

# Towards a new carmaker: Fiat-Chrysler Giuseppe Calabrese

#### ▶ To cite this version:

Giuseppe Calabrese. Towards a new carmaker: Fiat-Chrysler. European Review of Industrial Economics and Policy , 2011, 3. hal-03469072

## HAL Id: hal-03469072 https://hal.science/hal-03469072v1

Submitted on 7 Dec 2021

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Towards a	new	carmaker:	Fiat-Chrysler		
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## 1. Introduction

In the automotive and, more generally, in the industrial arena Fiat Group Automobiles (Fiat) and Chrysler Group LLC (Chrysler) can be considered two permanent case studies. In particular now that they are joining their trajectories. Both companies have gonthrough many crises in more than acentury of existence.

In particular, Chrysler in the last fifteen years has been characterized by three acquisitions/mergers; each can beconsidered agood research field.

In 1998, the successful Chrysler entered into a partnership named a "merger of equals" with Daimler-Benz AG, one of the world's most respected carmakers. From the beginning the Germans were the dominant force in the partnership and as a matter of fact the merger became an acquisition, but they were not able to integrate the two automotive visions in a single company (Gomes et al., 2010)

In 2007 Chrysler became the first carmaker controlled by private investors, Cerberus Capital Management, a deep-pocketed Wall Street private equity group, whereas the continued financial link to Daimler ensured the access to new technology. The new acquisition and arrangement seemed to propitiate several advantages (Belzowski, 2009) buthe product strategy turned out obe afailure.

In 2009 the financial crisis found Chrysler at a re-structuring stage and Fiat was identified as the right partner to develop a product-sharing alliance. In comparison with the previous cases, the main difference is that "money" plays a smaller role. The ongoing merger/acquisition is based more on the barter of technologies from Fiat with Chrysler equities.

Mergers differ from acquisitions because they are the product of mutual consent between the companies and can imply an exchange of shares. Acquisitions involve taking over and they are often viewed as hostile, but, as in the case of Chrysler, they can be welcomed by at-risk companies in search of rescue from imminent bailout. There are different types of mergers and acquisitions: vertical, horizontal, lateral and conglomerate. Fiat-Chrysler falls within the second one since they are seeking to gain access to products and market segments, new or different technologies, skills and distribution channels in order to increase economies of scale, scope and competitive power.

Mergers and takeovers have not by any means proved a panacea for solving industrial problems as many fail to achieve the goals originally envisaged (Cartwright and Shoenberg, 2006). Often the expected gains from expected synergies fail to emerge. As Capron (1999), argues, it is probably easier to achieve synergies in marketing than in innovatory capabilities in manufacturing and production due to products being at different stages in the development cycles. Indeed it might take a long time for real synergies and benefits to emerge fully (Donnelly and Morris, 2003).

The merger-acquisition process is often neither simple nor straightforward and both in the pre-phase and in the post phase mainly depends on leadership of the two companies. The ultimate responsibility lies with the acquiring firm that has three choices: motivate the existing management team, bring in an entirely new team or create a new management team drawn from both firms. Whichever method is adopted it is essential that team members play complementary roles to achieve change whether this be in culture, behavioural patterns, human resource management practices, operating procedures and so forth (Begley and Donnelly, 2011). It is at this juncture that decisive leadership is essential, because as Prittchet, Robinson and Clarkson (1996) argue, failure in post merger strategy implementation often leads to stress and anxiety among the work force at each level.

The reminder of the paper is structured as follow. The next two sections will be report a brief recent history of the two carmakers. Section 4shows the alliance conditions between Fiat and Chrysler and section 5focuses attention on the main factors that could make the merger/acquisition viable. Section 6summarizes the main ideas of the paper.

#### 2. Brief recent history of Fiat

Fiat's trajectory has been marked by many crises and recoveries. The most impressive turnaround occurred at the beginning of the last decade. In 2002 the Italian carmaker was supported by a pool of banks and a quasi bankruptcy was followed by an unexpected renewal. Most scholars tie the success with the engagement of Marchionne in 2004.

After a long stage of managerial and competitive involutions during the 90s and continuous changes in governance (Volpato, 2009), the first years of the 21<sup>th</sup> century have been characterised by a double hierarchical turnabouts: the death of Giovanni and Umberto Agnelli and the agreement with General Motors defined in 2000.

