



JUAN MIGUEL VILLAR MIR AND FERROATLANTICA¹

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“There is no such a thing as a good sector or a bad sector; neither a good company or a bad company. You just have companies well managed or companies poorly managed”

Juan Miguel Villar Mir

At the end of November 1992, Christmas coming closer, Juan Miguel Villar Mir was immersed into big piles of papers and notes that “decorated” his desk. For some reason, he was staring through his office window. He always said that he did not like to waste a minute doing nothing. But those moments staring through the window weren’t at all a waste of time: while he was reading the report drafted by Goldman Sachs on the acquisition of “Carbueros metalicos”, he was watching a film in his mind about the experience of managing Hidro – Nitro Española (HNE) during the 70’s. He had only a few days, to decide whether to acquire “Carbueros metálicos”. Internally, the fact that the report had brought good memories from the HNE’s period made him think that “something exciting was coming up”. What was exciting in the report that could make him enter this project?. Which fears of possible transactional difficulties kept him reading the report page to page over and over? What key factors were Juan Miguel looking for that would make him decide to go ahead with the acquisition of “Carbueros metálicos”?

1. Juan Miguel: Person and entrepreneur

Looking back to his life, JMVM could see a highly intensive activity throughout, since his early years as a young engineer, to his late stage as an entrepreneur, including a long period playing management roles at public companies. His personal evolution, since he obtained his degree in civil engineering, had been riddled with experiences characterised by a continuous process of maturation both in his professional and private life, which in the end, allowed him to perform a successful activity as entrepreneur during the last 20 years.

JMVM began to teach since the very first moment after obtaining his PHD degree in Civil Engineering Sciences at the Polytechnic University of Madrid, in 1955, graduating as the number one in his

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promotion. Lately he obtained another degree, this time in Law. During many years and until he was allowed, he continued with his teaching activities in parallel with his businessman rising career. It was in the lecture rooms of Madrid University where he met a highly skilled student named Tomás García Madrid. By then, he was unaware of the important role that Tomás would play in his future business activity. Long time later, Tomás García would say *“he was one of the less academic professor I had, not another theoretical but practical, and with an appreciable management capacity”*.

In parallel with his educational activity, JMVM began to undertake management positions at the public administration, which ended with his appointment as Vice-president of the Government and Minister of Treasury for 9 months in the first government of the democratic transition of Spain (1975).

His performance in business duties was not unaware, as in 1968, at 36 he was considered the ideal person to fix *“Hidro-Nitro Española”*, a public troubled company in the ferroalloys and chemist compounds production sector which was at the moment close to temporary receivership. *“Before agreeing to the endeavour, I studied in depth all the financial statements, the business sectorial scenario and the industrial processes; everything. One week later I was firmly convinced of the viability of the company; temporary receivership was absolutely not necessary”*, remembers JMVM. That moment marked the start of his career as a proper businessman. He accepted the challenge and in the next fiscal year turned the company around: revenues and new investments instead of temporary receivership. It was there at Hidro-Nitro, where he met another significant person in his later entrepreneur life, Javier de Peñaranda, by that time young engineer of the ferroalloys company.

After this success, JMVM received more assignments for the reorganisation and professionalization of public or semi-public companies, contributing to increase his notability as *“company repairer”*.

“If I can make the companies of others to produce profits, I could do the same for a company owned by me”. He had this idea in mind when in 1987, he noticed that *“Obrascón”*, a subsidiary construction company of one in which he had worked for (AHV), was on sale. The situation of the company was disastrous: heavy losses and an unmotivated staff. Juan Miguel had the audacity of offering the symbolic price of \$50 cents for the company, assuming all the company loans and debts. An agreement was reached and a new entrepreneur was born. *“By that time, I remember that my own name and past good deed, made banks trust me. I was the main guarantee for them and I have maintained this condition during all my entrepreneurial life”*.

Obrascón was the first jewel of the crown configured by JMVM with the pass of years, which has seen many acquisitions of non-profit generation companies and the arising of a new familiar holding chaired by JMVM: Villar Mir Group, with interests in many sectors. The group is comprised of four businesses:

- Ferroatlántica Group (with factories all around the world) in the production of ferroalloys and silicon metal, and production of electricity sectors: biggest company in Spain and the biggest in Europe in the ferroalloys sector. Acquired in 1992 when previous owners were firing employees

and closing factories. Lately, in 2005, Alcan, an old rival company since the time JMVM chaired Hidro Nitro, and which owned Pechiney (a ferroalloy company with a volume almost equal to Ferroatlántica, and its main competitor), phoned him with the intention of selling him Pechiney, due to strategic reasons. *“And they really wanted me to be the buyer, in spite of not having considered the option of buying, due to the high volume of the company., finally we reach an agreement”*, remembers JMVM. Even if they had conflicts in the past, Alcan appreciated JMVM as the only one capable to manage Pechiney without firing people or closing factories.

- Fertiberia Group, in the fertilizers sector. Nowadays is the biggest company in Spain and the fourth in Europe in its sector. Another “money losing company” bought at the price of \$50p per share.
- Espacio estate Agency, a company with real-estate developments in Texas and Spain. Acquired in 1987.
- OHL Group, sixth Spanish construction group whose origin can be found in Obrascón and other later acquisitions. OHL is a quoted company, and Villar Mir Group has the major participation in the capital.

JMVM is convinced of the key role that studying has played in his success: *“It is not only about attending courses at business schools for a few days or a week. One has to be always aware of macroeconomic situations, economic reports made by the main consulting groups and management innovations. I think I spend about 20 % of my daytime reading. I only memorize the most important information, this is, balance sheets and economic reports of my companies”*. But this is not the only requisite for success. *“You have to work more and harder than others (competence). If you organise yourself, it is possible to work about 12 hours a day. And to achieve it, you must have confidence in long term result. Studying and working hard allows you to be sure of one’s way. This faith in long term success doesn’t mean to be stubborn neither egoist. You have to pursue your objectives always with emotional stability and mentally focused”*.

Maybe for a better comprehension of the kind of person JMVM is, it is necessary to know the opinion of one of his closest collaborators. Tomás García, currently managing director of Villar Mir’s Group after fifteen years working for JMVM, offers a complete description of him: *“One can appreciate many facets in Juan Miguel: he is very clever and smart, with an incredible analytical capacity. But what is completely outstanding is his work capacity. Even nowadays he works 90 hours a week, weekends included; he is tireless. He never considers something lost until the subject is really off, incinerated and buried. Always self controlled, and refinedly polite. Just another more thing: his demands at work can only be compared with his extreme generosity”*.

2. The Ferros Industry and Ferroatlántica.

“Carburos metálicos”, the precursor company of Ferroatlántica (from now on, FAT) was born with the basic industrial aim of producing Calcium Carbide, i.e. the main ingredient of alternative solutions to the electricity, either for lighting purposes or for heating purposes (acetylene) in liquid or gas versions of the basic substance. The industry required an intense energetic supply and the factory was always located close to a water falls to produce such, given that 35% of the cost of producing ferros is energy related. “Carburos metálicos” had entered the business of producing iron alloys for the same reasons that the rest of the companies in the sector: both productions have exactly the same main technical requirements, i.e. close to an electric energy source and electric ovens. Furthermore, both processes were very similar: electric ovens heating up to 1800-2000°C, mineral of the corresponding metal (quartz or manganese mineral), with the presence of carbons that play as reducers to eliminate the oxygen and to release the metal.

As a consequence, FAT had two activities: production of iron alloys and production of energy (through a hydroelectric plant by taking advantage of river water falls) to support iron alloys.

The separation of both activities was a decision made by Juan Miguel Villar Mir, as soon as the acquisition of “Carburos Metálicos” was totally accomplished. At the beginning, this decision was neither welcomed by the trade unions nor by the regional political class (e.g. Galician industry minister) but the new board of directors (headed by Juan Miguel) thought that the two activities should be separated so that, once they had been reorganized, they both had proceeds by themselves separately.

In addition to those activities, a new division was created in the last year: the mining division. This division is in charge of the quartz extraction from the Galician mines owned by the company. These mines have enough quantity of quartz mineral to ensure the supply of a premium quality raw material to produce silicon alloys.

Energy Division.

