Structuring and restructuring Fiat-Chrysler: can two weak carmakers jointly survive in the new automotive arena?

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Abstract: 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 gone through many crises, long histories and strong company cultures. In particular, Chrysler in the last 15 years has been characterised by three acquisitions/mergers; each can be considered a good research field. The paper describes the trends occurred by Fiat and Chrysler before the alliance and the targets to make Fiat-Chrysler a viable carmaker.

Keywords: mergers and acquisitions; business-product strategies; world class manufacturing; multinational strategies; Fiat-Chrysler.

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1 Introduction[1]

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 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. According to Marchionne, Fiat-Chrysler is "a mosaic in which each piece has a clear identity, and yet is interconnected with the other pieces" (Ciferri, 2011).

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 or in manufacturing and production, due to products are 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 et al. (1996) argue, failure in post merger strategy implementation often leads to stress and anxiety among the work force at each level.

The aim of this paper is to describe the trends occurred by Fiat and Chrysler before the alliance and the targets to make Fiat-Chrysler a viable carmaker.

The reminder of the paper is structured as follow. The next section will report a brief recent history of the two carmakers and the prerequisite conditions for Fiat-Chrysler alliance. Section 3 focuses attention on the main factors that could make the alliance, that

is: product strategies, cost reduction and multinational strategies in emerging markets. Section 4 the current pros and cons of the new carmaker.

2 Fiat and Chrysler before the alliance

Any understanding of the last 15 years of Fiat and 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 a cheaper and quicker option (Begley and Donnelly, 2011).

2.1 Fiat recovery: do better with less

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 properly tie the success with the engagement of Marchionne in 2004.

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. For the second time[2] ownership and management were strictly separated in Fiat.

The closure of the agreement with General Motors made possible a number of limited alliances all over the world and reinforced the assets in Brazil, Turkey and Poland (see Section 4.3).

Before the last financial crisis, Fiat reported some successful products in terms of sales and/or profit margins. 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. That is: platform sharing, emphasis on carryover, time to market reduction, standardisation of modules, coordination with suppliers and adoption of template process (Zirpoli and Camuffo, 2009). Nevertheless, apart from Brazil, the main emphasis was on cost reduction rather than R&D. 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.

Moreover, Fiat was considered too small in comparison to competitors and overburdened of elevated structural costs above all with regards Italian plants. 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%.

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.

Fiat dealt with its second weakness through the launch of investment plan and improves car production (see Section 4.1).

2.2 Chrysler troubles: from success to chapter 11

In 1998, a successful Chrysler and its subsidiaries entered into a partnership named a 'merger of equals' (Kisiel, 1998) with German-based Daimler-Benz AG. 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).

Chrysler and Daimler 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 4.4 million 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 engineering and purchasing which were completely different from the ones of the US carmaker. The focus at Chrysler was always on developing new, exciting products quickly and within cost targets, whereas Daimler's goal was to increase the level of technology and product sophistication (Belzowski, 2009). The relationship with suppliers moved from collaborative to transactional. Moreover, the decision to locate the headquarters of the new group in Germany affected fatally the relationship.

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 US 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).

In spite of Daimler cut 26,000 operatives, US$4 billion from internal and external costs and six idled plants to improve capacity utilisation, in 2007 and in 2009 Dailmer sold Chrysler Group to the US private equity company Cerberus Capital that 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 2006 to 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.

2.3 Prerequisite conditions to Fiat-Chrysler alliance

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 that Chrysler was unlikely to survive without a product-sharing alliance.

The New Chrysler emerged from bankruptcy on June 10, 2009, with a new ownership structure with Fiat which involvement 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 United Auto Workers (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 58.5% in 2011, up from 30% that came from its initial 20% plus meeting two performance goals. The remaining 41.5% stake is still in the hands of the UAW.

A necessary step to foster more auto alliances was carried out by Fiat at the beginning of 2011. Italian 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. It is evident that the Fiat de-merger cannot be limited only to financial requirements but implies also industrial consequences in terms of next alliances and joint-ventures.

3 Making Fiat-Chrysler a viable carmaker

There are three targets that all carmakers are reaching or are trying to reach right now. The first is to achieve economies of scales by redefining product strategy, making vehicles as common as possible and rationalising brand, models and engines.

The second target is improving productivity by cost reduction. The third target is to be present in growing markets. The real bargains come mainly from emerging markets:

Fiat-Chrysler results are supported by the Brazilian market, Volkswagen has two 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 not in these countries have no future.