In spite of the fact that Fiat is listed on the Stock Exchange, it is still a tightly controlled family business. Giovanni Agnelli carried more of a charismatic role, whereas Umberto Agnelli an industrial role. The departures were a chance for a radical change.

On the other hand, the agreement with General Motors implied a put option for Fiat to sell the automotive assets after four years at fair market value. As a matter of fact Fiat managers and employees experienced a period of wavering and a sort of two-boss syndrome. In 2005, the acute crisis moved General Motors to disburse the implicit penalty and resolve the agreement.

The immediate intensive pace adopted by Marchionne when he took over management of Fiat impacted deeply on Fiat's structure and industrial strategies. The organisation was streamlined, based on Marchionne's over-demanding work and great leadership.

The closure of the agreement with General Motors made possible a number of limited alliances all over the world (Tata, Ford, Severstal<sup>1</sup>, Suzuki and Chery) and reinforced the assets in Brazil, Turkey and Poland.

Before the last financial crisis, Fiat reported some successful products in terms of sales and profit margins, by launching: the new Fiat Panda, the new Fiat Croma, the

<sup>&</sup>lt;sup>1</sup> Severstal is a heritage from the General Motors alliance.

Fiat Grande Punto, the Alfa Romeo 159and Alfa Romeo Brera, the new Fiat Bravo and above all the new Fiat 500. The customer success can be related to the significant improvement in engineering procedures with higher perceived quality and higher satisfaction, and lower development and manufacturing costs<sup>2</sup> (Volpato, 2009). Nevertheless, apart from Brazil, the main emphasis was on cost reduction rather than research development, and product innovation turned out to be an ephemeral success and mostly limited to the mini and small car segments, traditionally the strength of Fiat, and where the sales network was deep-rooted, that is in Italy.

The delay in upgrading the product portfolio, towards premium priced models and compact-large car segments, was further affected by the financial crisis and induced product obsolescence in most segments. After the end of the government scrapping incentives, the result was the reduction of market share in all European countries. Fiat claimed that the strategy of waiting to launch new models made sense because of the futility of launching many new models in a period of crisis and, as a matter of fact, it can benainly justified by the in progress integration with Chrysler.

Moreover, Fiat was considered too small in comparison to competitors because of its elevated structural costs in Italian plants, that is, low utilisation of production capacity<sup>3</sup>. The first assumption moved Fiat to pursue scale and scope economies by mergers and acquisitions with the production target of 6 million units globally even if many scholars and practitioners disagreed with Marchionne's postulate (Berta, 2009). The strategy was successful with Chrysler but did not hit the mark with Opel because of the opposition of General Motors, German Unions and local German authorities. Today, total production is about 4.0 million passenger cars and light commercial vehicles (Fiat 2.4, Chrysler 1.6).

Fiat dealt with its second weakness through its plan "Fabbrica Italia" that reports the more than optimistic intention of Fiat to double domestic car production to 1.4 million units in 2014 from the 650,000 units built in 2009<sup>4</sup>. The plan is in progress in spite of union conflicts and the European financial crisis as well as the new international investments in Serbia<sup>5</sup> with the national government and in Russia by Fiat alone.

<sup>&</sup>lt;sup>2</sup> That is: platform sharing, emphasis on carryover, time to market reduction, standardisation of modules, coordination with suppliers and adoption of world class manufacturing standards.

<sup>&</sup>lt;sup>3</sup> According to Fiat in 2009 the utilisation of production capacity in Italian plants was (technical definition, 280 days per year/3 shift a day): Mirafiori 64%, Cassino 24%, Pomigliano 14%, Termini Imerese 28%, Melfi 65%. Generally the breakeven point is assumed to be at 80%.

<sup>&</sup>lt;sup>4</sup> In brief, Fiat plans to invest 20 billion euros through 2014 in Italy to improve plants and vehicle development. A reshuffle of models will be carried out between European and North American plants. To make domestic production profitable, Fiat asked unions to increase efficiency by about 70 percent, switching to a three-shift, 280-workday year from the current two shifts and 235 workdays. The plant of Termini Imerese in Sicily will be closed at the end of 2011 and the former plant of Bertone, near Turin, will be integrated into the production system.