The FAT energy resources are based on hydraulic power generated at the river banks of Xallas and Río Grande rivers, in Galicia and Cinca and Esera rivers, in Aragon (Spain).

In addition to that, the cogeneration groups in some of the production plants (Boo, in Santander; Sabón, in La Coruña and Hidro-Nitro in Monzón-Huesca) contribute to recover a substantial part of the energy used in each one.

The energy division manages, with an overall vision, the production, transport and transformation of the group hydroelectric energy. The energy plants work fully automatic. The dams, energy plants and transformation plants are operated remotely, with the support of some employees working in those plants.

The license to exploit the water fall has a term that it can't be looked down on: it can only be sold to the public electric energy net the energy that is not being used by the iron alloys production plants; in other words, only when the energy consumed by FAT is lower than the energy produced in the water falls and thus the surplus energy rebounds to the commercial energy net to be sold.

Industrial division

The main activity of this division is the production of iron alloys although in the last years, due to the investments in R&D, FAT has managed to produce other products stem from iron alloys.

An iron alloy is defined by the “American metal society” as “an alloy that contains iron with enough quantity of one or more other elements that are very useful as a component to introduce in the steel”. Iron alloys can be also defined as the “steel vitamins”, therefore, they are very strategic products.

Since the acquisition of “Carburos metálicos” by Villar Mir team, FAT has managed to optimize the iron alloys production processes that were already offered by “Carburos metálicos” and, in addition to that, has expanded their product portfolio. **Exhibit 1** covers a broad description of the iron alloys uses.

Nowadays, FAT has 6 iron alloys production plants although not in all of them it is elaborated all the products of its portfolio. Four of them come from the former “Carburos metálicos”: Cee, Dumbría and Sabón (in Galicia, Spain) and Boo de Guarnizo (in Santader, Spain). Furthermore, FAT has the plant of Hidro-Nitro Español (in Monzón – Huesca, Spain) and another plant in Puerto Ordaz (Venezuela), after the acquisitions of “Hidro Nitro Española” (in 1996) and the acquisition in 1998 of the 80% of the former FESILVEN “Compañía Venezolana de Ferroaleaciones” (nowadays, it is called “Ferroken” and it is included under the umbrella of FAT), respectively.

Raw materials division.

Two of the main raw materials of the group are the electric energy and the quartz.

FAT has created another division for the exploitation of the FAT’s quartz mines. The FAT’s mining division has enough quartz both in quantity and in quality to ensure the supply of an exceptional quality raw material for the production of silicon alloys. This granted high quality is an added value for the FAT’s products in comparison with the competitors.

Nowadays, the FAT’s quartz deposits are grouped in three different locations:

- Rocas, Arcillas y Minerales, S.A. (RAMSA) (Galicia, Spain) → Mine: Serrabal.
- Cuarzos Industriales, S.A. (Galicia, Spain) → Mines: Sonia, Conchitina, Esmeralda, Trasmonte, Merlan and Cristina.
- “CuarzoVen, S.A.” (Est. Bolivar, Venezuela) → Mines: Cadelaria, El Manteco, El Merrey.

3. The acquisition of Ferroatlantica

While the IPO of “Obrascon” (a construction company, one of Juan Miguel first holdings) was taking place, in mid 1991, he received the news of the opportunity of buying “Carbueros metalicos”. The company was looking for a buyer since long ago through the services of Goldman Sachs Spain. The latter found some investors that were willing to acquire the water fall division but did not intend to purchase the alloy iron division. The license document to exploit the water falls stated that both divisions could not be separated; those investors weren’t the right one’s to carry out the acquisition. In other words, they couldn’t find any investor who was both an investor appealed by the acquisition of the whole company (including both divisions) and with a proved solvency and ability to success in the difficult iron alloys sector.

Then, they decide to change the M&A advisor for one small Spanish financing advisor called “Socios Financieros”, who has a better knowledge about business in Spain. They came up with the conclusion that the ideal candidate to buy “Carbueros metalicos” was JMVM, idea that was also shared with other stakeholders such as the trade union. Alfredo Pastor, by then member of the board of directors of “Carbueros Metálicos”, assured the rest of directors that “the only person who will be willing to buy the company and manage to relaunch it is Juan Miguel Villar Mir” since Alfredo Pastor was aware of the course of JMVM as CEO of HNE, in the 70’s. Without considering any detail of a hypothetic future negotiation, water falls and iron alloys made JMVM to remind him good memories of former success in this sector (Hidro – Nitro Española and Viesgo). Therefore, at a first sight, he was willing to consider the transaction but he needed time to value the size of the offer.

As it is usual in JMVM before any acquisition deal, at the end of 1991 it begins the reporting phase from which they find, between other data, the following data:

- The valuation of the energetic assets of “Carbueros metalicos”, not only the production capacity (they could produce about 350 million Kilowatt – hour) but also the economic profitability they could make with this assets.
- Valuation of the iron alloys factories. JMVM was aware of the low profitability of them (even it made losses). That is why in this part of the report was focus on the maximum losses they could have in the following years. They find that they could utmost lose about 1.000 million pesetas each year (about 6 M€ per year).
- They found that the license to exploit the water falls allows them to sell the energy surplus that they produce; in other words, it allows them to sell all that electricity which is not used by the iron alloys factories. From that fact, they set a plan to manage to sell all the electricity produced during the peak hours (6 hours per day in which the price to sell the electricity can be up to 5 times the price during the rest of hours of the day). But this plan had an additional technical challenge: they had to stop completely the production in an industry where the factories are working 24h because anyone has neither the technology nor the know-how to stop the ovens without breaking the electrodes. JMVM asserts that *“we knew that we depended on getting to stop the factories during the peak hours, something that any iron alloys factory in the world was able to do, to make the project successful and*

profitable. We must to manage to stop the factories; otherwise we couldn't make any cent!". At this point, was crucial the role of Javier Peñaranda, recruited from Hidro-Nitro by JMVM, *"thanks to his deep knowledge of ferroalloys production, he developed and achieved the unique process of stopping ovens without breaking electrodes."*

With these results, JMVM had already in his mind a fair price for the company and he was ready to begin the negotiation phase with the representatives of "Carbueros metálicos". The only thing that wasn't already known by him was the assets that were going to be included in the deal and the amount of money the seller wanted for them:

- For the valuation of the water falls, "Air products" (majority shareholder of the company, with a 30% of all the equity) set as a price the number reflected in the balance sheet of the company and they didn't admit any reduction of it. This number was 17.492 million pesetas (about 105 M€).
- For the acquisition of the iron alloys factories, JMVM knew that *"those factories weren't worth at all because they were "making losses" machines"* (about 2.000 – 3.000 million pesetas per year). Nevertheless, they finally set a token sum of 500 million pesetas (about 3M€). In addition to that, JMVM included two more conditions to accept the deal: the first one was that the current assets and liabilities were assumed by the seller; the second one was that JMVM would receive the balance sheet of the iron alloys business with a working capital of 6.000 million pesetas (about 36M€), *"a basic condition so that I accept to buy the factories because with this amount of working capital allows us to assume possible losses in, at least, the first two years"*, JMVM admits.

All in all, the total sum of the deal was set about 17.992 million pesetas (about 108 M€): 17.492 (105 M€) for the water falls and 500 (3 M€) for the production facilities. *"Thus, we set off!"*, JMVM says.

Finance of the acquisition.

Coming soon the negotiation of the financing plan for the acquisition, JMVM didn't forget to keep an eye on the macroeconomics indicators of the moments. JMVM remember that *"in that moment, I thought the Spanish economy was so unstable that I forecast that it wouldn't take a lot of time to have a currency devaluation of the peseta and the interest rate would go down, since in those days it was very high, about 15%. And I guessed both correctly!"* .At the end, both things occurred: on one hand, there was a currency devaluation of the peseta in 1993, that helped the iron alloys exports (in that moment, more than 50% of the FAT's production goes abroad, and on the other hand, the interest rate were going down in the following years, that it made the financial costs lower (**Exhibit 2**).

The hardest part of the transaction was to find a way of financing the acquisition of the water falls since the seller wanted the money in cash.

It was quite easy to get a credit of 500 million pesetas to pay in cash. The credit was released by Banesto, endorsed with the JMVM's personal wealth and with his Obrascon's shares (JMVM had almost the 60% of the shares of the company, which had proceeds of about 500 million pesetas per year).