3.1 Achieving economies of scales trough product strategies

Fiat-Chrysler is a company with the most diverse brand portfolio this side of VW Group, from the Fiat 500 minicar to the Ferrari FF supercar to the Chrysler Town & Country, Fiat-Chrysler has products for just about every need in just about every segment market.

Economies of scale by sharing more components across many models are possible. 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 penultimate Golf model. Toyota and PSA produce together segment A models in the Czech Republic.

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) 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.

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.

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, even if they expected better results (see Section 5).

Something similar is happening with the Fiat brand and the Freemont model, a rebadged Dodge Journey crossover built in Mexico. 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. A Fiat-based subcompact car is on schedule to arrive in 2013 in the USA.

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.

In this context the Fiat-Chrysler alliance will bring a big dose of Fiat's fuel-saving 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%; diesel engines; flexible power systems of petrol-ethanol (developed for the Brazil market and called Flexfuel); 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 is 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 mandate for 2016, but this leaves them open to how to meet the more stringent mandate coming for 2017–2025.

3.2 Improving productivity through cost reduction

The World-Class Manufacturing (WCM) system which operates in all Fiat-Chrysler plants in the world is concerned with costs reduction in manufacturing operations through elimination of all that does not produce added value, as losses or waste as well as accidents or defects.

It is therefore an operational methodology designed to increase the internal added value of production. Normally, when we talk of value added, we refer to what is realised on the market and is calculated with respect to production costs. Within the framework of the WCM instead the value added has a completely different meaning because it derives from the continuous elimination of waste, so as to minimise the cost of objective and subjective elements of production. One can speak of the value added in the usual meaning only insofar as the internal value added lowers production costs and increases profits. The progressive reduction of losses and wastes is carried out with incremental innovations (Erlicher and Massone, 2005) that affect all aspects of manufacturing.

In the context of WCM the three zeros of Ohno's philosophy: zero inventory (JIT), zero breakdowns (TPM), zero dead time (TQM), which were organisational goals in lean production, are aimed at eliminating waste. The overall vision of World Class Manufacturing is based on the activity-based costing management (ABC/M), that considers activities and cause of them (Kaplan, 1992; Alder, 1999). "If an activity does

not have explanation, applicant or value added, it would supply omission, balance or development ground" (Azizi and Modarres, 2002).

The strategic value of an ABC/M system is that it can provide useful insight into decision-making processes because:

- it identifies costs against activities
- it examines processes and activities in order to identify internal value added and non-value added activities
- it finds opportunities to streamline or reduce the costs or eliminate the entire activity, if there is not internal value added.

Compared to the practices of lean production, the strategy is moved from management by objectives (the three zeros) to the management of the production process of the internal value added, whose results at plant level are comparatively evaluated to be transferred from a plant to another plant, and inside a plant from a manufacturing unit to another one.

- The WCM system considers the automotive production process in ten pillars, which identify broad areas of analysis and intervention to eliminate what does not produce internal value added. The pillars can be grouped according to three macro objectives: autonomous activities, logistics, and early equipment management concern the organisational structure of the production process (from the layout to the workstations, for the activity of the workers) in order to reduce the throughput time of the product.
- Focused improvement, professional maintenance, and safety prevent the occurrence of accidents for man and machinery, in order to ensure the continuity of the production flow.
- Quality control, people development, and environment in order to ensure the quality of the product, taking into account the externalities that contribute to define it.

Cost deployment is the pillar by which to judge all actions related to the above frameworks and processes, reflecting management's forecast of workload and financial and non-financial requirements to meet agreed strategic goals and planned changes to improve performance, reducing waste and losses.

It is important to note that the current distinction between fixed costs and variable costs falls outside of the context of WCM. Under WCM the only relevant dichotomy is between costs that give internal value added and costs that do not give internal value added.

Labour, which is normally considered a variable factor of production, is taken into account only for production of internal value added. However, from this point of view the Ergo-UAS is strictly connected with WCM. The Ergo-UAS is a methodology for ergonomic analysis of each work performance. It is designed to intervene on those organisational and logistical elements of the layout that can increase the rhythm or cadence of work and redefine in process the work cycle time, thereby reducing what in performance can be considered as waste. From an ergonomic point of view, Ergo-UAS allows to calculate the movements of workers that do not add internal value added, that WCM must eliminate. As examples of not-value added operations it considers: walking, waiting, finding, counting, replacing, measuring, choosing, untying. The elimination of

these activities results in an increasing of the throughput and in a reduction of the cycle time.

The crisis in the European market brings Fiat-Chrysler to cut production and resort temporary layoffs, but until the plants are active all must operate according to the logic of WCM to increase internal value added and to transfer the results from a plant to another one, from one area to another. There is no contradiction between the drive to increase labour productivity within WCM and Ergo-UAS systems and lower production, as long as the plants remain open. The objective is to reduce the production costs regardless of the scale of production, so as to neutralise the investment risks.