<sup>&</sup>lt;sup>5</sup> Fiat's investment in Serbia will reach 850 million Euros by the end of 2011, including the cost of cleaning up and rebuilding the decrepit Zastava facilities, and will employ 2,400 employees. Production capacity at the plant is up to 250,000 units a year. Fiat has been making Punto subcompacts in Serbia since 2009 and plans to keep the production. In 2012 Fiat will launch a new model for the European markets, including Russia. It will be a B-segment, five-seater of between 4.1 meters to 4.25 meters in length in its basic version.

A necessary step to foster more auto alliances was carried out by Fiat at the beginning of 2011. Its industrial businesses were spun off from the holding company and two new companies, Fiat SpA and Fiat Industrial, began trading separately on the Milan stock exchange.

Fiat SpA includes Fiat Group Autos, Maserati, Ferrari, Magneti Marelli, Teksid, Comau, the portion of Fiat Powertrain Technologies that makes engines and transmissions for cars and the stakes in the Chrysler Group. The split will allow Fiat SpA to focus on the growth of the automotive business and it is essential to the integration with Chrysler.

Fiat Industrial includes Iveco, the truck and engine maker; CNH Global, the agricultural and construction equipment manufacturer; and the industrial and marine part of Fiat Powertrain Technologies. The split will allow Fiat Industrial to avoid the evaluation of these activities using the lower multiples of the auto business. For years, financial markets have been asking Fiat to separate its auto business to avoid the conglomerate discount applied to a highly diversified industrial group.

It is evident that the Fiat breakup cannot be limited only to financial requirements but implies also industrial consequences in terms of alliances and joint-ventures.

### 3. Brief recent history of Chrysler

Any understanding of the last fifteen years of Chrysler needs to be encompassed within the major trends of consolidation that occurred in the global automotive industry from the late 1980s onwards in response to increasing market competition and product diversification.

With regards to past trends, the novelty for carmakers regards less geographic integration and more the presence in each market segment by organic growth or acquisition and merger. Theoretically, the former, which was pursued by Toyota when it created Lexus as a separate brand, is slow and expensive, whereas the latter, followed in series of acquisitions made by Ford, Volkswagen and General Motors, offers acheaper and quicker option (Begley and Donnelly, 2011).

In 1998, a successful Chrysler<sup>6</sup> and its subsidiaries entered into a partnership named a "merger of equals" (Kisiel, 1998) with German-based Daimler-Benz AG. Their respective products were for the most part complementary with a model in every product segment for the key European and North American markets, Chrysler would concentrate on the volume market and Daimler on the luxury. The new DaimlerChrysler employed about 428,000 people, and the new group was expected to produce 4.4million vehicles per annum (Business Week, 1999).

However, from the beginning the Germans were the dominant force in the partnership (Gomes et al., 2010). This was seen in the stock valuation of Daimler-Benz at almost twice that of Chrysler, the adoption of Daimler procedures in

<sup>&</sup>lt;sup>6</sup> In that period Chrysler was considered one of the more successful carmakers after surviving the US recession in the early 1990s (Belzowski, 2009). However, the Chrysler strategy was risky, still limited to the North American market and not sustainable in the long run (Köhler, 2009).

engineering<sup>7</sup> and purchasing<sup>8</sup> which were completely different from the ones at Chrysler, and the decision to locate the headquarters of the new group in Germany.

In fact, Daimler subsequently acquired Chrysler, to the surprise of many stockholders, after the retirement of Chrysler CEO Bob Eaton, and in 2000 decided to follow suit by merging with Mitsubishi and Hyundai to avoid the possibility of becoming vulnerable to possible predators (Dicken, 2007; Morris and Donnelly, 2006).

After the merger, Chrysler ran into trouble due to Daimler not being able to incorporate the thinking of a volume-oriented brand such as Chrysler into its corporate thinking which was based on developing expensive vehicles (Belzowski, 2009). In 1998 the American firm was at the top of the US market. Within two years it had spiralled deeply into crisis, racking up \$4.7 billion in operating losses by 2001 as a result of fierce domestic and foreign competition in the light truck and SUV market on which it was overly dependent, a situation that was not helped by heavy price discounting (Begley and Donnelly, 2011).