It can be said that the acquisition of the iron alloys factories was a self-financed transaction with the current assets of the former company, since almost the entire balance sheet was made of current assets. They pay the amount (3 M€) in cash as soon as they arrived in the company.

The finance of the water falls wasn't simple at all because as the energetic division couldn't be separated from the iron alloys division (due to the covenant of the dealership to exploit them), a hypothetical mortgage execution would bring a segregation of the company, and this is not legally possible. JMVM turned to his most reliable bank (Banco Santander) to design the most suitable finance structure. This consisted of a first buying of the water falls by the bank and then set a leasing to FAT for ten years and 5 months (125 months), at the end of which FAT had a buying right to become the owner. To release the leasing, the bank laid down a very restrictive warranty conditions since the risk of the transaction was quite high, not as much as for the water falls but as for the doubtful profitability of the iron alloys business that threatened the profitability of the project as a whole. The guarantors were, in one hand, the real state company called "Espacio" (one of the companies of JMVM's holding) with the 60% of the share of "Obrascón" (recently put it on the stock market; in those days its market value was about 10.000 million pesetas, having proceeds of 1.000 million pesetas with a PER of 10) and, in the other hand, with the JMVM and this wife's personal wealth, without any limit. "*I had mortgaged everything I had, even the pillow I slept on every night*" JMVM explained. The acquisition deal was finally signed in December 1992.

Additionally to the details of the financing structure of the transaction, FAT ask the bank a grace period in the first moths to take advantage of the fact that the most rainy months of the years of 1993 were very near to come just after the signing of the deal. They were very lucky that 1993 was a very rainy and they had a water surplus to be able to produce the total capacity of energy. Thus, they took advantage of the big cash flows that were generated during the winter and spring of 1993 to pay the leasing interests and to pay the acquisition of the iron alloys division since they decided to remain the current assets in the company to cover the necessities of cash and they asked a credit to pay in cash this division.

The transaction was obviously very risky for JMVM but the big numbers of the acquisitions said that the equity of "Carburos metálicos" was valued about 10.000 million pesetas and its working capital was valued about 3 or 4 thousand million pesetas: this total sum was the maximum he has willing to lose in case he didn't manage to success in this business. Nevertheless, there was a very important fact that lightened the risk of the transaction: JMVM and his team had in mind that the water falls asset had the ability of generating cash-flows bigger than the one needed to pay the leasing monthly instalments since the water falls were located in a very rainy region (in Galicia, in the north-west corner of Spain, **Exhibit 3 and 4**) were is guaranteed enough water reserve to produce electricity the whole year and, it is useless to say, during the 1.200 hours per year of the peak period, when the energy is sold in a much higher price. Therefore, to make this project successful, they set the bottom line of achieving a non losses iron alloys division and an energetic division highly profitable.

Finally, in May 2003 the leasing of the energetic assets finished and they exercised the buying right. Surprisingly, at least at the first sight, FAT design a new finance transaction with "Caixa Galicia" in which it sold the water falls and then it again bought them with another leasing deal for 10 years. Thus, the VM holding

obtain a big flow of money to invest in other companies of the holding (e.g. increase in share capital) or in new acquisitions. This new leverage is, in other words, a way of bringing forward future cash-flows and, in the case of the water falls, with a low risk since they are assets that gives very secure and stable cash-flows.

This finance structure, together with the restructuring in the company management made this project very successful. Since 1993, the energetic division have had proceeds and the iron alloys division only had losses in 1993, 1994 (the first two years after entering the company, see the **Exhibits 5, 6 and 7**) and 1999 In the financial year of 2003, the iron alloys division first overcame the proceeds of the energetic division and this trend has been going on in the following years. In 2006, FAT have had proceeds of about 20M€ from the energetic division and 40M€ from the iron alloys division. (**Exhibit 8**).

Other FAT's acquisitions.

Hidro – Nitro Española, S.A. (HNE). With the acquisition of “Carburos metalicos” was included a share of 12% in HNE, with major share holder was still “Pechiney” (with 70% of the shares) since JMVM quitted his first stage in it (from 1968 until 1978). In 1995, HNE was the only FAT’s competitor in Spain in the iron alloys sector. In that year, “Pechiney” decided that strategically wasn’t very interested in paying attention to the iron alloys production (at least in Spain), it began to consider the selling of HNE and they thought JMVM can be the ideal investor. Being aware of that, JMVM sounded out the willingness of the Pechiney’s managers to get rid of HNE and he began to develop the report that always goes before any acquisition made by JMVM. The transaction was finally signed in the first months of 1996 with a price of 2.500 million pesetas (about 15M€) that would be paid in cash, within a framework of an offer for sale in the stock exchange market for the whole company, which immediately would be launched in the market.

Ferroatlántica de Venezuela, S.A. (Ferroven). In 1998, it was opened a privatization process of Fesilven (Ferro Silicio Venezolano S.A.), which main activity was producing basic iron alloys (specially those made with Silicum). The privatization wasn’t for the whole company but for the 80% and the process coincide with first election of Hugo Chavez as President of Venezuela. All the tenders, except from FAT, were frightened before the new situation and they withdrew their offers and FAT paid the price stipulated in the privatization contract without giving time of reaction to the rest of the tenders. The acquisition price was finally a bit higher that the one stipulated in the prior contract, and they paid about 2.310 million pesetas (about 14M€).

Pechiney Electrometallurgie, S.P.A. (FerroPem). At the end of 2002, after a meeting of “Euroaliages” (a European Association of alloys producers), the Pechiney’s representative proposed Javier de Peñaranda (managing director of FAT) to buy de iron alloys division of Pechiney since Alcan, the big Canadian aluminium producer and the main shareholder of Pechiney, wanted to get rid of all the divisions besides aluminium ones. What is more, Pechiney didn’t have in mind to sell the company to anyone else except from JMVM, due to his unquestionable renown of turnaround companies and his background as a manager of iron alloys companies. “We don’t want to sell the company to someone that will close it the following day to avoid a work force problem as well as to be well seen by the French government after the transaction” Pechiney’s representatives told JMVM. Then, he asked if the would accept an offer together with the other big European competitor, Elkem, but Pechiney’s answered strictly “No way. We know the sector: you buy us otherwise we

close the factories". After the usual detailed reporting phase with all his confident team that precedes every acquisition made by JMVM (in this case, the report included a plan for the next 10 years) and after the negotiation phase, the acquisition was finally signed at the beginnings of 2005 for a price of 120 M€. The finance structure was as follows: 30% was contributed by the own FAT's current assets and a bank syndicate financed the rest. In 2005, they had about 16M€ of losses; in 2006, they balanced the incomes and the expenses and in 2007 they expect to have a profit of more than 30M€.

4. FerroAtlántica Today

Nowadays, the **FerroAtlántica Group** has grown to become the most important company in the sector of ferroalloys and silicon metal, a world market valued at almost EUR 13.500 billion.

In fact, with the recent acquisition of all the assets and liabilities of *Pechiney*, integrated in the group as *FerroPem*, FerroAtlántica is the most important and largest producer in the world (**Exhibit 9**), due to the high production capacity and the wide range of products, with market leadership in many of them, as ferroinjections for motoring industry and ferrosilicon of high purity. This situation allows an optimistic and challenging horizon, with real growth prediction of 20% for the next year.

On the other hand, the recent purchase of FerroPem has been an opportunity to reorganize the management structure. This new organization chart has been designed around the main target markets: steel, silicon metal and smelting. The aim is to reach a more efficient commercial activity due to the wide range of products and the new global dimension of the company. Another change in the organization is the sale of the non-core factories formerly property of Pechiney, and to exploit the new condition of the group, which allow them to double the turnover, hence improving negotiation power with suppliers.

The current structure of the group is shown in the **Exhibit 10**. The company is organized in two management divisions:

- **Energy Division**, which manages the energetic assets of the company.
- **Ferroalloys Division**, which manages the production assets, commercialization, R+D, and the supporter activities to production, as quartz extraction and commercialization. This last activity is even a sub-Division of Ferroalloys one.