Fiat has introduced the WCM in 2006 gradually extending it to all its plants in Europe and achieving important results in terms of internal value added The Ergo-UAS was introduced afterwards in 2008. In 2010 the CEO Marchionne reported that the first phase of implementation of WCM in Italian plants and in Tychy (Poland) has enabled savings of 730 million Euros between 2006 and 2009, through a reduction of 50% of the line operations that do not add value (60% in Melfi), a reduction of logistics costs of 26%, and a savings of 20% of the unit cost of energy per vehicle produced. The second phase, according his forecast, provides technical and organisational restructuring that should be made a total saving of 1.9 billion euros between 2010 and 2014. Since 2009, the WCM system has also been adopted in Chrysler.

The WCM system is headed by the directorate of the company, where a team with managerial, technical and accounting skills operates for each pillar. The team analyses comparatively the yields of all the plants, identifies problematic areas, and makes plans for reducing wastes and losses. It is up to individual plants define interventions, identifying internal target areas through the comparative analysis of the yield of the operational units and, within each unit, of the yield of the worker teams. Resources to carry out interventions are anticipated by the company board. Credit balances with which it must be held every intervention is partially retained by the plant and used for similar purposes to cut costs. The improvements in a plant are widespread in all the others, which verify the adaptability to their specific situations.

The involvement of workers in their workstations has the complementary function of verify that the effects on product quality and on the fluidity of the production process meet the expectations of those who have made innovations. This requires continuous attention to everything that flows into their field of action, and can stimulate proposals of micro-improvements. Each plant is assigned quantitative target for the collection of these proposals. According the Fiat sustainability report in the 2011 1.6 million proposals was presented by the 80% of workers, with an average of 12 per capita.

External audits evaluate the activities carried out by each plant and assign awards – bronze, silver, gold, and world class – which involve bonuses to management and employees.

3.3 Growing through multinational strategies in emerging markets

One of the main challenges for Fiat-Chrysler is global business. Since the economic crisis started, sales in emerging markets represented a possible way to balance heavy losses in declining developed markets. In the new global scenario, a South American presence is important, but it is crucial the productive presence in other emerging economies, such as China, India, Russia and the Far East. In these markets, demand drives supply. In addition, the lack of a car culture means that buyers do not pay very high attention to

quality, finishing and technological innovation, while the prices are more or less the same than in developed markets. Therefore, margins are higher. Moreover, attractivity policies matter, since nearly all developing countries are granting incentives to the manufacturers, that tend to consider carefully the economic benefits offered by governments.

If we look first to the European macro-region, one should stress the role, within the Fiat Group's network, of Turkey and Serbia as emerging countries. Production facilities in those countries are fully integrated with Italian headquarters and factories, and with Polish facilities. As a consequence, the configuration of the production network in Europe has been significantly enlarged, in the 2000–2012 period, to the Turkish and Serbian affiliates, as far as subcompact cars and light commercial vehicles are concerned. This represents a major change in the multinational strategies of Fiat.

In Turkey, Fiat has been operating since the early 1970s in partnership with the private Koç Group, a family-controlled conglomerate. In a first stage, the joint venture Tofaş followed a typical domestic market oriented and product-life-cycle approach, transferring mature technologies and machinery, to serve the local protected market with obsolete models (Balcet and Enrietti, 2002). Since the new century, after the opening of the domestic market and its full integration with the European market, Turkish facilities have been mainly specialised to produce light commercial vehicles to be exported to the EU: it is the case of the Doblò and Qubo models. At the same time, Tofaş expanded its production in the segment C (Linea model), also largely oriented to export, reaching the production of 300,000 units in 2011.

Fiat in 2011 invested 850 million Euros in Serbia, including the cost of cleaning up and rebuilding the old Zastava Kraguievac facilities (bombed by NATO during the 1999 war). Fiat Automobil Srbija (FAS) is a majority-owned affiliate, with an equity participation of 33% owned by the Serbian Government. In 2012, FAS started the production of Cinquecento L model, to be exported to the whole European market. Production capacity at the plant is up to 250,000 units a year, while 2,500 people are employed. Fiat has been making Punto subcompacts in Serbia since 2009 and plans to keep the production. In this country, wages are estimated to be 1/5 than the Italian level, and about 1/3 of the Polish one. However, social movements in November 2012 obtained relevant wage increases. It must be noted that this investment has been largely funded by the Serbian Government.

