Nova School of Business and Economics

Attracting Investments from Germany to Portugal

A specific value-proposition for Automotive suppliers

Gonçalo Oliveira Martins de Sousa

1196

Lisbon, January 17th 2014

Master in Management CCILA Work Project

Developed under the supervision of: Professor Alexandre Dias da Cunha

Abstract

This thesis work grounds on the investment relations of Portugal and Germany intending to provide investment promotion agencies a more comprehensive model and a more effective set of investment promotion tools. Particularly, it stresses how Portugal can attract more capital from Germany in a specific sub-sector – the automotive Tier1 suppliers industry (manufacturer who provides directly to a company without dealing with other manufacturers or a middleman).

It builds on a very strong field work, based essentially on experts and top managers' opinions of several different spheres. It is also structured around the collection of several case-studies' insights and carefully designed questionnaires.

A main finding is that one as to be realistic with regard to Portugal's potential to attract investment. Investment promotion analysis shows that investment decisions depend first and foremost on the quality of a country's business environment; investment promotion agencies can only bridge information gaps and mitigate biased perceptions by leveraging on a country's strengths.

It is offered several recommendations both at a more general and operational level. The need to improve a 'suboptimal' choice and prioritization of arguments and metrics or some important investment lead generation activities suggestions are just some examples, among others.

Acknowledgements

This work was made possible with the continuous support of Professor Alexandre Dias da Cunha who believed in us to address this challenging topic. His guidance helped me believe also be possible, and for that I'm truly grateful.

I would also specially thank Mr. Hans-Joachim Böehmer whose inspiring methods and vision stimulated my thinking and elevated our work. Also, the incredible diligence of Mrs. Susana Mayer is worth my sincere thanks.

Thirdly, I would like to express my deep gratitude to Mr. Rafael Dias for his ever-crafty feedback and for making this tri party project possible.

I also need to thank my fellow colleagues, especially Steffen Schink for taking this enormous and captivating journey with me.

Last but not the least, special words of gratefulness pertain to my family whose support and comprehension inspired me to be always better.

Table of Content

Table of Figures

1. *This introductory chapter intends to briefly detail some aspects that underlie the whole business project and provide useful context on the topic studied.*

Contextualization

Challenge Overview

The present study was born out of a true challenge prepared by the *German-Portuguese Chamber of Industry and Commerce* and *Roland Berger Strategy Consultant* (see Appendix 1).The sponsor of the project was Mr. Hans-Joachim Boehmer - captaining the all project. He was to observe and validate the proceedings and the relevance of the results achieved. Worth mentioning, the results of the project are intended to be presented to the relevant authorities such as AICEP (Agência para o Investimento e Comércio Externo de Portugal) or the Ministry of Foreign Affairs, for example, figuring consequently as the final 'target' of our work and to whom most of the recommendations were delineated.

The project team was composed of me and my colleague Steffen Schink; we were both equally held responsible for planning, executing and meeting the project objectives. With our partners was agreed a comprehensive set of deliverables and a demanding schedule of 'steering committee meetings' that made the coaching process clear and productive. The steering committee was composed of Mr. Boehmer, Mr. Rafael Dias from Roland Berger and Mr. Alexandre Dias da Cunha from Nova School of Business and Economics. The constant feedback provided by all was of utmost importance.

We were asked to design a specific business case on how to promote and attract German companies' investment. It would have to treat a particular sector of activity – our choice fell on TIER 1 suppliers[1] of the automotive industry (explanation deferred to section 2). Also shape a, presently, very broad global value proposition into a more meaningful picture for particular German companies (that we would have to list as one of the deliverables) centered on concepts of technology and innovation. Overall this work reflects the intention of our client for us to 'dig-deeper' into the aforementioned problematic – Investment Promotion - in a quest to assess better companies' needs, major bottlenecks they encounter and their expectations when comparing diverse investment destinations; the possible match of these with a more cohesive, coherent and measurable offer of real

[1]"Being identified as a Tier1 Automotive supplier establishes both the credibility and commitment required by global automotive manufacturers of their closest business partners trusted to design, develop, and validate the products and systems incorporated into their vehicles." (from http://www.Tier1parts.com/)

competitive advantages can truly allow a country such as Portugal to 'get in the short list' and capture important resources to its economy. The more tailored possible the offer is to a specific sector, the most likely is the strategy able to produce significant results and provide some innovative thinking on the matter; there is also the need to bring these quantitative value propositions closer to business decision makers and all relevant stakeholders by involving experts, networkers and investment managers with vast experience (or by promoting privileged contacts with specialized media, for example).

There are many and fierce competitors presenting offers that better match German investors' needs. It is of utmost importance the channeling of efforts and resources to re-think Portugal promotion strategy enabling it to participate more actively in our ever more globalized world.

FDI: Introductory Facts And Figures

Among other institutions, the OECD praises: "In recent years, Portugal has implemented ambitious structural reforms to restore the sustainability of public finances, reduce external imbalances and put the economy back on a path of strong, jobs-rich growth. Reforms to bolster the fiscal framework broaden tax bases and enhance labor market and competition policies have been important steps forward. (…)This ongoing rebalancing – on the back of renewed reform impetus – has been paramount in assuring markets of Portugal's capacity to implement reforms, and in restoring debt sustainability and external confidence"[2]. For our work it is very important to understand the possible impact for the real economy and, consequently, what outcome it has for foreign investment. More concretely, we have to wonder whether or not German companies recognize real improvements on the business environment, in consequence of the reforms in place. Some facts and figures on Foreign Direct Investment (FDI) are presented next to help contextualize the topic.

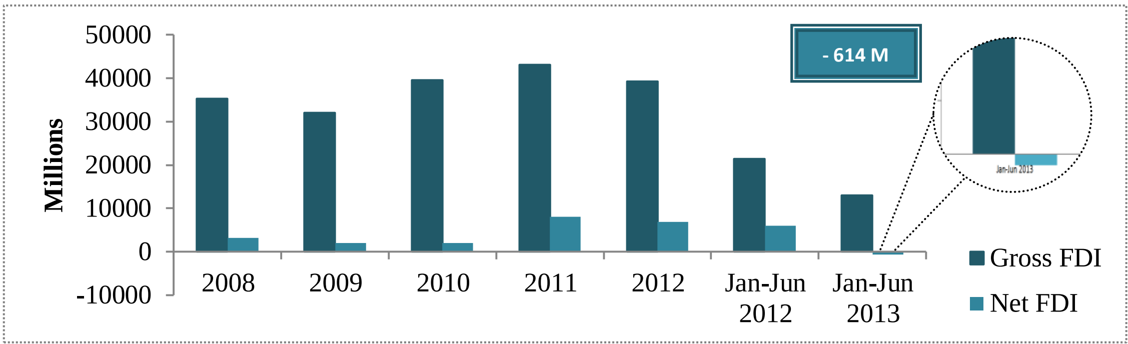
The Bank of Portugal (August 2013 data) shows that net FDI in Portugal fell in the 1st semester of 2013 comparing with the homologous period by 110.2%, representing a net investment of -614 Million (Euros)[3]. This accentuated an already clear drop from 2011 to 2012 on net FDI of 13.5% – Figure 1 below is very clear. Overall FDI Stock in PT was

[2] OECD (2013) "Portugal: Reforming the State to Promote Growth" p. 8.