After a cost-cutting program under CEO Dieter Zetsche<sup>9</sup>, Chrysler returned to profitability for a short time, but in 2007, Dailmer sold an 80.1% stake of the Chrysler Group to the American private equity firm Cerberus for US\$ 7.4 billion<sup>10</sup>, only a small fraction of the US\$ 36 billion Daimler paid in 1998. Cerberus was awarded the deal against other interested equity funds and automakers and suppliers (Renault-Nissan, General Motors and Magna).

The main effort was focused in rebuilding the management structure, but nevertheless, under Cerberus, Chrysler put into the market some of the most poorly rated vehicles in the industry, matched by equally flat sales. The product strategy turned out to be a failure: the perceived value decreased with the use of cheap materials; the engineering teams stopped working and some divisions lost more than 200 people; the product plan was blocked and also the integration between platform teams. From 2000 2009, the number of Chrysler employees fell 41% to little more than 47,000.

The financial crisis found Chrysler at a critical stage and ushered the storied carmaker into bankruptcy reorganisation under the Chapter 11 code. On the basis of a potential dramatic aftermath in the case of a significant disruption of US carmakers (Scott, 2008), the Obama administration determined to protect jobs and salvage the automotive industry, even at the expense of secured lenders. The Obama administration recognised that Chrysler had significant problems: few fuel-efficient vehicles; few small and mid-sized cars; poor initial quality; a weak brand strategy, and a high concentration of sales in North America. For these reasons it was decided

<sup>&</sup>lt;sup>7</sup> The Focus at Chrysler was always on developing new, exciting products quickly and within cost targets. Daimler's goal was to increase the level of technology and product sophistication (Belzowski, 2009).

<sup>&</sup>lt;sup>8</sup> The relationship with suppliers moved from collaborative to transactional.

<sup>&</sup>lt;sup>9</sup> He cut 26,000 operatives, US\$ 4 billion from internal and external costs and idled six plants to improve capacity utilisation (Bradsher, 2001).

<sup>&</sup>lt;sup>10</sup> On April 27, 2009, Daimler AG signed a binding agreement to give up its 19.9% remaining stake in Chrysler LLC to Cerberus Capital Management and pay as much as \$600 million into the automaker's pension fund.

that Chrysler was unlikely to survive without a product-sharing alliance, which was identified with Fiat.

## 4. Fiat-Chrysler alliance conditions

The New Chrysler emerged from bankruptcy on June 10,2009, with a new ownership structure with Fiat.

The federal government financed the deal with US\$ 6.6 billion in financing, paid to the "Old Chrysler", a new company called Old Carco LLC was set up to take over the remaining assets and liabilities, which remained in Chapter 11 bankruptcy. The transfer did not include eight manufacturing locations, or many parcels of real estate and equipment leases. Contracts with 789 US auto dealerships, which were being dropped, were not transferred. Table 1shows a list of the actions taken by main stakeholders and their equity stakes in New Chrysler.

Stakeholder	Action	Equity stakes
Fiat	<ul> <li>Contribution in technology and intellectual property.</li> <li>Offer access to global distribution network</li> </ul>	– 20% equity in New Chrysler It would receive 5% for meeting each of three performance goals: produce a vehicle at a Chrysler factory in the United States that performs at 40 mpg or better; provide Chrysler with a distribution network in numerous foreign jurisdictions; manufacture state-of-the-art, next generation engines at 4US Chrysler facility.
UAW (VEBA)	<ul> <li>Make concessions on wages new workers (\$ 14 an hour instead of US\$ 28) with fewer benefits and partly shift of the retiree health care in equity<sup>11</sup></li> </ul>	- 55% equity in New Chrysler, pro forma for Fiat additional equity
United States Treasury	– Lend money for \$5.9 billion plus waive repayment for \$ 6.6 billion	– 8% equity in New Chrysler, pro forma
Canadian Government	– Lend money for \$1.7 billion	– 2% equity in New Chrysler, pro forma
Secured lenders	<ul> <li>Exchange \$6.9 billion secured claim</li> </ul>	<ul> <li>Receive \$2 billion cash</li> </ul>

Table 1. Fiat-Chrysler alliance stakeholders' actions and equity stake

Source: Adaptation from (SIGTARP, 2009)

The involvement of Fiat in the ownership structure has been a mixture of barter of technology and performance goals with equity stakes, along with onerous conditions to buy equities obtained from the other equity holders (US Treasury, Canadian Government and UAW).

