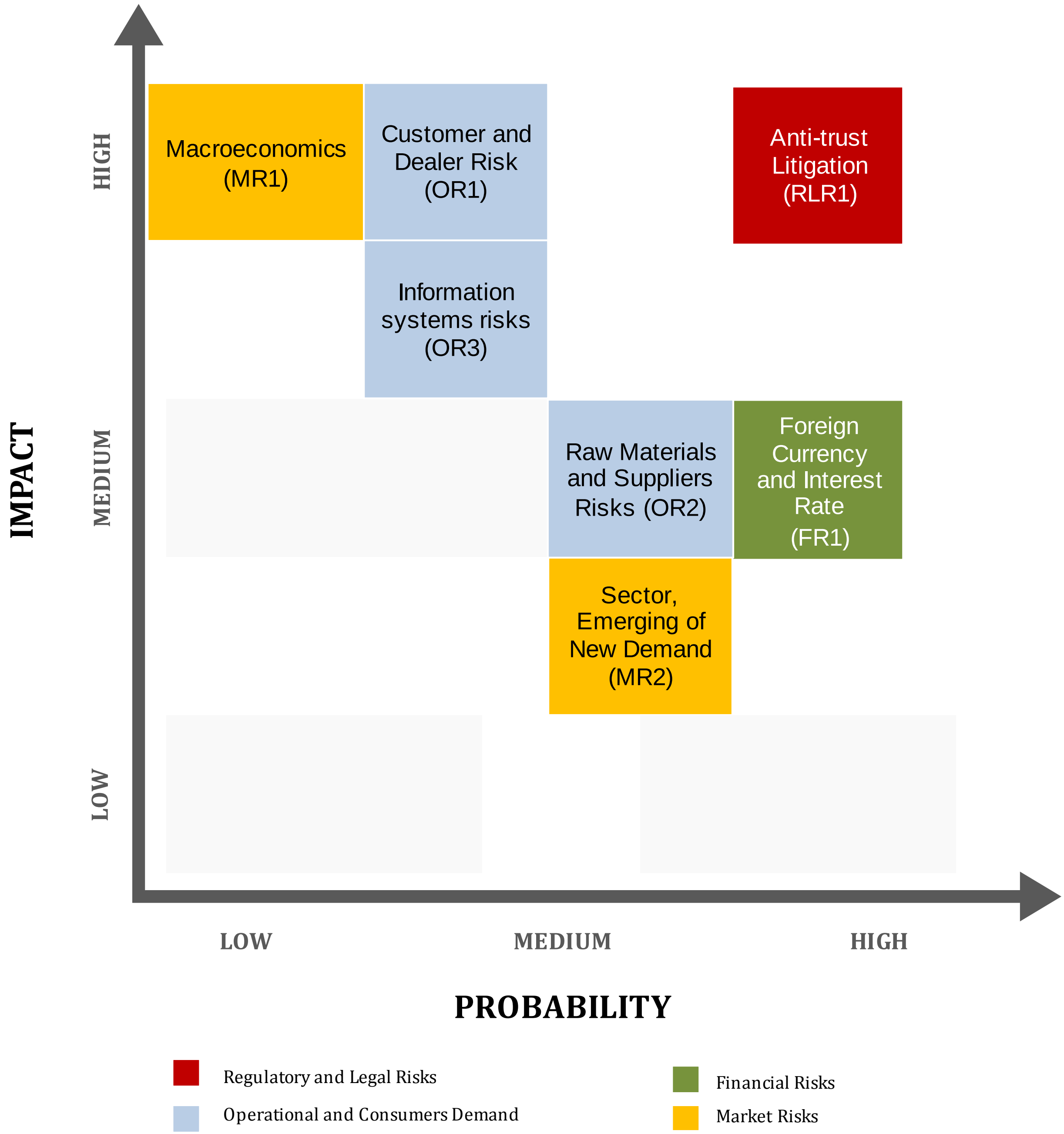
Comparison of Return on Invested Capital (ROIC) between comparable Companies

Company	Average ROIC	Peer?
PSA	10,42%	
Fiat	7,16%	✓
VW	2,34%	✗
Renault	3,60%	✗
BMW	4,87%	✗
Daimler	6,32%	✓
Hyundai Motor	2,82%	✗
Nissan Motor	4,80%	✗

After all steps applied to determine the companies that best fit PSA Group comparable peers, the best candidates comparable are as follow :

Company	Business Structure	Revenue Range	Geographic Revenue	Profitability Ratios	Peer?
PSA					
Fiat	✓	✗	✗	✓	NO
VW	✓	✗	✓	✓	YES
Renault	✓	✓	✓	✓	YES
BMW	✓	✓	✗	✓	YES
Daimler	✓	✗	✗	✓	NO
Hyundai Motor	✓	✓	✗	✗	NO
Nissan Motor	✓	✓	✗	✓	YES

Appendix 10: Risk Matrix



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