[3] "FDI flows with a negative sign indicate that at least one of the three components of FDI (equity capital, reinvested earnings or intra-company loans) is negative and not offset by positive amounts of the remaining components. These are instances of reverse investment or divestment" (UNCTAD 2013)

49.3% of GDP in 2011 (in Ireland was 120% and in Holland, Hungary, Czech Republic and Slovakia around 60%). FDI in Portugal is insufficient and its application on non-strategic sectors - mostly in financial activities, insurance and utilities – suggests deficiencies on the supply side and the public incentives offered, in relation to the abovementioned countries, some very close competitors of Portugal in investment capture.[4] One can also observe a worsening of Portugal's relative positioning on the World Economic Forum Index of Productivity Growth from 45th place to 51th place (among 148 countries) considering 2011 to 2013.

Figure 1: Evolution of FDI in Portugal

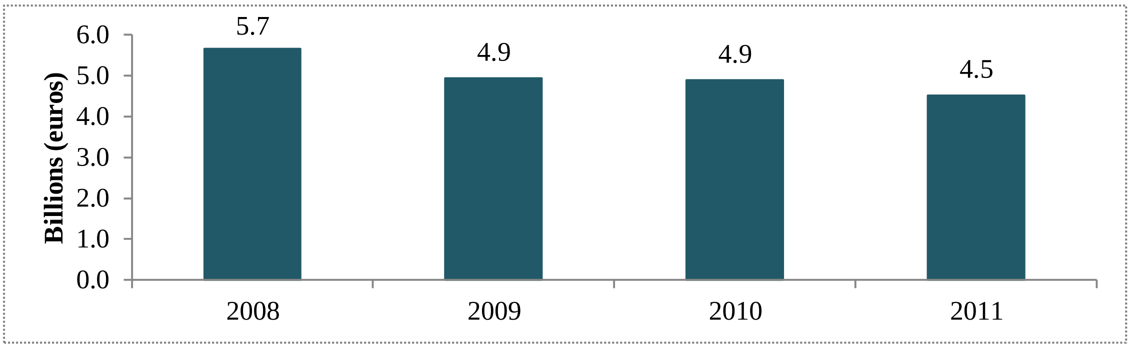


Source: Bank of Portugal 2013

When it comes, more specifically, to German FDI in Portugal the numbers don't get much rosier. Till 2010 Portugal captured 0.5% of all accumulated investment of Germany abroad according with the Deutsche Bundesbank while the UK got 10%, Holland 6.1%, Spain 2.5%, Czech Republic 2.2%, Poland 2.2%, for example (See Appendix 2[5]). Of some relevance is that neighboring countries acquired roughly 1/3 (33.3%) of all accumulated German FDI giving strength to argumentation of location proximity preference. Figure 2 shows that FDI stock of German investors in Portugal has been decreasing. Its numbers contrast with Bank of Portugal data that estimate that German FDI stock in Portugal was stabilized around 3 billion Euros for the last decade[6].

[4] Paragraph based on "FDI in Portugal – attractive capital to create jobs: Recommendations to the government and public institutions about strategy and policies to implement"
[5] Complementary graphs – "FDI in Portugal by Country 2012 (%)" and "FDI in Portugal by Country January/June 2013 (%)"
[6] It was also interesting to note some discrepancies on FDI data, across different institutions. To this aggregate variable are given different definitions and the simple inclusion/exclusion of one component might lead to contradictory results.

Figure 2: Total FDI Stock of German Investors in Portugal



Source: Deutsche Bundesbank (2013), Foreign Direct Investment Stock Statistics

According with the Bank of Portugal data, while in 2007 Germany was first investor in Portugal representing 19.75% of all foreign investment in the country in 2012 was already sixth. This implies a reduction of Germany representativeness in the Portuguese economy. From 2007 to 2011 Gross investment from Germany to Portugal was 26362.2M (Euros) and divestment of 27346.9M (Euros) – a net value of -984.7M.

All the macro data presented above complemented with a more detailed analysis at 'firm level' can add much value; PORTUGALPLUS study from Roland Berger[7] – 'starting document' of our project - complemented with in-depth research on many other sources allowed us to get a more holistic view on German companies already established in Portugal. When it comes to their composition, 60% are from the Industry sector – 18% Automobile sector, 14% of Chemicals, 9% Metallurgy, 7% Consumer Goods and 13% others – while 24% are Services and 16% Commerce.

German companies already established in Portugal are good examples as they are investing in a long-term perspective[8] mainly in technology-intensive industries and because they make a very significant contribute to exports[9].

[7] It was to this study that we were supposed to give continuity. This study prepared by Roland Berger to the German-Portuguese Chamber of Industry and Commerce had the objective to recommend a new dynamization plan to boost German FDI to Portugal and Portuguese exports.

[8] Between 2012 and 2015 about half of the companies intend to maintain their investment levels and more than 30% consider to increase investment in Portugal in 2014-2015 (Roland Berger PORTUGALPLUS study May 2013); 79% of German industrial companies are positively committed with Portugal - 27% in the short-term and 28% in the medium-term intent to expand their investments and only 11% to 9% decrease, respectively (AHK "Empresas Alemãs em Portugal – Clima Empresarial e Factores de Sucesso" 2010).

[9] 87% of all production is exported on average; in some sectors these numbers are even much higher - 97% in Rubber products, 95% in Shoes industry, 91% in Machinery, 90% in Electrical Equipment or 88% in Automotive, for example (Roland Berger PORTUGALPLUS study).

There exists a very vast list of German companies - Continental Mabor, Mitsubishi Fuso, Preh Portugal, Schaeffer, Leica or Labesfal, for example - that made significant investments in Portugal very recently (2011 to 2013). Some examples, among many others, show the dynamism of our business environment: Nokia Siemens built two new IT centers in 2012-2013 that represented a 90M Euros investment; Bosch has a worldwide Research and Development (R&D) center in Thermotechnology that represents till 2013 an investment of more than 190M Euros; Continental has in Portugal its most productive subsidiary in the all group; the presence of Enercon or Volkswagen Autoeuropa, two very meaningful investments that created a very significant numbers of jobs.