So far, Fiat has fulfilled its end of the deal. As requested, the company has plans to fit Chrysler vehicles with fuel-efficient engines, expanded Chrysler sales overseas, and paid off loans from the US and Canadian governments. In return, Fiat has been allowed to raise its stake in Chrysler to a controlling 53.5 percent, up from 30 percent that came from its initial 20% plus meeting two performance goals). Fiat has the option to add another 5 percent of Chrysler when it produces a vehicle at a Chrysler factory in the United States that performs with at least at 40 mpg. This performance target is expected to be reached by the end of 2011.

The remaining 41.5 percent stake is still in the hands of the United Auto Workers (UAW). Fiat also holds an option to acquire 40 percent of the original stake held by the UAW's retiree health-care trust. The option is exercisable from July 1, 2012, to

<sup>&</sup>lt;sup>11</sup> According to the Center for Automotive Research per-worker labour costs are, including bonuses and benefits, \$58 an hour at Ford, \$56 an hour at GM, and \$49 an hour at Chrysler. That is competitive with Honda and Toyota plants in the U.S., but more than the US plants operated by Hyundai and Volkswagen.

Dec. 31,2016, and in amounts of as much as 8 percent in any six-month period, according to the filing.

## 5. Making Fiat-Chrysler viable

There are three targets that all carmakers are reaching or are trying to reach right now. The first is to try to make vehicles as common as possible. The second target is to be present in growing markets. The third target is to get public aid and grants.

**First target.** Economies of scale by sharing more components across many models are possible. Indeed, the ideal would be to build a single model such as the famous Model T Ford in 1908, but unfortunately, this strategy does not work in terms of modern marketing. Customers have their own personality or, to put it as the experts, every brand and every single car has an emotional content that affects the sale.

If this is true, then, each model must be unique with a different exterior and the highest number of components (mechanical, electrical, or structural) absolutely identical or common. It is not a secret that a Fiat Panda and 500 are not as different as they appear. Or that all mid-sized cars of the Volkswagen group (Seat, Skoda and Audi even) are more or less successful clones of the Golf, the penultimate model.

The main area of savings regards the coordination of platforms and architectures between models of the company brands. In the case of Fiat-Chrysler, each automotive segment will be supplied with a dedicated platform following the specific national competences. The smaller vehicles will be developed by Fiat (mini, small and compact segments<sup>12</sup>) and the other ones by Chrysler. Each platform should represent, on average, 1 million of vehicles, the same as Volkswagen, Ford, and Renault-Nissan, and ensure more bargaining power with suppliers. The drivetrain systems for the vehicles designed by Fiat or Chrysler will be preserved, but Italian capabilities with rear-wheel drive vehicles are minimal and Jeep is the recognised leader for four-wheel systems. The capabilities on automatic and dual-clutch transmission have been shared between the two companies.

Another strategy to save costs is the one promoted by Lancia-Chrysler, the identical model sold with different brands on the two continents, but the logic is the same because half of global sales take place in mature markets where competition is hard and margins and sales opportunities are limited.

At the moment, the integration between the brands Lancia and Chrysler is the more advanced feature in the rationalisation and realignment of product strategies of the two carmakers. In June 2011, about six hundred Lancia-Jeep dealerships, roughly two-thirds from Lancia's existing network and a third from the previous Chrysler-Dodge-Jeep organization, opened for business in continental Europe, while 46 colleagues in the UK and Ireland remained under the old Chrysler-Jeep logos. These dealerships are getting aruly international portfolio.

The Lancia's Delta compact hatchback comes from Italy, while the new Ypsilon subcompact is built in Poland and sold under the Chrysler brand in UK and the

<sup>&</sup>lt;sup>12</sup> As a matter of fact, engineers adapted the compact platform for the US market by lengthening and widening Fiat's high-volume compact platform of the Alfa Romeo Giulietta. The modified platform, called the CUSW for Compact US Wide, will spawn a range of compact and mid-sized vehicles for Chrysler, Dodge and Jeep.