As a consequence of the Serbian move, as well as the launch of the production of the New Panda in Fiat's Pomigliano d'Arco plant in Italy, the production of subcompact segment A cars for Europe is no more concentrated in Poland: the rationality of the 'one segment – one factory' strategy is over (Balcet and Enrietti, 1998). In Fiat's factory in Tychy the same platform is shared by Fiat 500, Lancia/Chrysler Ypsilon and Ford Ka, in order to maximise economies of scale. The agreement between Fiat and Ford to share production in Tychy can also be considered a strategic reaction to the joint venture that Toyota and PSA launched few years before to produce subcompact cars in Kolin, in the Czech Republic. During 2012, the results of the plant in Tychy have been negatively affected by the shift of production to Italy and Serbia, while demand was declining in Europe. Production breaks took place in the last part of this year.

Brazil is a success story, as it plays a key role in the multinational configuration of Fiat, substantially contributing to its global competitive position. In 2010, the Betim factory, one of the biggest in the world, produced more than 700,000 cars, representing 36% of the world Fiat production of all vehicles. The Brazilian affiliate FIASA got a market leadership when the country became the fourth global producer. Since the 1990s,

FIASA realised that growing middle classes opened new market opportunities to multinational carmakers. It reached good performances with Uno Mille and later with the New Uno models, specially designed for the South American market. Brazil was the only country where the Fiat's world car project, based on Palio and Siena models, had a good success, while results were poor in other developing and emerging countries (Balcet and Enrietti, 2002). In the early 2000s the platform of these models moved from Turin to Betim (Belo Horizonte), where the most important Fiat's Engineering and Product Development Centre outside Italy is located. Fiat decided to invest in a new huge greenfield factory, including testing facilities, located in Pernambuco State, which is expected to start production in 2014.

In India, on the contrary, Fiat's performances have been quite disappointing, notwithstanding the strategic alliance concluded in 2006 with a major Indian player, Tata Motors, part of the Tata Group. A new greenfield plant located in Ranjangaon, Maharastra State, started production in 2008, assembling both Fiat and Tata models. A strategic asset of Fiat on the Indian market is represented by the small Multijet diesel engines: they are assembled on Fiat models, supplied to Tata within the partnership agreement, and licensed to a major competitor and market leader, Maruti-Suzuki. However, sales have been poor in this fast growing market, and production capacity utilisation low. Fiat's supply is limited to few models, including the obsolete Palio and Siena world cars, compared to a diversified supply by other carmakers, i.e., Maruti-Suzuki, Hyundai and Tata Motors. Moreover, Fiat was depending on the dealer network of its partner; for this reason, it started to build its own network in 2012, after renegotiating the joint venture.

Fiat and Chrysler are not among the main actors in China, since 2009 the world's largest auto market. Within the Fiat Group, Iveco has been producing since 1996 light trucks (Daily model) and minibuses, via a joint venture established in Nanjing. A new three-party joint venture with SAIC and Hongyan (involving a complex governance pattern) started production in 2009 in ChongQing. This new investment diversified production towards heavy trucks, partly oriented to exports to Asian and African markets (Balcet and Richet, 2011). Following unsuccessful partnership experiences in the past decades, Fiat started again producing passenger cars in June, 2012, thanks to a 50/50 joint venture with Guangzhou Automobile Company (GAC), a local state-owned company. The new factory, located in Changsha, has a production capacity of 140,000 vehicles. It produces a segment C car, the Viaggio model, derived from an Alfa Romeo Giulietta platform, later developed for the Dodge New Dart model in the USA. This implies a tentative multi-regional strategy of architecture convergence in this segment (where Fiat is not especially strong), involving production in Europe, China and the USA.

Finally, Fiat has little presence in Russia, one of the Europe's most promising markets. In 2012, negotiations took place for starting the production of light commercial vehicles and SUVs with the Jeep brand. Synergies are expected with Chrysler, which operates in Russia with a widespread dealer network.

On the whole, Fiat tends to be relatively weak in developing markets, with the relevant exception of the Brazilian affiliate, which keep Fiat alive, while losing money in Europe and India. Turkey and Serbia represent now key areas of production within an enlarged European macro-region. China, India and Russia represent big challenges for Fiat-Chrysler in the future decade.

4 Conclusions: pros and cons of the new carmaker

The last 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. One of the main criticisms was that Fiat-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 has taken some authority from the CEO. In spite of the executive council being dominated by Fiat-bred 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.