However it is relevant to observe the increased competition from other locations and recognize some underlying limitations that investors point out as crucial. Portugal is said to be in high competition for the capture of German investment with Asia and Eastern European countries that offer a very attractive proposition based on cost-efficiencies, but not only (internal market dimension, for example is another very important aspect). While Portugal has ranking quite good in infrastructure, employees' motivation, and qualification of the work force and availability of specialized people, among German companies, it is also stressed that public administration efficiency, energy costs, public tenders' transparence, taxes or labor low flexibility are factors that seriously affect the business environment and hinder investment badly[10].

2. *This section intends to expose the methodology used by the working team and explain the plan that was set up to tackle the challenge stated and its main results.*

Our approach plan and main recommendations

Methodology

We agreed to define the deliverables structure into a simple model, but not simplistic, that allowed us to have a first guiding thought about what were we looking for – What?, How? and Who? (see Appendix 3). First we propose to analyze the strengths and relevant location factors to be presented to potential investors; then we design a way of giving credible and tangible argumentation to support our choices. Second we detail which processes to follow in order to achieve the pre-defined goals – how to best use the evident

[10] Roland Berger (2013) "PORTUGALPLUS – Investimento e Exportação"

scarce resources. Finally, we assess to whom our value proposition should be directed to, tailoring the approach to a well-defined target segment – intention to match the set of strengths with the 'needs' of real businesses.

We conducted a very complete first level research on the materials provided by all our partners on a first effort to define what FDI is, the different forms of it and the basic rationale that is behind investment decisions as well the best practices existent.

Following we define a comprehensive set of activities and work-packages that allowed to manipulate more efficiently the continuous flow of information. It provided a rigorous scheduling that would serve both the team and the client side as a way to check the ongoing-work and sometimes re-center the focus on the goals set initially (see Appendix 4). This highly dynamic process is evident on the continuous improvement and extra emphasis each section had at different periods of time according with the flow of project. We also added a to-do list for each 'steering committee meeting' that would be checked in a review slide that detailed the more specific activities in course and the plans ahead.

In operational terms and for the sake of narrowing down the approach we identified some criteria that would help us choose the industry, namely[11]:

- R&D intensity (expenditures by sector from German companies)
- Industry dimension and FDI propensity (stocks of FDI abroad historic)
- German FDI in Portugal by sector (already competitive sectors)

The first followed the recommendation of Roland Berger to focus on R&D centers in order to sell our competitive labor prices and availability (between others), put very roughly. The basic rationale for the second is that large industries have higher potential as a target and stocks of FDI would track down the ones that have more 'willingness' to invest abroad. The last one would be identifying recent investments that could indicate growth opportunities and subsequent capital inflows.

Following the industry choice a lot of subsequent research was carried out so that we could understand better the market and envision possible investment opportunities from the study of its value-chain, both in Germany and Portugal. Some of the findings are shared along the all work as they constitute a pillar base of it.

[11] This first reference to the industry rationale is only made here on the context of the methodology used, being it neither extensive nor exhaustive; that is to be left for section "Overview: Industry choice rationale".

It is fundamental to highlight the considerable number of in person interviews conducted with experts. Our holistic approach led us to speak in person with a big number of stakeholders from diverse spheres: main companies, Industry and Cluster Associations, Universities and R&D centers and relevant Government Authorities (see Appendix 5). This unique resource is undoubtedly the one that generates most value, constituting the biggest part of our 'field work' (discussed in more detail in the sub-section beneath). Other relevant contacts were made, due to time and budget constraints, over the phone and by sending questionnaires.

We also attended some conferences about this topic in order to get special insights on investment rationale and followed the news daily to be aware of any update or initiative (e.g. BBVA Conference "Espanha – Exportações e Investimento").

Finally, we were to consolidate all this research into a final consulting presentation that would sum up all our recommendations.

Brief interviewing techniques discussion

We soon understood that interviewing top management would require a lot of preparation – indeed interviewing is a special skill that we developed a lot. We wanted to make sure we would get straight to the point and able to get the most out of each interview. Also, the eclectic nature of our approach required us to be very specific and tailor each interview very carefully.

In order to 'get below the surface', we used several techniques that were on continuous update; it was a true process of 'learning by doing'. Nonetheless, some important factors were taken into account, namely[12]: preparation of questions and an agenda beforehand (see Appendix 6); importance of making occasional eye contact to show interest and confidence; asking open-ended questions at the same time encouraging the interviewee to provide details and examples on key topics; asking tough questions; and always taking notes on the information collected.

We were also aware of many relevant tips for successful interviewing, that we followed many times, for example[13]: "interview in pairs" – which we did 95% of the times and allowed us to make the interviews the more complete possible; "listen, don't lead" – to get

[12] Stroh, Linda K. and Johnson, Homer H. (2006)
[13] Rasiel, M. Ethan (1999): "The McKinsey Way"

the most exhaustive answers possible one as to listen first; “paraphrase, paraphrase, paraphrase” – allowing the interviewee to add extra information and stress the most important aspects; “don’t ask for too much” – it was very important for us to focus on some key pre-defined goals, prioritizing some questions to get more tangible results; “adopt the Columbo tactic” – realizing that when the interview is over, the interviewee becomes more relaxed and can be more willing to provide extra information.

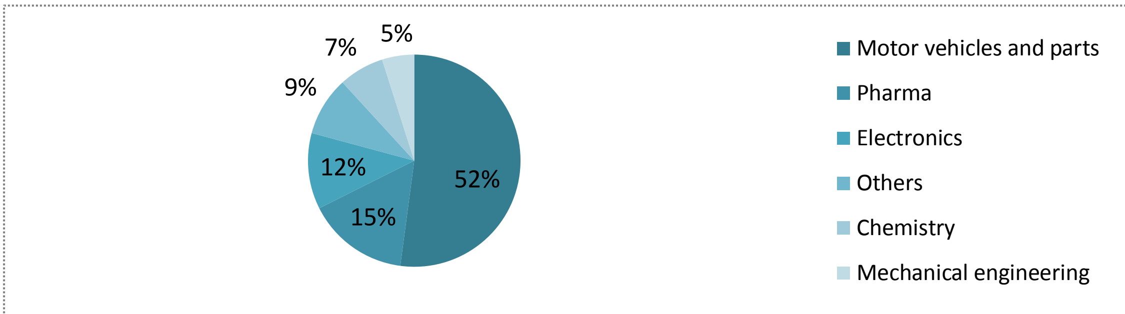
The interviewing process is one of the main building blocks of our project and required us to get acquainted with many different industries and different settings, which proved of immense value for the team.

Overview: industry choice rationale

Our criteria analysis showed that the Automotive Suppliers (TIER1) constituted the most valuable opportunity on which authorities could focus its efforts on.