Lancia brand in the rest of Europe. Two models made in Canada, the Lancia Thema large sedan (a rebadged Chrysler 300) and the Grand Voyager minivan, will arrive at the end of 2011. In spring 2012, the market may get a US-built model, the Chrysler 200 cabriolet, rebadged as the Lancia Flavia.

Something similar is happening with the Fiat brand and the Freemont model, a rebadged Dodge Journey crossover built in Mexico<sup>13</sup>. A Fiat-based subcompact car is on schedule to arrive in 2013 in the USA. The car could be a US version of the next-generation Fiat Punto. The car would give Dodge a subcompact to compete with such cars as the Ford Fiesta and Honda Fit. The same between Fiat professional and RAM that will begin selling a small panelled van built by a Fiat joint venture in Turkey in 2013<sup>14</sup>.

Costs can be cut through waste elimination. The implementation of the World– Class Manufacturing (WCM)<sup>15</sup> operating system in all Fiat-Chrysler plants around the world is improving manufacturing operations, eliminating losses or waste as well as accidents or defects by copying where WCM succeeded.

**Second target.** The real bargains come mainly from emerging markets: Fiat results are supported by the Brazilian market, Volkswagen has three joint ventures in China, and General Motors' revival is largely due to the flow of fresh money coming from sales in China. The future of automotive companies depends on emerging markets and those companies that are no**i**n these countries have no future.

A South American presence is important, but it is especially important to be in China<sup>16</sup>, Russia and even Africa and the Far East. In these markets, demand drives supply. In addition, the lack of a car culture means the buyer does not pay particular attention to quality, finishing, and technological innovation. The cars are not, in most cases, those buyers are accustomed to in developed markets, while the prices are more or less the same, and thus the margins are higher.

One of the main challenges is making Fiat-Chrysler a global business. Although Chrysler repaid its loans to the US and Canada ahead of schedule, the automaker is still recovering in the US market. Overseas, Chrysler is virtually invisible. Brazilian

<sup>&</sup>lt;sup>13</sup> The Freemont seems to be a bargain and a success, doubling sale expectations. With a starting price under 25,000 euros in Italy, the Freemont costs 5,500 euros less than the slow-selling Fiat Ulysse that it replaces.

<sup>&</sup>lt;sup>14</sup> In North America, the Ram small van will compete with the Ford Transit Connect, another vehicle built in Turkey. Fiat also plans to bring a larger Ram-branded commercial van to the United States based on the Ducato, which will be probably made in Mexico in 2013.

<sup>&</sup>lt;sup>15</sup> WCM was introduced in Fiat in 2006. WCM is structured in 10 technical pillars representing operational concepts such as safety, workplace, organization, quality control, logistics, people development and environment. There are 10 managerial pillars as well. Within each pillar, there are seven prescribed steps designed to eliminate losses and reach the end goal of zero in each area.

<sup>&</sup>lt;sup>16</sup> In China a joint venture between Fiat and Guangzhou is running. The plant is located in Hunan province and will be managed equally by the two manufacturers. The first car to be assembled in China will be based on the C-wide platform, probably the Dodge Caliber, and will be launched in 2012. The Chinese plant will also produce engines especially in view of a future expansion of Fiat-Chrysler's presence in China. For this reason, a research centre is scheduled to be set up. The new venture is expected to start producing cars with an initial capacity of 140,000 cars and 220,000 engines per year. Recently, Fiat has decided to raise the planned production capacity to 500,000 units a year by 2015. That will be significantly higher than Fiat's initial plan of 300,000 units.

operations keep Fiat alive, buthe company continues to lose money in Europe<sup>17</sup> and India. Fiat and Chrysler are not players in China, the world's largest auto market, and their partners have little presence in Russia, Europe's most promising market.

**Third target**. Mature markets need a real technological leap. The electric car is the most fashionable assumption and refined strategies are already in the field to show everyone that we are one step away from the target of a car that does not need to burn fossil fuels. Unfortunately that one technological step is a large one. The electric cars of today are only good if one drives for a few tens of kilometres per day. Mixed routes and highway driving does not allow for sufficient driving autonomy. Many governments provide financial R&D support for electric vehicle development as well as for plants related to the manufacture of these vehicles and their components.