The main managing **guidelines** for the correct administration and relationship with all the factories of the Group are the followings:

- Complete responsibility for the profit and loss accounts and balance sheets, without being conditioned at all by the group.
- Permanent objective towards profits, with long term management criteria.
- Maximum reinvestment, withholding 100% of the profits made.
- A permanent effort to improve production, productivity and costs, respecting rigorous criteria towards work, professionalism, honesty and money-saving.
- Promotion to executive positions of internally developed talent.

On the other hand, FerroAtlántica carries out a rigorous and responsible policy, specified by a permanent observance of environmental laws, and continuous investment in **R+D** with the objective to complete processes automation, energetic reuse, new product development and environmental care in the manufacturing process. Approximately 1% of the entire turnover of the company is devoted to the search for these new stimuli for

progress, reaching the amount of € 47 M for FY05. One of the most outstanding successes in R&D is the ‘ELSA’ electrode, patented and recognized and used worldwide in the silicon production world.

One of the main pillars of the company is the **staff**. FerroAtlántica employees, currently at 2.254 individuals, are a clear reference for the other companies of the group. Since the acquisition of FerroAtlántica, the productivity (tones produced by employee) has tripled, which is one key of the success of the company. And what is more, such has taken place within a steady labour relation.

Going in deep in the **financial statements** (summarized in **Exhibit 8**), 2005 could appear as a bad year in comparison with the previous budget year. This results stands on two facts: the absence of rainfalls has reduced the profits of the energy division, making necessary to buy more energy for the operation of the factories. On the other hand, the year 2004 was an exceptional one due to the reaching of the highest prices ever in the market of ferroalloys.

However, 2005 has been a good year, with an EBITDA of € 83.4M and € 45.8M of profit after taxes. The revenues come 65% from the Ferroalloys Division (which includes profits from de Quartz Division), and 35% from the Energy Division.

It is necessary to remark that the acquisition of the factories of the Pechiney Group, has contributed to results for the last 7 months of 2005, in which the net production has almost doubled the results of the last year, increasing by 46.2% to reach the amount of 754,130 tones produced and almost doubling the amount of assets of the group. It is expected that the contribution in results of *FerroPem* will have more impact in the following years, as such will be reorganised and managed following the criteria of the group.

At the end of year 2006, Ferroatlántica Group, including FerroPem, was comprised by:

- 13 factories, including 5 in Spain, 6 in France, 1 in Venezuela and 1 in South Africa.
- Electrical furnaces with electrical power of 354 Mw in Spain, 275 Mw in France, 114 Mw in Venezuela and 82 Mw in South Africa.
- A total of 2.254 employees.
- Full catalogue of ferroalloys and Silicon Metal products.
- Production of 830.000 metric Tons.
- Net profit of 53 million EUR: 25 million EUR from the Energy Division, in Spain; 26 million EUR from the ferroalloys plants in Spain and Venezuela and 2 million EUR from the ferroalloys plants in France and South Africa (after 12 million € provision for the restructuring of the french factories and headquarters).

For the FY07, the net profit of the Group Ferroatlántica, including FerroPem, will probably exceed 100 million EUR (**Exhibit 8**).

5. Turnaround model by Villar Mir Group

“The key element is always to study the situation and existing problems and possibilities until you are able to define exactly what must be done. You must always define carefully the objectives to be reached”, affirms JMVM. Expanding on the idea, Juan Miguel breaks down the key for managing companies:

- 1) **Objectives.** *“You need to define the objectives with precision and for that you must write them down!”* It is necessary to distinguish between short term and long term objectives.
- 2) **Organization** fully oriented towards the objectives.
- 3) **People.** *“...as they are the most important mean to achieve objectives. You must make a good selection and then motivate the team to achieve the objectives”*.

It sounds quite simple, but to summarize, it is a question of having always in mind your objectives, so you can organize resources in order to fulfil them, mainly managing people. *“We need the best people for each of the functions that take part on the way to objectives. And to do that, we have to get to know our people (employees) thus we can have them motivated”*. About this latter point, motivation, Juan Miguel specifies *“You have to be focused on people, always putting them in the very first place. We can see daily examples of what not to do about this question, in all kind of business. For example, when a football club is in a losing streak, it is usual to see on press or on TV, the president of the club stating how bad and lazy are his own footballers, instead of providing them enough motivation to do their best, and above all, assuming his part of guilt and thus, his bad management of the club. In bad moments and crisis, you have to give your best, showing your confidence on the organization and your people. On the other hand, a bad crisis management will make you lose forever the confidence on your own organization.”*

What is more, the policy of the group is to give everyone the job position in which they would fit best. JMVM states *“It is frustrating to have a job that requires competences you don’t really have. You have to be in a position in which you can develop yourself and be capable and responsible of all the decisions you will be making”*. Furthermore, internal promotion is not only possible but desired. Juan Miguel also deems important allocating best people to new ventures.

Another important management principle for JMVM is delegation. In an example of the application of this principle, he delegates the management of the group on 14 people. He does not believe in synergies or headquarter departments (Administration, HHRR, finance, ...) horizontal to all the divisions: *“I don’t like constraints to the managers of our companies. We only do a strong control in the areas of finances, programming and strategy, which are necessary to be centralised for the whole group. Each company, each division and each area has its own objectives, and they have to do whatever will be needed to achieve these objectives, being completely responsible for that”*.

Coherently with all the previously exposed, upon arrival to each of the companies acquired, JMVM and his staff have always developed a previous and deep analysis of the company in many aspects: market/clients, production, financial statements, management structure, etc, in order to determine whether the company could be profitable in the future. *“The price of the company to be purchased is important, but*

independent of the bad or good nature of the business. I mean, if I think that a company can be repaired and become profitable, the price is not the most important fact of the negotiation. By the way, when companies are in crisis they are cheap too". Such ideas allow him to apply the management principles of the group: improving production and reducing variable and fixed costs. In words of the managing director of *Villar Mir Group*, **Tomás García**, their philosophy could be explained as *"to make the companies to unfurl the sails"*.

But it is not easy to achieve these objectives. Tomás García thinks that *"It is necessary to develop a strong commercial activity to sell the increasing production, and it is very difficult to reduce cost. However, much can be done within the management structure"*. What Tomás means is that the acquired companies typically have a heavy management structure with many executive posts in central offices, becoming hence very centralised organizations. Therefore, Juan Miguel implements strong management reorganization, with a decentralization that gives more autonomy to factory managers, with complete responsibility for the profit and loss accounts and balance sheets, without being conditioned at all by the group. In exchange for these new competences (including personnel administration and others), managers have a new salary with a high variable (up to 75% for top positions)..

It is very important to note also that the company never fired any executive upon arrival. Managers are offered to continue working for the company, but with the new conditions previously described. In fact, currently almost every director of factory is a former employee of the acquired company.

Exhibit 1: Iron Alloys uses

90% of the Ferro-Manganese alloy, Ferro-Siliconmanganese iron alloy and the Ferro-Silicon alloy is used to produce steel and the rest 10% is used to produce foundries, as a pickler and as an alloy element. In other words, the Silicon (Si) and the Manganese (Mn), in an iron alloy, are added into the steel pouring as a pickler (to eliminate the oxygen) since Mn and Si are very thirsty to combine with the oxygen and, thus, eliminate it from the final steel composition. Si acts also as an alloy element (reducing the carbon, which makes the steel weaker) and the Mn makes the steel become harder. To be aware of the necessity of the iron alloys in the steel, it is known that for each tone of steel it is needed 8-9 kg of iron alloys.

The silicon metal is used to produce aluminium alloys and other chemical application, such as silicones, with a purity higher than 98,5%.

The electrode paste is used as a raw material in the production of all the iron alloys, selling the surplus not used by FAT. The latter increases the production processes profitability of all the FAT production plants since they even benefit from the surplus products.

The microsilicon is used to produce high strength concrete, with higher waterproofness, higher strength to chemical attacks and a more dense and homogeneous structure.

The pulverizeds are smashed iron alloys according with each customer preferences. They are used in the production of welding electrodes and packages.

The raw material needed for the production of the different iron alloys made by FAT are: for the Silicon metal and the Ferro-Silicon alloys it is used mainly the quartz; for the Ferro-Manganese iron alloy and the Ferro-Silicon-Manganese alloy, the main raw material is the manganese mineral. The raw material division is in charge of providing them (see “Raw material division” section).