First, as Figure 3 shows, the enormous share – 52% - the automotive industry has on global German companies’ expenditures in R&D is very significant (the automotive industry is very research intensive and relies on steady innovation in order to compete[14]). It is also in line with Roland Berger recommendation to look for opportunities in R&D as Portugal can sell its qualified workforce at competitive prices, for example. Also true is that in fact many manufacturing companies in the automotive industry already face skill shortages[15] that Portugal could potentially fill (see Appendix 7). Among the top reasons for German automotive suppliers to come to Portugal in the first place were indeed the lower labor costs or the workforce motivation and flexibility, for example, as our research showed.

Figure 3: Global Expenditure in R&D (German Companies by 2011)



Source: Stifterverband für die deutsche Wirtschaft 2013, FuE – Datenreport 2013 – Analysen und Vergleiche

[14] McKinsey Global Institute (2012) “Manufacturing the Future: the next era of global growth and innovation”.
[15] Ibid.

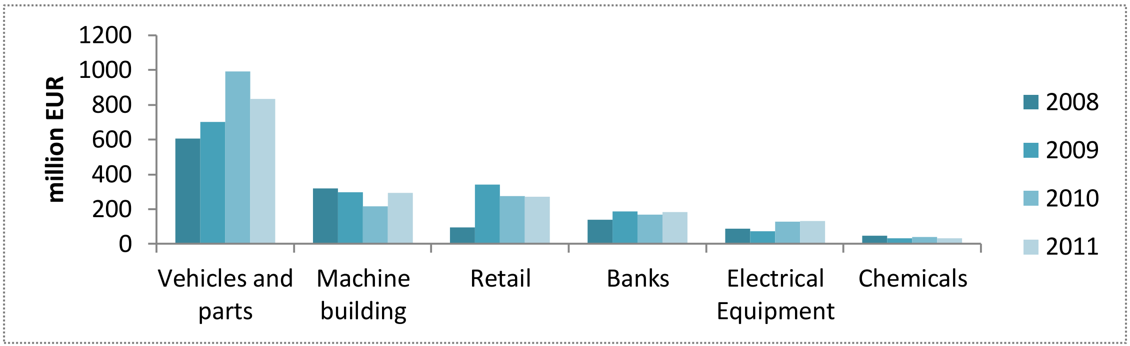
Second, the automotive industry is the biggest and most important sector in Germany generating a total turnover of 351bn – 20% of all German industry revenue in 2009.[16]

Third, besides the obvious influence of size the automotive industry is also the one that accounts for the biggest chunk of total German investment abroad – 31% in 2011[17] - that indicate a high propensity to delocalization.

Forth, the prominence of German investment in Portugal in this sector is also evident and indicates further investment potential – from 2008 to 2011 the CAGR of automotive related investment in Portugal by Germany was of 11.3%[18]. In 2011 motor vehicles and parts accounted for 47% of German FDI stock in Portugal[19] which indicates the perceived attractiveness of the sector in Portugal (as illustrated in Figure 4).

One final argument on which we base our industry choice is the observed dynamism of exports on vehicles and other transport material that ranked second (after Machinery). It accounted for 11.2% of Portuguese exports between January and June 2013[20]. Competitive companies are responsible for this and figure as possible partners (buyers and suppliers) to any potential investor coming to Portugal.

Figure 4: Development of German FDI Stock in Portugal by Sector (2008-2011)



Source: Deutsche Bundesbank 2013, Foreign Direct Investment Stock Statistics – Special Statistical Publication 10

Complementarily one should be aware of the real capacity Portugal has in attracting foreign investments. Several structuring aspects and trends of the automotive industry and FDI must be taken into account:

[16] Germany Trade & Invest (2010) "The automotive industry in Germany", p. 3.
[17] Deutsche Bundesbank (2013) "Foreign Direct Investment Stock Statistics – Special Statistical Publication 10", p. 62.
[18] Composed out of Deutsche Bundesbank data
[19] Ibid.
[20] INE 2013 Statistics of Portugal

(1) The vast majority of German FDI is done to tap new markets, through sales representations (45%) or production facilities (35%), in the automotive the latter even accounts for 65%[21] and both carmakers and suppliers internationalization is primarily driven by growth and cost considerations[22]. Naturally, the dichotomy of high costs and flat growth in established markets and lower wages and high growth in emerging markets led to the re-direction of capital to China, India or Eastern Europe, for example[23] (global production in the automobile industry hit record numbers in 2012 primarily because of Growth in Asia[24] – since 2010 China is the world's largest market for vehicle sales[25]). Undoubtedly, Portugal has suffered significantly on its share of cost-driven investments mainly after the EU inclusion of Eastern European countries.

(2) As customers become more rigorous and demanding Original Equipment Manufacturers (OEMs) are obliged to diversify their portfolios. Modular strategies and platform sharing seem the way to go, to deal with increasing complexity and cost that derive from lower volumes per model. These allow for economies of scale and manufacturing flexibility by the use of identical building blocks[26]. This reality allows Portugal to sell convincingly two very important competitive aspects: its high-skilled labor competitive price and its large flexibility.

(3) Importantly to recognize is the increasing use of 'Engineering Services Outsourcing' in opposition to internal R&D as they allow for higher flexibility, lower costs and access to external knowledge (Appendix 8).This trend is strong in the outsourcing of R&D related with engines efficiency and electrification, in particular[27]. Quoting the German Trade and Invest 2013 study on the Automotive industry in Germany: "Furthermore, the industry landscape is shifting as increasing cost pressures force OEMs and component manufacturers to outsource former core competences such as R&D to lower level suppliers or other contractors"[28].

---

[21] Data composed out of DIHK (Deutscher Industrie-und Handelskammertag) data
[22] KPMG (2009) "Global Location Strategy for Automotive Suppliers"
[23] Gerth, Richard J. (2007) "Innovate or Die"; Ernst & Young (2013) "European Automotive Survey"
[24] PWC (2013) "Consolidation in the Global Automotive Supply Industry"
[25] TAB (2012) "Zukunft der Automobilindustrie – Innovationsreport"
[26] McKinsey Global Institute (2012) "Manufacturing the Future: the next era of global growth and innovation"; McKinsey (2012) , "The road to 2020 and beyond"; TAB (2012) "Zukunft der Automobilindustrie – Innovationsreport"
[27] Roland Berger (2010) "Mastering Engineering Service Outsourcing in the Automotive Industry – Market Study"
[28] Confirmed also on Gerth, Richard J. (2007) "Innovate or Die"

(4) The European crisis helped manifestly to lower demand levels on the automotive market. There is a clear overcapacity – estimated around 25%-30% by the European Automobile Manufacturers' Association (ACEA)[29]. In consequence, "manufacturers and suppliers have to reduce capacity (and eliminate fixed costs) by closing down plants or lay off employees"[30]. Impressively, some industry reports estimate numbers around16 million units production decline, from 2012 to 2015, at Western European plants.