But there is another way to get public funding, which nearly all countries are granting to the manufacturers, and that is to build plants in countries where you want to manufacture and/or sell your vehicles. Factories, among other investments, have been largely funded by public money or lured by countries with the promise of tax incentives for production. All the manufacturers of the world have chosen to locate a new plant or have decided to enlarge their production sites after having considered carefully the economic benefits offered by government. Some examples include Volkswagen in Russia, Renault-Nissan in South Africa, BMW in South Carolina, and Fiat in Serbia.

In this context the Fiat-Chrysler alliance will bring a big dose of Fiat's fuelsaving technology to Chrysler's gas-guzzling line-up. With help from Fiat, Chrysler is shifting from six- and eight-cylinder engines to more four-cylinder power plants. Chrysler's strategy is to use a suite of systems to improve fuel economy and performance that includes:

- eight-nine-speed automatic and a dual-clutch transmission;
- Fiat's MultiAir engine, which varies valve timing for each cylinder independently and allows, with a very moderate cost, increased performance by about 20%, while also providing in all the features now considered distinctive of a product of excellence (torque and power for a sporty driving, low power consumption for a reduction of costs of use, and low emissions of harmful gases and greenhouse gases);
- Fiat can also offer its long experience in diesel engines, but it depends on how much North America becomes more diesel-friendly. Flexible power systems of petrol-ethanol (developed for the Brazil market and called Flexfuel), of petrol-LPG and of petrol-CNG developed for the European market make the Italian carmaker the unopposed leader.

On the other side Chrysler can offer a new 3,000 cc petrol engine, called Pentastar with excellent performance, and more competences in electric vehicles and gasoline-electric hybrid vehicles which are receiving grants from US administrations, even if the best choice for Fiat rely is petrol-methane vehicles.

Nevertheless, at the moment Fiat-Chrysler on fuel saving technologies seems not to fit the new US government mandate. It's also not clear how much Chrysler is getting from the government for electric and hybrid vehicle R&D. Chrysler has some but not much expertise in these areas, and they seem more focused on the Fiat engine integration that they will use to meet their government fleet fuel economy

<sup>&</sup>lt;sup>17</sup> Fiat targets breakeven result for the carmaker's European business by 2014.

mandate for 2016, but this leaves them open to how to meet the more stringent mandate coming for 2017-2025.

### 6. Conclusions

2012 will reveal if the integration between Fiat-Chrysler is going to be auccess.

The last two years were like crossing of the desert and the new carmaker spent many efforts in matching strategies and technologies, as well as the attention focused on financial aspects of the merger/acquisition. Fiat and Chrysler operations are drawing closer. More than a half of their supply chain is shared and a single management team for the two companies has been created in order to supervise the operating performance of the businesses (regional markets and operations), brands, line and staff processes<sup>18</sup>. In spite of the executive council being dominated by Fiatbred executives, 14 out of 23; employees of both companies are working side by side in all the industrial functions avoiding the "colonisation" effect suffered during Daimler control.

In the middle of a global economic slowdown without a presumed end, automotive markets are performing differently, nowadays better in USA than in Europe. Their near absence in emerging countries forces Fiat-Chrysler to concentrate, in the short and mid-term, on expected results from countries with high levels of car registration but low growth sales because of the recession. The consequence is they have to snatch market share from direct competitors, and there is only one way to do this: improve the quality-price ratio that is, selling cars with Japanese quality at a Korean price. Is it possible or practical in segment markets where Fiat-Chrysler is follower?

The recent models gained positive recommendations from car analysts (e.g. Consumer Reports in USA) and from customer orders. Low price does not necessarily mean low margins if the two companies can reduce costs internally and with their suppliers. There is still much to be gained from Fiat-Chrysler's integration of models, components, technologies, skills, distribution channels which can lead to increases in economies of scale, scope, and competitive power. We will find out over the next five years or so if these gains will be realized.

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<sup>&</sup>lt;sup>18</sup> One of the main criticisms was that Fiat and Chrysler operated under one team that consisted of only one man: Marchionne who until now drew heavily on the force of his personality to achieve targets. The new management structure would take some authority from the CEO.

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