The iron alloy production is made in three phase electrical ovens of submerged arc, where the electric energy is introduced through the paste electrodes (thus transforming electric energy into calorific energy) and the minerals react with the reductors (some kind of carbon minerals). It is also added limestone and scrap iron.

Exhibit 2: Spanish Interest rate evolution

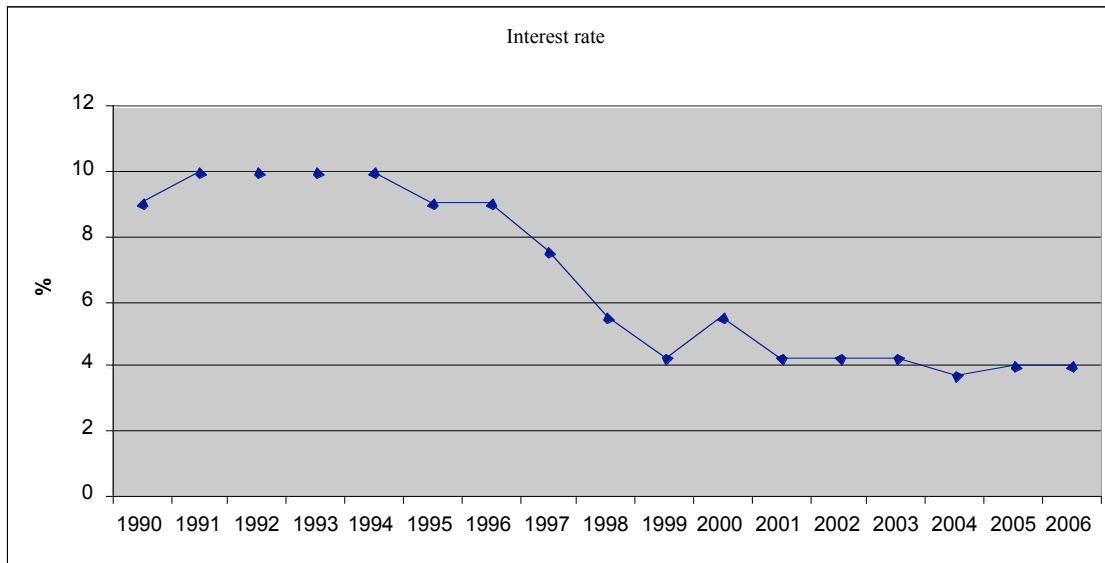


Exhibit 3: Average rainfalls by Spanish basins (last 50 years)

Precipitaciones extremas (mm), por cuencas hidrográficas					
Cuenca	Precipitación media	AÑO MÁS HÚMEDO		AÑO MÁS SECO	
		AÑO	Pmax	AÑO	Pmin
NNW	1316,9	2000-01	2033,3	1948-49	802,2
DUERO	608,5	1965-66	887,2	1964-65	348,2
TAJO	645,7	1955-56	987,3	1980-81	406
GUADIANA	546,4	1962-63	839,9	1994-95	295,1
GUADALQUIVIR	594,0	1962-63	1024,2	1998-99	272,8
SUR	544,7	1989-90	957,6	1994-95	279,1
LEVANTE-SE	465,9	1958-59	661,9	1952-53	273,4
EBRO	607,7	1959-60	871,7	1948-49	400,3
PIRINEO ORIENTAL	720,9	1971-72	1212,3	1966-67	498,7
VERTIENTE ATLÁNTICA	710,6	1959-60	1046,3	2000-01	332,8
VERTIENTE MEDITERRÁNEA	563,8	1959-60	788,1	1952-53	411,5
MEDIA PENINSULAR	664,1	1959-60	950,8	1948-49	457,8

Exhibit 4: Rainfalls at Galician basin (last 8 years)

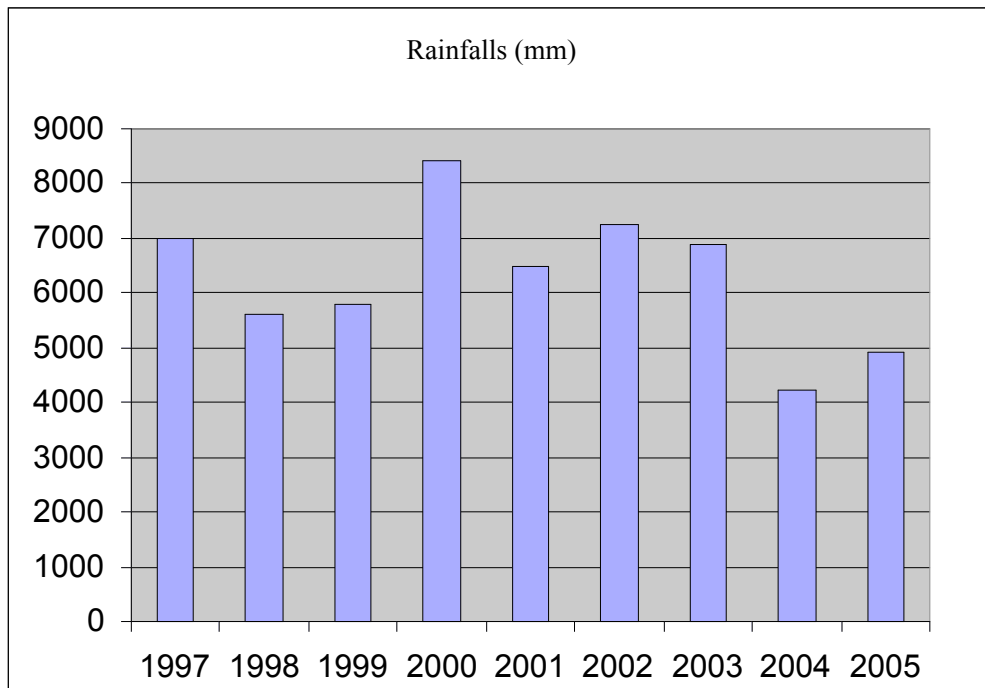


Exhibit 5 P&L Statement and Balance sheet for Energy Division, first years after JMVM purchase (1993-1995)

(M€)	1993	1994	1995
Net Sales	34,3	34,9	31,1
Other Incomes	0,9	1,1	1,7
Net Revenue	35,2	36,0	32,8
Cost of Sales	0,0	0,3	0,2
Operating Expenses	1,7	1,6	1,4
Other Expenses	3,5	1,3	2,0
Amortization	2,5	2,5	2,5
Net Costs	7,8	5,7	6,1
Operating Profit	27,4	30,3	26,7
Financial Income	0,1	0,8	0,8
Financial Expense	-17,9	-13,2	-12,2
Primary Profit	9,6	18,0	15,3
Excess Profit	5,5	1,1	1,0
Incidental Expenses	-0,7	0,0	-3,4
Gross Profit Result	14,3	19,1	12,8
Taxes		3,3	4,5
NET INCOME	14,3	15,8	8,3
EBITDA	29,9	32,8	29,2

	1993	1994	1995		1993	1994	1995
Intangible assets	101,3	98,8	96,4	Capital	0,0	0,0	0,0
Tangible assets	0,0	0,2	0,9	Reserves	0,0	-3,5	0,0
Investments and loans	0,0	18,2	14,1	Previous Income Statements	-0,7	13,0	25,3
				Income Statement	14,3	15,8	8,3
Total fixed assets	101,3	117,2	111,4	Corporate Equity	13,6	25,3	33,5
				Provisions for contingencies	0,0	0,0	0,1
Spreaded Costs	30,3	27,2	34,6	Leasing Creditors	123,3	112,2	98,4
Inventory	7,8	0,0	0,0	Loan	0,0	0,0	123.272,7
Debtors	10,1	8,0	5,5	Other long term Creditors	0,0	1,4	3,3
Cash at bank	0,0	0,1	0,0	Total long term Creditors	123,3	113,6	101,7
Adjustment to cash	6,4	5,8	5,1	Short term Leasings	11,9	13,4	14,9
Financial assets	6,6	0,0	0,0	Short term borrowings	3,6	3,5	2,6
Total current assets	23,1	13,9	10,6	Commercial Creditor	0,8	1,3	0,7
				Other Debt Holders	1,5	1,3	3,1
NET ASSETS	154,7	158,4	156,6	Liquid Liability	17,8	19,5	21,4
				Total Liabilities	141,1	133,1	123,1
				NET LIABILITIES	154,7	158,4	156,6