The four abovementioned industry trends are also accompanied by some important 'good news' that any investment promotion officer should be also aware of. They give relevancy to the need of understanding the environment at a more micro-level.

Despite the crisis 27% of German OEMs and suppliers are planning to increase their production capacity in Europe while only 8% intend to decrease - serving our case very well, suppliers are said to be even more committed with this effort – 34% plan to increase production (in contrast with 17% of OEMs). Also true, and very relevantly "40% of German automotive companies plan to increase R&D expenditures and only 2% intend to lower those"[31].

This exercise also helped us structure much the rationale around our recommendations.

Recommendations – deliverables

What?

A first possible general recommendation can be derived out of the realization that investment decisions depend first and foremost on the quality of a country's business environment. Thus, the main concern of Investment Promotion Agencies should be to bridge existent information gaps and mitigate biased perceptions by leveraging on a country's strengths. Secondly, it is also natural that one finds it hard to say whether AICEP, for example, should privilege R&D or manufacturing activities – our opinion is that from an operational point of view, AICEP does not need to decide on one activity as long as they use adequate propositions. For investigating whether or not a TIER1

[29] ACEA (2012) "European automobile manufacturers call for EU policy on automotive industry to be translated into urgent action" [Press Release]

[30] TAB (2012) "Zukunft der Automobilindustrie – Innovationsreport"; McKinsey 2012 , "The road to 2020 and beyond"; Earst & Young 2013, "The Eurozone and the automotive sector – Executive Summary"

[31] Ernst & Young 2013, "European Automotive Survey"

manufacturer could establish in Portugal, it is also important to realize the interdependence between manufacturing and R&D – it also makes the choice between both secondary.

One of our first steps was to analyze AICEP's promotional material (sector presentations, website and the 'investor's guide) which revealed significant improvement potential. First, they should make a strong effort to envision and name tangible investment opportunities rather than augmenting almost exclusively on positive competitive factors. This can make a huge difference and allow for any investors to screen faster potential and evaluate more credibly information. Second, they could use more pungently specific success cases and give more contextual information that catch potential investors' attention. An investor should know exactly what competitive advantages established groups are enjoying at the present moment. Up to date information on successful companies is crucial to entice investors. Third, they must improve what we consider a suboptimal choice and prioritization of arguments and metrics; preference should be given to metrics that benchmark the institution with main competitors, i.e. which give meaning to comparisons to be carried.

Before exposing our choice of arguments there are some frequently cited arguments, we believe should be dropped or receive lower priority within AICEP's argumentation - we called them the 'no-arguments':

(1) Access to technology – existing technology difficultly justifies FDI, companies can simply buy the technology and use it anywhere. Rather than technology it should be promoted the capacities to create knowledge that may justify investments – existent highly-qualified talent pool or significant high-end research work by R&D centers or universities, for example;

(2) Strategic location – "Portugal can serve as a hub for overseas business" in Brazil, Angola, USA, etc., the enlargement of Panama Canal and the Free Trade Agreement with the USA possibilities are among many arguments that are not substantiated with powerful enough facts. In reality, subsidiaries in Portugal add little value for goods sold overseas. Companies already invest directly in foreign markets without having Portugal has an intermediate. Adding to this, vast majority of German companies view the location (of Portugal) as a negative factor for competitiveness (transport costs for Germany are considered high, for example);

(3) Supplier Base – the good supplier base has been praised as selling point in some occasions which does not correspond with prevalent opinions of German managers in Portugal, based on our research. The supplier base is rather considered bad which forces them to source abroad the majority of cases.

Our intention is to offer and recommend a more adequate choice and a more articulate prioritization of arguments and metrics that should fundament AICEP's rationale in investment capture. This is mainly derived from our experts' opinions but also out of our understanding of the needs of real companies that we were able to gather while researching exhaustively in many other sources (in our sector, but not only). As a side note, in result of some conversations with our interviewees and also hinted by our partners' that Shared Services Centers (SSCs) activities could constitute a very interesting investment opportunity, we decided to include here the relevant factors prioritization for this 'high target-potential' activity too (these centers centralize the more specific operational tasks like Accounting, Human Resources, Payroll or Legal, for example). This adds to our offer for the capture of Tier1 suppliers another very relevant dimension – the need to run these 'cost-centers' efficiently. They are to be divided in relevant arguments for Manufacturing, R&D and SSCs independently, by activities type:

Figure 5: Choice and Prioritization of the Main Arguments

Relevant arguments for Manufacturing	Relevant arguments for R&D	Relevant arguments for SSC
1. Incentives	1. Incentives	1. Incentives
2. Costs of labor	2. Costs of skilled labor	2. Costs of skilled labor
3. Availability of labor	3. Availability of skilled labor	3. Availability of skilled labor
4. Quality of labor (incl. motivation & flexibility)	4. Quality of skilled labor (incl. motivation & flexibility)	4. Quality of skilled labor (incl. motivation & flexibility)
5. Business Environment & Reforms (CIT, labor law, energy tax, justice system, licensing, eGovernment)	5. Business Environment & Reforms (CIT, labor law, energy tax, justice system, licensing, eGovernment)	5. Real estate cost and availability
6. Physical infrastructure	6. Digital infrastructure	6. Business Environment & Reforms (CIT, labor law, energy tax, justice system, licensing, eGovernment)
7. Real estate cost and availability	7. Physical infrastructure	7. Digital infrastructure
8. Digital infrastructure	8. Real estate cost and availability	8. Physical infrastructure
9. Quality of Life	9. Quality of life	9. Quality of life

Source: Own research results

Briefly put, the most relevant 'take-away' is the need for investment promotion agencies to sell something that companies value and are able to quantify easily. For each argument we constructed a very comprehensive set of metrics and respective graphical representation that cover this need and could very well help AICEP job. Our metrics' choice reflects our intention to provide a comprehensive set of facts and figures to which an investor could give meaning to. They are categorized with the purpose of better allowing anyone to adjust their presentation to the targeted audience stressing the right arguments. Labor Costs, Business Environment and Reforms, Infrastructure, Real Estate, Availability and Qualification make the six sections that group our comprehensive 53 metrics list (see Appendix 9).

By way of example, I will mention then the most significant arguments.

First, for any investor evaluating different investment locations it is vital that the information available is very clear and objective; the case of incentives is a striking - there exist a lot of programs and incentive-packages that are not easy to read and even 'cannibalize' each other. This information was considered by our experts as vital for the growth of FDI in Portugal as, in the end, most of the decisions boil down to 'financials'. At least, to 'get in the short-list' a lot of effort should be put into re-organizing and clarifying this, several times overlooked criteria - for the sake of transparency and effectiveness these programs should be very clear on availability and compliance rules criteria, for example.