A second disapproval regards the delay in upgrading the product portfolio, above all in Europe, towards premium priced models and compact-large car segments. Spending on new product is one of the things that a carmaker should never cut. Saving cash kelps only in making agony last longer, because only new products that consumers are willing to buy will build your future success. In fact, after the end of the government scrapping incentives in 2009, the result was the reduction of market shares from 9.0% to 6.5% in 2012 and the product obsolescence in most segments. Fiat knowingly decides to move strategy from strenuously defence of market shares to cash flow supremacy. It claimed that the strategy of waiting to launch new models made sense because of the futility of investing in a period of crisis and, moreover it was affected by the in progress integration with Chrysler.

Another criticism regards the historical role of Fiat in Italy. According to the previous plan presented by Fiat-Chrysler in 2010, the estimated sales should have been 6 million cars in 2014, 3.2 for Fiat and 2.8 for Chrysler. The main focus was on the full integration of Fiat and Chrysler product portfolios and volumes gradually return to pre-crisis levels essentially by a commitment to a new manufacturing reality in Italy.

With the 'Fabbrica Italia plan', Fiat announced to invest 20 billion euros to improve plants and vehicle development in order to double Italian car production to 1.4 million units in 2014 from the 650,000 units assembled in 2009. Moreover, Fiat asked unions to increase efficiency by about 70%, switching to a three-shift, 280-workday year from the current two shifts and 235 workdays. In 2011, Fiat closed the plant of Termini Imerese in Sicily and integrated the former plant of the coachbuilder-stylist Bertone, near Turin into the production system.[3] Union conflicts and the European financial crisis made void the more than optimistic Fiat plan.

In 2012, total production is about 4.2 million passenger cars and light commercial vehicles. For 2013, Fiat-Chrysler estimates a small increase to 4.3 million units well below the targets of the plan 2010–2014. At the beginning of the alliance the distribution between the two groups was 50-50, now the trend is 40% Fiat and 60% Chrysler.

A more realistic plan was presented at the end of 2012 shifting the focus onto the carmaker's higher-margin brands to preserve underused Italian plants with the launch of three new car models next year, six new models in 2014 and another five vehicles in 2015. Most of these models will be sold also in the USA where Chrysler production capacity is running at 94.4% utilisation (Wardsauto, 2012). It is more profitable to

saturate plants suffering overcapacity than build new auto assembly lines with high sunk costs.

SWOT analysis helps to point out some evaluations on the new business-product plan:

- Strengths: Fiat brand seems it will end up being 500 or Panda-based. Both can be considered brands within a brand. Five hundred families are occupying the subcompact and compact segments with level of variation of particular style. Panda comes with the widest choice of powertrains, fuel types and traction options in its segment that has dominated in Europe. Freemont is considered an extension of the Panda flexibility concept in a much larger size.
- Weaknesses: Lancia barely sells cars outside of Italy, which accounts for nearly 90% of its annual volume and mainly with the Ypsilon model. Unless a carmaker is really premium, selling a sedan in Europe is tough, so there is no reason to invest on Lancia brand that will be reduced to the Ypsilon and US made products. Fiat brand tried to compete in the C segment without success: Golf, Focus and Astra are out of reach. The market will be covered only by Alfa Romeo and eventually by a cheap model produced in China.
- Opportunities: Jeep, Maserati and Alfa Romeo will be the only global brands in order to compete with premium carmakers with higher-margin models. It is not a new idea, Nissan-Infinity and Toyota-Lexus did not succeeded and can be used as benchmark even if Fiat-Chrysler can rely on Ferrari background. Jeep is now Chrysler group's number 1 brand and is well present all over the world. Maserati did not suffer the ups and downs of Fiat and will launch six models in the next four years. The main efforts and risks regard Alfa Romeo which most of its product plan is to be well tuned, nine models through 2016, to assure the relaunch in the USA that would be easier than in Europe.
- Threats: Their near absence in emerging countries (with the exception of Brazil) forces Fiat-Chrysler to concentrate, in the short and mid-term, on expected results from countries with high levels of car registration but low 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 and from customer orders, above all in the USA. 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 increase in economies of scale, scope, and competitive power.

We will find out over the next five years or so if these gains will be realised.

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Notes

1 Whilst the paper is the result of joint research, Giovanni Balcet is responsible for Section 3.3 and Giuliana Commisso for Sections 3.2, the rest is up to Giuseppe Calabrese.

2 The first one concerns Valletta chairmanship that lasted two decades characterised by rapid expansion. He retired in April 1966 to be succeeded by the founder's grandson, Giovanni Agnelli.

3 Fiat bought Bertone's plant in August 2009, and it plans to build two Maserati models based on Chrysler architecture and Ferrari engines, for sale in Europe and US market.