Exhibit 6 P&L Statement and Balance sheet for Ferroalloy Division, first years after JMVM purchase (1993-1995)

(M€)	1993	1994	1995
Net Sales	48,4	65,8	91,7
Other Incomes	1,1	6,6	5,8
Net Revenue	49,6	72,4	97,5
Cost of Sales	35,8	43,8	57,3
Operating Expenses	14,6	18,0	19,9
Other Expenses	7,1	8,9	10,8
Amortization	2,6	6,5	4,6
Net Costs	60,1	77,2	92,6
Operating Profit	-10,5	-4,8	4,8
Financial Income	0,4	0,5	0,4
Financial Expense	-1,1	-1,8	-2,5
Primary Profit	-11,2	-6,1	2,7
Excess Profit	0,3	0,2	0,2
Incidental Expenses	-0,0	-0,4	-0,2
Gross Profit Result	-10,9	-6,4	2,8
Taxes	0,0	0,0	0,0
NET INCOME	-10,9	-6,4	2,8
EBITDA	-7,9	1,7	9,5

	1993	1994	1995		1993	1994	1995
Intangible assets	0,3	0,2	0,2	Capital	65,4	65,4	65,4
Tangible assets	18,2	15,7	15,7	Reserves	0,0	4,1	0,0
Investments and loans	9,2	10,5	11,1	Previous Income Statements	-2,1	-13,0	-15,3
	0,0	0,0	0,0	Income Statement	-10,9	-6,4	2,8
Total fixed assets	27,7	26,4	26,9	Corporate Equity	52,4	50,1	52,8
Spreaded Costs	0,0	0,0	0,0	Provisions for contingencies	0,6	0,9	1,1
Inventory	21,4	22,4	25,8	Leasing Creditors	0,0	0,0	0,1
Debtors	16,7	23,4	34,4	Loan	0,0	0,0	0,0
Cash at bank	0,3	0,5	0,3	Other long term Creditors	0,0	0,0	0,4
Adjustment to cash	0,4	0,0	0,0	Total long term Creditors	0,0	0,0	0,4
Financial assets	0,0	0,0	0,0	Short term Leasings	4,4	12,8	20,9
Total current assets	38,8	46,3	60,5	Short term borrowings	2,4	1,8	3,5
NET ASSETS	66,5	72,7	87,4	Commercial Creditor	5,6	6,0	8,2
				Other Debt Holders	1,0	1,2	0,5
				Liquid Liability	13,4	21,7	33,0
				Total Liabilities	13,4	21,7	33,5
				NET LIABILITIES	66,5	72,7	87,4

Exhibit 7: Net income evolution of FAT after JMVM acquisition

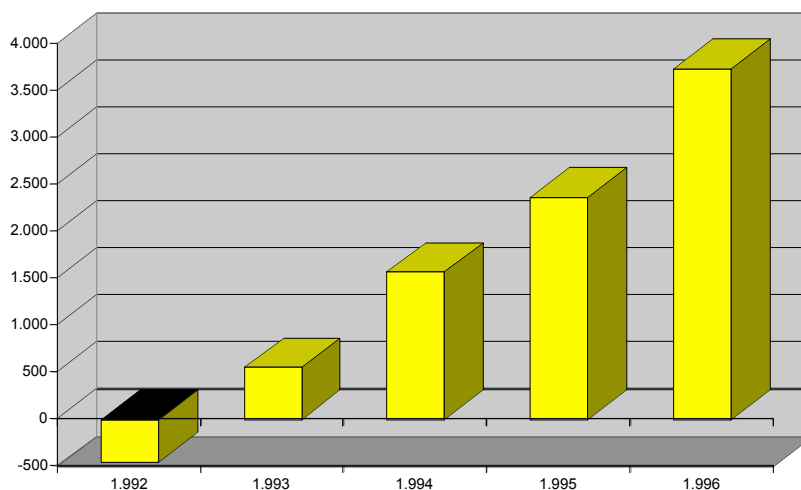


Exhibit 8 P&L Statement and Balance sheet for 2003-2007 period.

(M€)	2007 (E)	2006	2005	2004	2003
Net Sales	845,0	707,2	522,7	405,1	307,9
Other Incomes	10,0	29,5	5,6	4,0	6,8
Net Revenue	855,0	736,7	528,4	409,1	314,7
Cost of Sales	444,6	362,4	238,3	156,6	146,9
Operating Expenses	106,3	106,3	77,7	49,9	40,6
Other Expenses	123,3	154,5	129,0	63,5	42,5
Amortization	31,2	29,6	31,9	20,2	15,4
Net Costs	705,4	652,8	476,8	290,2	245,4
Operating Profit	149,6	83,9	51,5	118,9	69,3
Interest Income	6,9	10,3	15,3	11,0	7,9
Interest Expense	-14,7	-20,5	-19,7	-13,3	-14,7
Amortization of Working Capital	-0,3	6,8	-0,8	-0,8	-0,8
Primary Profit	141,5	80,5	46,3	115,8	61,7
Excess Profit			24,5	6,1	2,1
Incidental Expenses	-0,4	-6,8	-6,0	-2,1	-1,9
Gross Profit Result	141,5	73,8	64,9	119,8	61,9
Taxes	-37,6	-20,3	-19,1	-40,6	-19,7
Earning Before Irregular Items	103,5	53,5	45,8	79,2	42,2
External Partners Incomes	-1,5	-0,5	-0,5	-1,5	-1,2
NET INCOME	102,0	53,0	45,3	77,7	41,0
EBITDA	180,7	113,5	83,4	139,1	84,7
CASH FLOW	41,0	82,9	78,0	98,7	57,2

	2006	2005	2004	2003		2006	2005	2004	2003
Intangible assets	72,1	75,6	78,5	83,9	Capital	66,6	66,6	66,6	66,6
Tangible assets	209,6	194,5	94,1	83,8	Reserves	165,0	198,8	174,6	192,8
Investments and loans	123,9	170,2	162,3	212,9	Adjustment on first consolidation	0,0	19,3	3,2	3,3
Total fixed assets	405,6	440,3	334,9	380,6	Corporate Equity	284,5	284,7	244,4	262,7
Goodwill	1,0	1,3	2,1	2,9	Minority Shareholders	6,3	6,3	5,2	4,2
Spreaded Costs	15,2	17,5	21,4	31,2	Spreaded Incomes	34,4	2,8	3,4	2,6
Inventory	200,6	201,3	79,4	51,3	Provisions for contingencies	2,1	31,9	6,9	4,8
Debtors	198,7	195,9	125,7	106,8	Corporate Funds	327,4	325,7	259,9	274,3
Cash at bank	30,1	7,9	16,0	9,1	Leasing Creditors	94,0	106,7	119,6	133,4
Adjustment to cash	3,4	1,9	1,0	1,5	Loan	117,4	138,4	28,3	31,5
Total current assets	430,4	407,0	222,1	168,7	Other long term Creditors	26,3	26,7	29,5	27,6
NET ASSETS	852,1	866,0	580,5	583,4	Total long term Creditors	237,7	271,9	177,4	192,5
					Short term Leasings	14,4	14,2	14,0	10,7
					Short term borrowings	121,4	133,1	66,6	46,2
					Commercial Creditor	108,5	81,6	41,5	35,2
					Other Debt Holders	42,7	39,6	21,1	24,5
					Liquid Liability	208,7	268,4	143,2	116,6
					Total Liabilities	524,8	540,3	320,6	309,1
					NET LIABILITIES	852,1	866,0	580,5	583,4

Exhibit 9: Portfolio and production of FAT main competitors in year 2005

Product (Mtones)	FAT + PEM	NIKOPOL (Ukraine)	ERAMED (France)	ELKEM (Noruega)
Siliconmanganese	152	1000	300	--
Ferromanganese	190	250	500	--
Ferrosilicon	243	--	--	300
Silicon metal	200	--	--	70
Microsilica	120			200
Other products	46			50
TOTAL	951	1250	800	620