Second, AICEP should, in our opinion, offer what is believed to be what we have best in a smart way - our talented and resourceful workforce. A thorough analysis on our costs, availability and quality of skilled labor should be available to any investor. These are true and tangible competitive points that need more complete treatment by the competent authorities and should be at the top of our 'arguments short list'.

Lastly, before the also very important criteria of Physical infrastructure, digital infrastructure, real estate cost and availability or the Quality of life, one should account for the need to sell properly the business environment and particularly the Reforms that are making it more dynamic and competitive if that is the case. One could refer to praises of the EU, IMF and OECD (one example is showed in the introduction) – this is very important elevating the generally bad perception of Portugal among German investors.

Identified problems like the Government bureaucracy, tax rates and regulations, labor law or the efficiency of litigation could be tackled with more clear information on the Simplex program, Labor Law liberalization, corporate income tax reform or the judicial system reform, for example.

Finally, we also stress other aspects that we consider relevant and worth mentioning: the necessity of the government to further promote firm-level wage bargaining, the important involvement of employers in vocational training and the conclusion of the corporate tax reform. There is also the pressing need to recognize investment promotion as vital by dedicating sufficient resources to hire the best, for the creation of specialized investment teams and add activities.

Who?

Roundly, new targets in our sector, but not only, are hard to pinpoint - they are rather hard to identify and some approaches we took turned out to be real 'dead-ends'.

Inquiring at industry associations, businesses, etc. proved of no use, they had no knowledge about investment plans and were totally unable to identify specific companies as potential targets. We also inquired at IHKs – German Chambers of Industry and Commerce – whom hardly showed any interest in Portugal and were totally unaware of any investment considerations (even if they were, they could not disclose until the decision has been made). Likewise, we asked perseveringly experts interviewed for supply-chain gaps that German companies could fill and the results were poor: companies did not mention any foreign suppliers they could envision to locate here – it would work only in industries with several potential buyers as suppliers may be reluctant to entirely depend on one customer obviously (one important group hinted at rubber and wiring looms suppliers currently located in Turkey and Ukraine as possible targets but with few grounding). Lastly, the continuous research on the news and annual reports also proved dark, we found no stated interests in investing in this region.

Our recommendation is therefore, for AICEP to identify and focus on few key sectors, automotive TIER1 suppliers (our pilot research) and others, while the company choice within a suitable industry is somewhat arbitrary. These strategic sectors would be the ones to which a proposition based on the aforementioned criteria generate the biggest investment potential. AICEP should incorporate knowledge on different types of needs that exist for different targets enabling them to better tailor their value-propositions. Company size considerations are a good example. Large corporations have complex processes, it is harder to contact decision makers but they account for most R&D internationalization – these investments are Greenfield, largely. At the same time Small and Medium Enterprises (SMEs) are more open to suggestions but they cannot slice R&D neither they are willing to outsource their main and unique resource. In sum, one can say that as long the approach and proposition is tailored both can be viable targets.

Also a very strong recommendation that our team formulated is that AICEP should focus on nurturing incremental investments by existing investors rather than Greenfield. Our rationale is for a re-orientation towards FDI quality in place of quantity, many investments are gradually developed towards higher value activities over time. Farther, it is true that it's easier to retain than to attract new investors - the contacts are already in place. These are companies that already committed and are, consequently, more willing to invest. Consequently, AICEP should re-contact all subsidiaries of German companies (not only automotive) regularly to discuss future prospects and investment plans as well how they could assist them.

Our own survey that inquired German automotive supplier companies revealed that some are willing and considering investing in Portugal, namely: AIS, Bollinghaus, Bosch, Brose, Gestamp (formerly EDSCHA) and Preh. If AICEP is not already in contact with these, they should.

We also offer specific examples of business opportunities and generally vigorous sectors to be considered. Two specific tenders should be presented to German companies related with 'Wave Energy' and 'Smart Grids'.[32] Other sectors our value proposition applies to: Bioengineering, Software Development and Shared Services Centers[33].

[32] REN is looking for technology developers and operations and EDP is currently looking for suppliers of metering infrastructure.
[33] Generally, research-intensive sectors are benefiting from Portugal strengths at the present moment, dynamic industries with particularly convincing investment track records and sectors relying much on the availability and qualification of labor.

How?

This closing sub-section discusses more procedural recommendations our team designed. Our results point to the need of adapting various operational aspects at AICEP, notwithstanding we share some positive feedback collected.

We constructed our ideas around an 'Investment Promotion Agency Activity Cycle' structured in: (1) Strategy and Organization, (2) Lead Generation (for a cost-impact analysis see Appendix 10), (3) Project Handling and (4) After-care and Performance Evaluation (see Appendix 11), as detailed below.

(1) Foster a return-driven business mentality throughout AICEP and focus on few strategic sectors;

(2) Excellence on execution is a must for lead generation, AICEP should proactively look for potential targets rather than waiting to be approached – among many there are some pressing actions that AICEP could foster that have a good cost-impact ratio, including: hold sales presentations to potential investors (AICEP has presentations but these are not customized); organize sector-specific investment missions; host information seminars on investment opportunities; just for specific events conduct direct mailing or telephone campaigns; advertise in financial or industry-specific media; nurture relations with influential journalists to generate benign news; continuously update and facilitate the layout of the website; ensure correct language and design adequacy in all materials (possibly promote the translation of key materials to German, for example); provide fact sheets, which are easy and inexpensive to produce, for download and easy access for investors with key information;

(3) Make sure one-stop shop principle is being applied, re-checking the effectiveness and scope of the agency and study best-practices (Irish or Singaporean case);

(4) AICEP should adapt their performance measurement criteria, making it more thorough (e.g. high-skilled jobs created and contracts with knowledge intensive functions signed instead of simply presenting jobs created numbers or the number of investment contracts).

From our research we were also hinted to the need for AHK (German-Portuguese Chamber of Industry and Commerce) to launch press releases in IHKs (German Chambers of

Commerce) to maximize positive publicity, elevate image of Portugal and potentially generate interest and information requests.

Nonetheless, AICEP is recognized as among the best practice agencies in inquiry handling by the World Bank, a very important aspect. Also of note 88% of surveyed German automotive suppliers in Portugal say to be happy with AICEP work. They are even praised to be among the few agencies worldwide able to put "an offer on the table" before investors committed.

3. *In this last section I try to make the bridge between the practical experience with more theoretical concepts and ideas our team used. Also, it intends to close the business project with a reflection on a more personal level.*

Reflection on learning

Bridging With the Theory

It is of relevance to say that our team was able to use its knowledge complementarily to our advantage. Some materials one learned before were used interchangeably to produce the most value possible and fortunately there were some materials to share and combine.