Exhibit 10: Ferroatlántica Group Structure

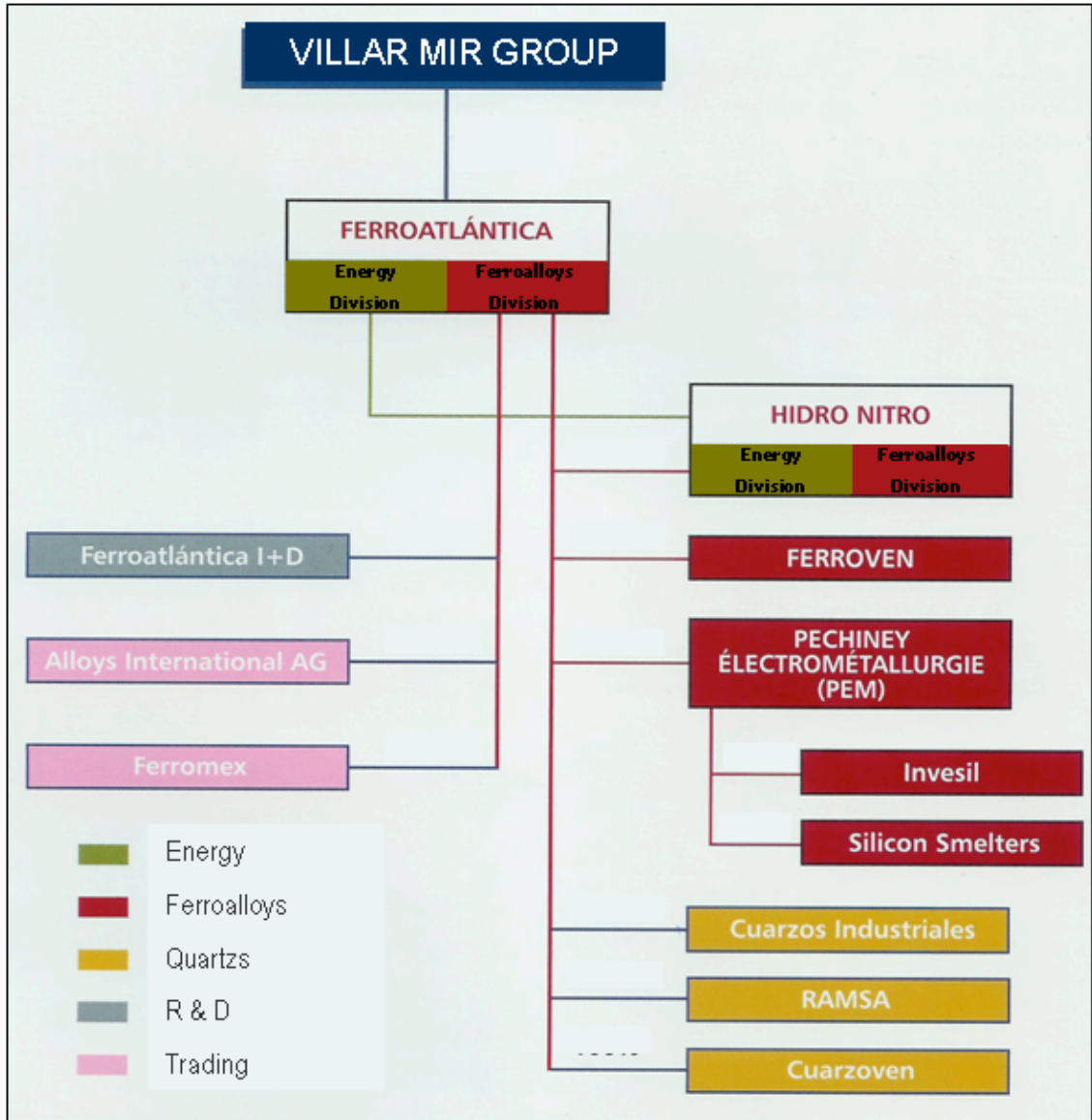


Exhibit 11: Main countries ferroalloy producers in year 2003

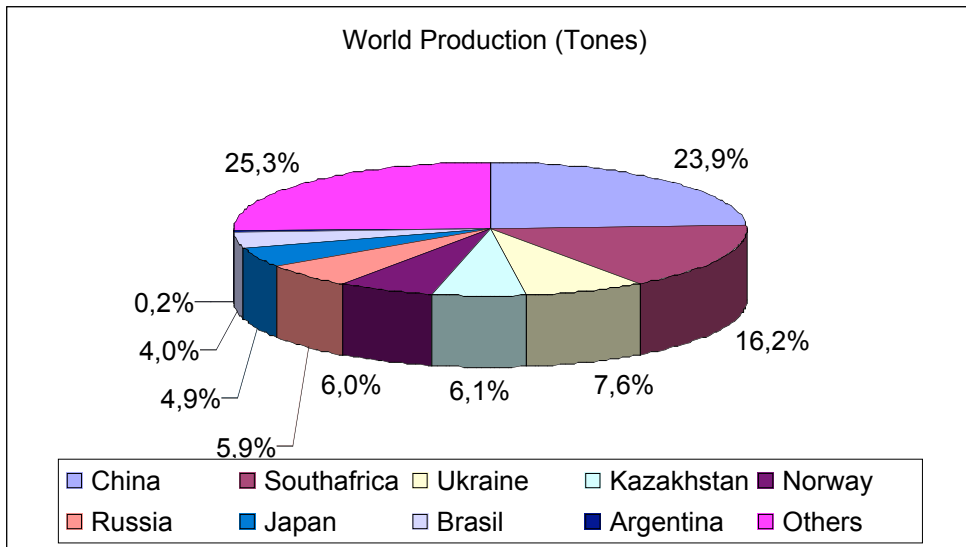


Exhibit 12: Dependence on Exports of Non-fuel Commodities and Geographical Concentration of Production in 2001