Such a vast topic required the use of an always changing mix of models depending on the dynamics of the workflow. While some concepts used are common and transversal to economy or business sciences, some specific course materials from different classes are worth particular note:

(1) Corporate Strategy – some introductory courses on strategy transmitted very useful concepts such as 'environmental scanning' and 'future scenario planning' or 'strategic-intend based planning', but Corporate Strategy was the first to show clearly that making strategic mistakes costs a lot. When attracting FDI from abroad one should be aware of the immense difficulties and risks a parent holding faces, when deciding to re-locate its operations abroad or expand its business overseas. Only a deep understanding on the way multinational companies plan the future can help assess what should be promoted and how it should be promoted, in any investment promotion strategy. Also, a key take-away from this discipline is that any company, institution or association must be aware of the rarity of unique resources that really constitute value, being those tangible assets or skills. Unique

resources are foundation of any goal and objective; efforts should be directed at nurturing the existent and building new differentiating capabilities;

(2) International Business – this course stressed the considerable impact ever increasing globalization has on the internationalization process of MNEs. The study on internationalization positioning and strategies proved of value when tailoring a plan that better suited companies' needs;

(3) Global Supply Chain Management – as mentioned before one of many strategies we adopted was to look for improvements in our sector companies' value chain and consequently, on the supply chain. We learnt how to improve supply chain performance through design and management in search for building true competitive advantages. 'Intra-organizational integration', for example, allowed us to grasp how outsourcing parts of an organization could boost or threaten the overall company ability to generate value. Long-term performance is dependent on the ability of one to recognize the ever-changing market conditions and flexibility potential of the business. Concluding, one should leverage on important insights about supply-chains and match the offer of solutions with the exact needs that generate sustainable results;

(4) Global Business Challenges – This interesting subject is also worth mentioning as it highlights the importance and impact of the external environment on firms' decisions. The "non-market environment" (developments in technology, income and lifestyles, government policies and the media, for example) is highly in FDI flows. When strategizing on how to capture capital it is important one is aware of the different stakeholders involved and their interdependencies (firms' behavior is much interconnected with private political actors and governments);

The complementarities abovementioned is well seen in the use of some concepts of Project Management, for example – a course only one team member took. Some models related with planning, executing, monitoring and closing of a project allowed us to make several adaptations and progressively plan efficiently; an ever-increasing detail effort was made to our work model.

Our supervisor also provided us the materials from the Consulting class that helped us structure our rationale and work productively in a 'consultant fashion'. How to formulate our ideas in a clear, complete and 'sellable' way was a very important take-away for the team (note: we also used other resources such as the "McKinsey Way" book for guidelines on how to conduct an effective interview or how to make meaningful presentations, which proved very useful).

Personal Experience

This experience taught me, first and foremost, that being flexible and able to adjust to the constant need of producing results is vital. Even though there were some moments of frustration, when you realize reality is a little different from the business ‘mental maps’ one constructs, I am really pleased to have observed that during the development phase we made pretty good predictions on the projects’ potential. I can say confidently that we always felt challenged by the immense work needed and curious to learn more. I believe that our team faced very positively the idea of structuring down such a vast topic and definitely our planning of bundled activities into sequenced and detailed work-packages allowed us to better use our time and direct our efforts efficiently.

I personally learn a lot about the way to integrate real life problems into real business solutions. The constant inflow of information regarding FDI in newspapers or TV is immense but we were still able to scheme it through and deliver value to our client. The ‘digging-deeper’ process is a lifelong learning as I believe it teaches us a lot about perseverance, method and team work. Not even the World Bank, IMF, European Commission, McKinsey, Roland Berger, etc. tones of reports dissuaded us of looking for the right, and not the easy, answer; this immense ‘food for thought’ we learnt to digest with method.

Also very important, I have acquired considerable experience in dealing with top management thankfully to the continuous contact with our partners, with vast experience. This close contact made me understand better what is expected from a consultant and the kind of pressure he is faced with. Moreover, the very big number of interviews, around twenty of them personally, our team conducted put us in close contact with top management on a serious of very important companies and others. This is an experience for life that I am extremely pleased with as it allowed us to take the problem closer to real decision makers and think together on innovative solutions.

More, I have to highlight that I found myself working daily with a colleague that always shared my enthusiasm and helped me leverage on my personal capabilities - I personally learnt a lot from him. It is worth mentioning that this particular mix of Portuguese-German nationalities to study a Portugal-Germany business relation potentiated our learnings about each other cultures and work methods, which is of immense value.

To conclude, I have to stress the biggest learning I took out from this experience -the immense value of team-work. Truly, only the capacity a team has to think problems better and in an innovative way made this project possible. The comradeship and work hours put into this research can only leave me proud of our efforts and confident about the end-product submitted.

References

ACEA. 2012. *European Automobile Manufacturers Call for EU Policy on Automotive Industry to be Translated Into Urgent Action*. [Press Release]. Available from: http://www.acea.be/index.php/news/news_detail/press_release_european_automobile_manufacturers_call_for_eu_policy_on_autom

AHK (2010) *Empresas Alemãs em Portugal – Clima Empresarial e Factores de Sucesso*. Lisbon.

AICEP PORTUGAL GLOBAL (2011) *Alemanha – Guia Prático de Acesso ao Mercado*. Lisbon, April 2011.

AICEP PORTUGAL GLOBAL (2011) *Alemanha – Oportunidades e Deficuldades de Mercado*. Lisbon, February 2011.

AICEP PORTUGAL GLOBAL (2011) *Reunião com Grupo de Trabalho – Despacho 9224/2011*. Lisbon.

AICEP PORTUGAL GLOBAL (2012) *Alemanha – Condições Legais de Acesso ao Mercado*. Lisbon, September 2012.

AICEP PORTUGAL GLOBAL (2012) *Alemanha – Ficha de Mercado*. Lisbon, September 2012.

AICEP PORTUGAL GLOBAL (2012) *Alemanha – Moldes / Breve Apontamento*. Lisbon, March 2011.

AICEP PORTUGAL GLOBAL (2012) *Portugal – Perfil País*. Lisbon, April 2012.

AICEP PORTUGAL GLOBAL (2012) *Portugal – Sistema Fiscal*. Lisbon, June 2012.

AICEP PORTUGAL GLOBAL (2012) *Portugal – Sistema Laboral*. Lisbon, September 2012.

AICEP PORTUGAL GLOBAL (2013) *Contas Nacionais 2013 (1º Semestre)*. Lisbon, September 2013.

AICEP PORTUGAL GLOBAL (2013) *Investing in Portugal – Business Support Services*. Lisbon.