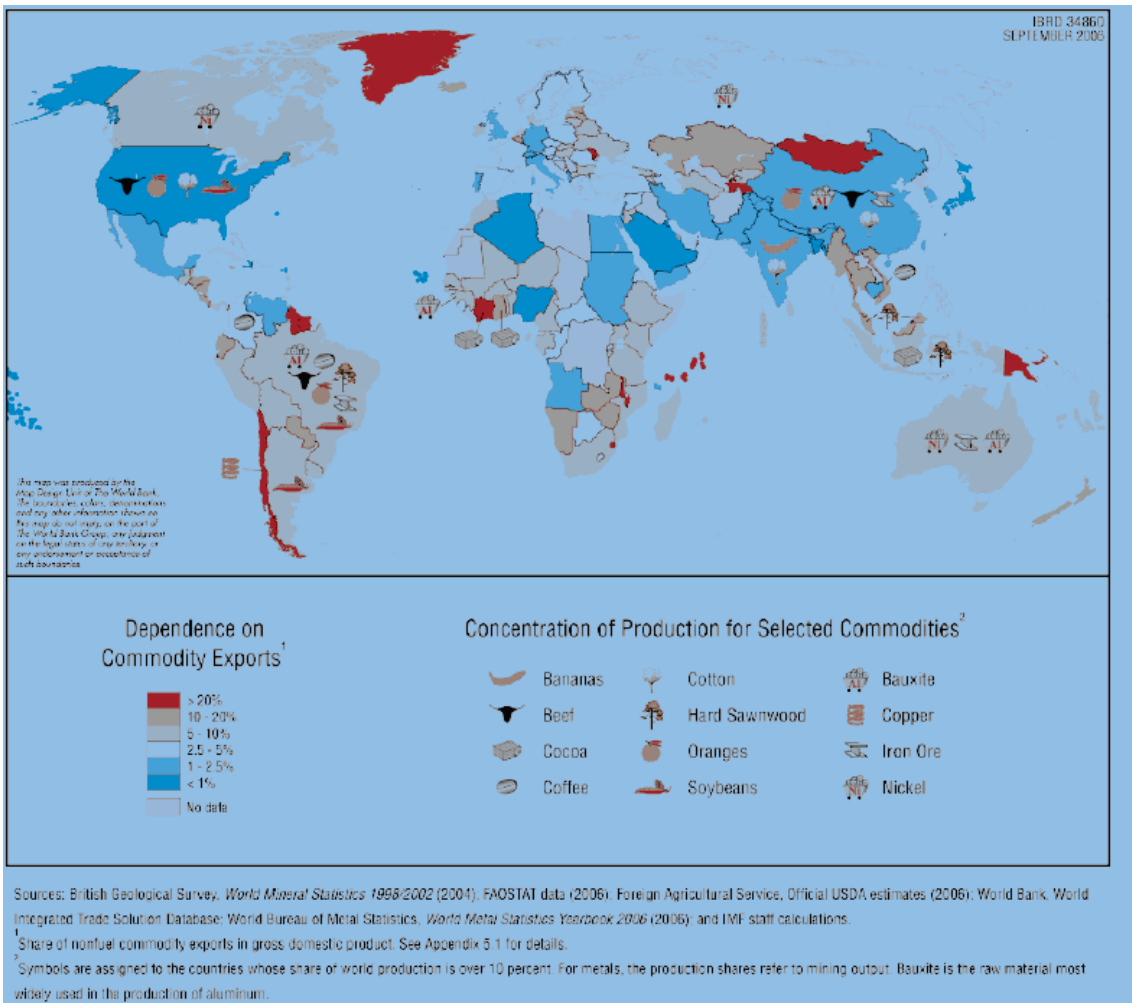
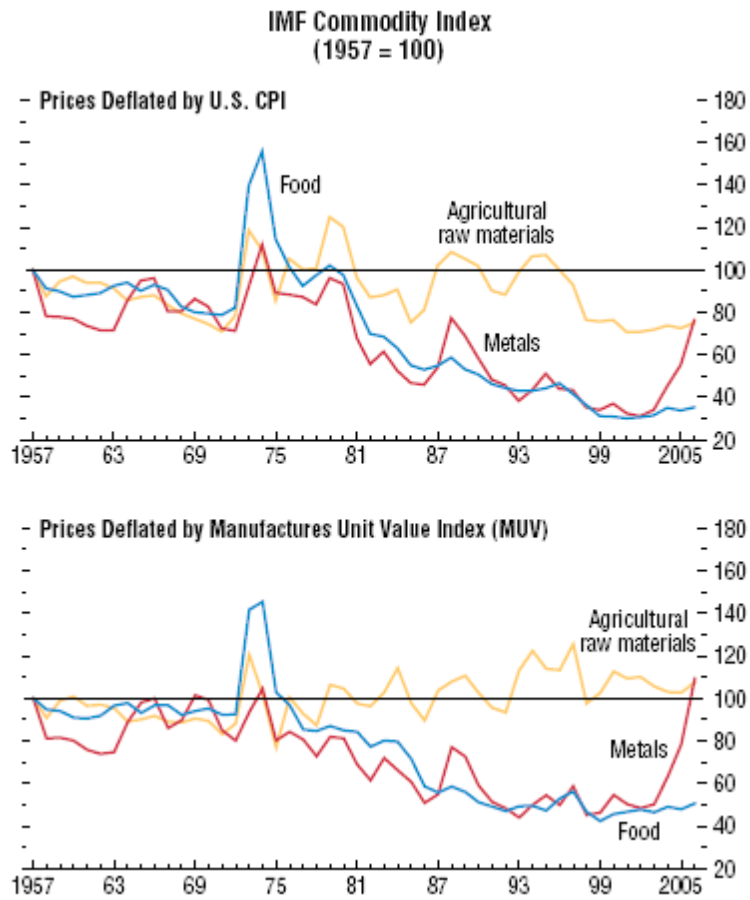


Exhibit 13: Long – Term Price Trends of nonfuel commodities relative to the consumer price index (CPI).



Source IMF & UNCTAD.

Exhibit 14: Metal price (in blue) over the business cycle (world GDP growth in red).

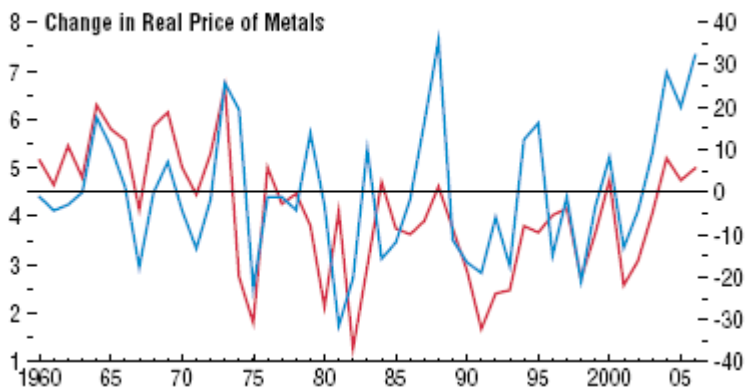
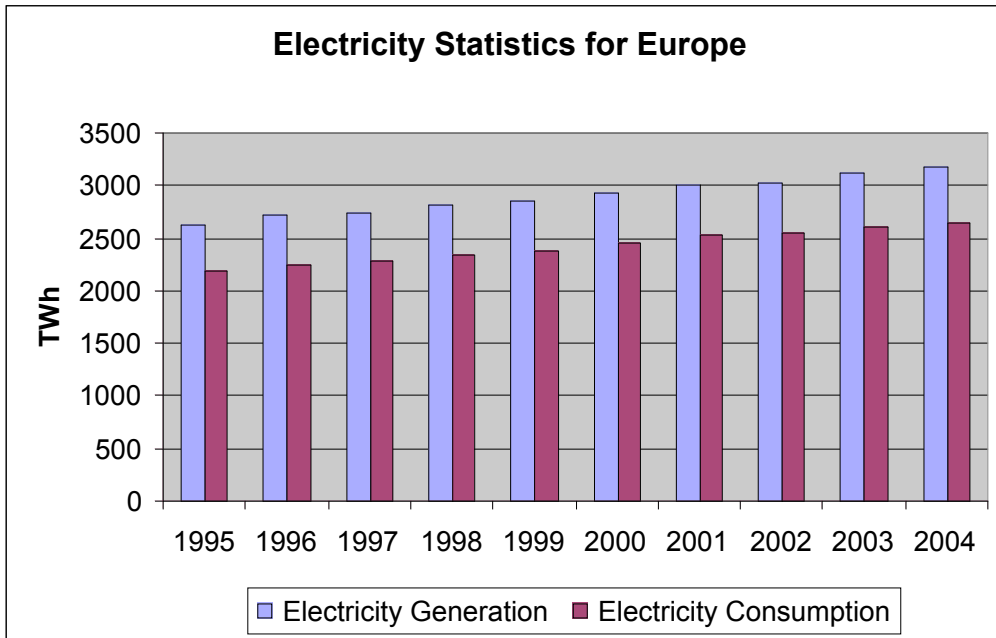
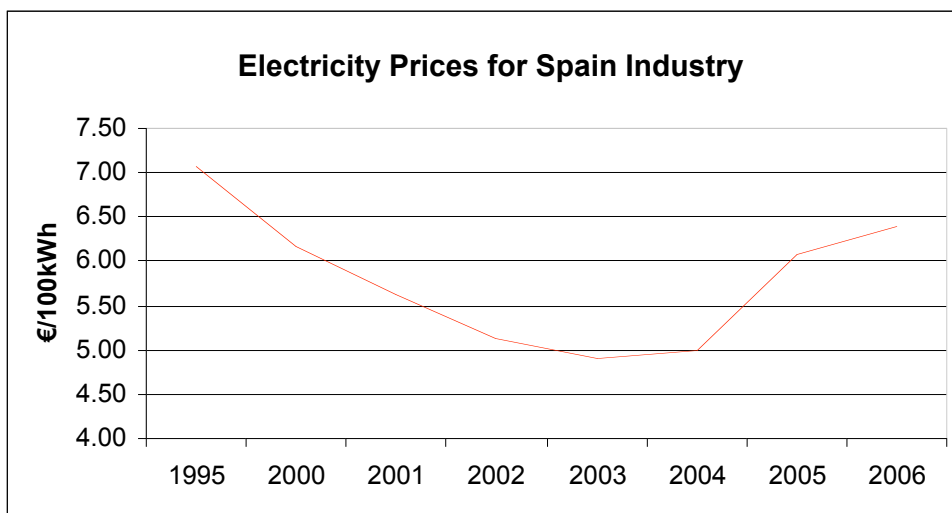


Exhibit 15: Electricity Statistics for Europe



Source: Eurostat

Exhibit 16: Electricity Prices for Spain Industry Consumption



Source: Eurostat