AICEP PORTUGAL GLOBAL (2013) *Portugal – Acordos Bilaterais Celebrados*. Lisbon, August 2013.

AICEP PORTUGAL GLOBAL (2013) *Portugal – Ficha País*. Lisbon, September 2013.

AICEP PORTUGAL GLOBAL (2013) *Portugal – Indicadores Económicos*. Lisbon, June 2013.

AICEP PORTUGAL GLOBAL (2013) *Portugal/UE – Acordos Bilaterais*. Lisbon, august 2013.

AICEP PORTUGAL GLOBAL (2013) *Portugal: Comércio Internacional de Bens e Serviços*. Lisbon, August 2013.

DEUTSCHE BUNDESBANK (2013) *Foreign Direct Investment Stock Statistics*. Special Statistical Publication 10 April 2013, ISSN 1864-4708 (online edition).

ERNST&YOUNG (2013) *Supplier Pulse Check – Financial Benchmarking of 100 Global Automotive Suppliers*. EYGM Limited, EYG no. ED0086.

ERNST&YOUNG (2013) *The Eurozone and the Automotive sector – Executive Summary, June 2013*. EYGM Limited, EYG no. ED0075.

EUROPEAN COMMISSION. DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS (2013) *The Economic Adjustment Programme for Portugal – Eighth and Ninth Review*. Publications Office of the European Union, Occasional Papers 164, November 2013.

EUROPEAN COMMISSION. DIRECTORATE-GENERAL FOR ENTERPRISE AND INDUSTRY (2012) *Member States' Competitiveness – Performance and Policies*. 2012 Edition.

EUROPEAN COMMISSION. DIRECTORATE-GENERAL FOR RESEARCH AND INNOVATION (2012) *Internationalisation of Business Investments in R&D and Analysis of their Economic Impact*. Luxembourg: Publications Office of the European Union, EUR 25195 EN.

GERMANY TRADE&INVEST (2010) *The Automotive Industry in Germany*. Berlin: Germany Trade & Investment, Issue 2010/2011.

GERTH, RICHARD J. (2007) *Innovate or Die*. USA, Center for Automotive Research.

GOVERNO DE PORTUGAL (2013) *Estratégia para o Crescimento, Emprego e Fomento Industrial 2013-2020*. Lisbon, April 2013.

IGCP (2013) *Notes from the 8th and 9the Reviews of the Economic Adjustment Program*. Lisbon, 11th October 2013.

INSTITUTO NACIONAL DE ESTATISTICA (2013) *Statistics of Portugal.*

KPMG (2009) *Global Location Strategy for Automotive Suppliers*. KPMG International, 902-015.

KPMG (2013) *Global Automotive Retail Market – From Selling Cars on the Spot to Centrally Managing the Retail Grid, PART I and PART II*. KPMG International, September 2013, 130540.

KPMG (2013) *KPMG's Global Automotive Executive Survey 2013*. KPMG International, January 2013, 121341.

LIPSEY, R. (2002) *Home and Host Country Effects of FDI*. Cambridge, NBER Working Paper no. 9293, October 2002.

MCKINSEY&COMPANY (2011) *Big Data: The Next Frontier for Innovation, Competition and Productivity*. McKinsey & Company Global Institute, June 2011.

MCKINSEY&COMPANY (2012) *Lightweight, Heavy Impact – How Carbon Fiber and other Materials will Develop Across Industries and Specifically in Automotive*. McKinsey & Company Advanced Industries, February 2012.

MCKINSEY&COMPANY (2012) *Manufacturing the Future: The Next Era of Global Growth and Innovation*. McKinsey & Company Global Institute and Operations Practice, November 2012.

MCKINSEY&COMPANY (2012) *The Future of the North American Automotive Supplier Industry: Evolution of Component Costs, Penetration, and Value Creation Potential Through 2020*. McKinsey & Company Advanced Industries, March 2012.

MCKINSEY&COMPANY (2012) *Trading Myths: Addressing Misconceptions about Trade, Jobs, and Competitiveness*. McKinsey & Company Global Institute, May 2012.

MCKINSEY&COMPANY (2013) *The Road to 2020 and Beyond: What's Driving the Global Automotive Industry?*. McKinsey & Company Advanced Industries, August 2013.

OECD (2013) *Portugal: Reforming the State to Promote Growth*. "Better Policies" Series, May 2013.

OSTER,G. (2013) Economia, Clima de Investimento e Relações Económicas com a Alemanha. *IMPAKT,* January 2013, pp. 32-39.

PRICEWATERHOUSECOOPERS (2013) *Automotive M&A Insights: Mid-year 2013*. PricewaterhouseCoopers LLP, September 2013 MW-14-0077.

PRICEWATERHOUSECOOPERS (2013) *Consolidation in the Global Automotive Supply Industry 2013*. PricewaterhouseCoopers LLP, DT-14-0022 jp.

PRICEWATERHOUSECOOPERS (2013) *Innovating for Future Growth – Automotive Assurance Products' Strategy*. PricewaterhouseCoopers LLP, May 2013.

PRICEWATERHOUSECOOPERS (2013) *Looking Ahead – Driving Co-Creation in the Auto Industry*. PricewaterhouseCoopers LLP, May 2013 LA-13-0260 SL.

PRICEWATERHOUSECOOPERS (2013) *North American Automotive Supplier Supply Chain Performance Study*. PricewaterhouseCoopers LLP, MW-13-0293.

PRICEWATERHOUSECOOPERS (2013) *Spotlight on Automotive – PwC Semiconductor Report*. PricewaterhouseCoopers LLP, September 2013.

RASIEL, ETHAN M. (1999) *The McKinsey Way*. USA: McGraw-Hill.

ROLAND BERGER (2010) *Mastering Engeneering Service Outsourcing in the Automotive Industry*. April 2010.

ROLAND BERGER (2013) *PORTUGALPLUS – Investimento e Exportação (Primeiras Conclusões do Estudo – Sumário Executivo).* Lisbon.

TAB (2012) *Zukunft der Automobilindustrie - Innovationsreport* . Berlin: September 2012, no. 152.

UNITED NATIONS (2013) *World Investment Report 2013*. Switzerland: United Nations Publications.

WORLD ECONOMIC FORUM (2012) *The Global Competitiveness Report 2012-2013*. Available at: www.weforum.org/grc.

TIER COMPONENTS (2013) *What is a Tier 1 Supplier in the Automotive Industry?* [WWW] Tier Components. Available from: http://www.tier1parts.com/what-is-tier-1-supplier [Accessed 14/01/2014]

STROH, LINDA K. and JOHNSON, HOMER H. (2006) *The Basic Principles of Effective Consulting*. London: Lawrence Erlbaum Associates, Publishers.