

## MANAGING THE FINANCIAL RISK IN TWO ROMANIAN FACTORIES. CASE STUDY ON DACIA PITESTI AND ARO CÂMPULUNG

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**Abstract:** Identification, evaluation, analysis, and diagnosis of the financial risk management issues in a public organization is a troublesome step and at the same time a complex approach of the management process. The state-owned companies' organization structure has had various forms and levels of management and at the same time the specific administrative knowledge. For various reasons, objective or subjective, some managers being nominated in positions of management or execution caused a multitude of financial risks. From simple opportunity or threats to financial risk, there are many theoretical arguments through which the management in the public organization in our country can be explained, by always discovering specters of approach, complacent to one study or another. The article's goal is to underline the role of making a study of impact based on solutions given by theoretic concepts and terms from financial risk management field. We conceive this case study by using a comparison between an existing company and a former company, bankrupted, sale and ultimately closed, by applying to each of them the contemporary financial and business realities of Romania. In order to draw valuable conclusions in the field of financial risk management, the researchers underline some differences between our two examples chosen from the car industry. Likewise, we would like to present the manner in which a good style of managing of financial risk in an organization has transformed Dacia-Renault cars factory into one of the best-performing companies in Romania. The study aims to analyze the risks of the two major Romanian plants, what measures could be taken in the short, medium and long-term to minimize and/or limit their effects and to prevent bankruptcy, as unfortunately, did not happen with ARO. The applied methodology is that of analysis based on case studies, being a quantitative analysis. The research paper presents the results of this comparative case studies analysis, which attempts to highlight the main aspects of the ways in which the threats and risks were mitigated and depending on their relevance, the findings were transformed into graphs which will make it easier for readers to understand the research results. Then a synthesis of the conclusions and the results obtained from the research will be presented.

**Keywords:** financial risk; financial management; budget; financial plan; risk analysis.

## Introduction

The automobile industry in Romania has had experienced a dramatic change in the cars' industry during the 20th century as the result of the introduction of automotive engineering technology in each country around the world. The comparative financial analysis suggests that adopting innovation in a changing industry is not a new phenomenon, and how companies can manage and make use of financial risk management. Moreover, the example of how the human resource could influence more than technology that leads to changes in this sector was almost inevitable, especially in ARO case. Case studies analyzed in the back to back system reveal that although both have benefited from the same market conditions, the same political conditions, both have been affected by the same factors, each of them has gone on another path. The dramatic changes affected different parts of the companies in different ways. If a company sees itself as a resilient company oriented to the future, the image itself could have been affected by the changes for short-term but it changed and adapted its every resource, human and material to rebuild the factory. The study results from the factors that underlie a change in the industry. Then we studied the phenomenon at the industrial level, and then see how a company in the car industry is affected by reacting and changing business environment. Finally, the change of industry was reconsidered at the organizational level. The paper shows how a successful automobile factory could be affected by the consolidation of democracy in our country, how was changed the industry above all the implications. The purpose of this article was rather to study how a company is reacting to, or possibly drives, a change of industry and the strategic considerations that are associated with it.

## Theoretical framework based on literature review

In this section, we explain all the appropriate theory that is used in the literature to analyze empirical data collected from the public information about ARO and Dacia. We define the important concepts for using them in the case study, the criteria that have affected the Romanian automotive industry in more than 30 years and what it takes to a company to be able to deal with the new problems that occurred in the post-communist era. The characteristics of the organizations in a crisis of identity are reflected in financial situation (the balance sheet, assets, profitability or cash flow) and financial risks (credits, residual value, foreign exchange, commodity prices, energy prices, interest rates). In Romania, in the communist ages, the financial risk or the management risk was almost non-existent for the industry, capital markets, or life in general. As such, the risk was more associated with socio-human sciences. In the XXth century, "the risk has been associated with the natural sciences, not with the financial and insurance theories, in the 2000's the concept of risk gained importance among the decision-factors in the business world. The crisis, starting with the second half of 2008, covered almost the entire planet, due to the contamination effect." (Treapăt, 2011, pp.9-13). Although not aware, it seemed that the high management from the automobile industry was at risk "in danger of loss" (Murphy, 2008, p.39). They did not understand that the unique way to survive in the international field of cars market was to adapt all the factories and to learn faster if possible to protect against malevolent acts against their organizations. It was impetuous necessary to develop a security risk assessment and management process. It seemed that they did not know "how to perform a complete risk assessment that assists the project owner and manager in deciding why to either accept the calculated risk or reduce the risk to a more acceptable level" (Biringer,

Matalucci & O'Connor, 2007, p.XXI). The risk management is usually taken into consideration in nowadays life in the hard times of a crisis or after the balances are noted with losses. "The losses emphasize that the systems were inadequate so that the risky positions being taken were simply not known. It is also important for the managers to continually think outside the box about what could go wrong so that as many potential adverse events as possible are identified" (Hull, 2015, p.673). Then, in the 90's, the Romanian industry had been faced with problems linked to the capitalist competitive market in all possible directions. In those years, "the perception of an increased risk, the lack of trust and the fear of exposing themselves to dangerous situations or malicious strangers seem to be the most important barriers" appearing in every business, regardless the age, sex or experience (Vătămănescu & Pînzaru, 2018, p.10).

Considering the above, it can be said that the risks to which the Romanian factories were subjected had to be quickly transformed into opportunities but not all managers knew or wanted it. It should be taken into account that the limits of risk assumption could be a lesson learned from the losses. "Ideally, overall risk limits should be set at board level and be converted to limits applicable to the individuals responsible for managing particular risks" (Hull, 2015, pp.644-645). Management risk requires a comprehensive and interdisciplinary approach to deal with the external and domestic threats. A lot of mistakes should be avoiding, like focusing on narrow and most popular measures and using poor communicating among workers and managers, assuming that the risk management must always be expensive and complicated as founded Wereda et al. (2016, pp.88-89). The necessary steps to avoid mistakes would be connected to the following tryptic: business performance, value protection, and value creation. (E&Y Industries Insights, pp.2-6).

### **The methodology of research**

The research method used in this paper is based on case study because it is the most appropriate method when we want a thorough and in-depth investigation of a phenomenon, which consists of analyzing the financial risk of two state companies, one successful, and one bankrupt. The more appropriate the research method is to counter face-to-face with two case studies, as we look at the different ways in which two companies evolved over time, where risk management was completely different. In the current study, we face two very different cases from the point of view of financial risk management, but very similar to the organizational form, because both companies were established by the state, so they were at the beginning public companies. They have worked for many years in the centralized economy, but their fate was different from the privatization methods applied to each. Any other research method would have been chosen, it would not have been able to cover all aspects of reality as analysis based on case studies. The reader will identify a qualitative research, whose conclusions will be capitalized on comparing important indicators expressed by graphic methods, letting them be easier to understand. Flyvbjerg (2011, pp.301-316) identifies that the most important is how you choose your study unit (in our case the two companies), which must lead to intensive research, rich in detail, complete and not neglect the reality of the company studied with the external environment. The advantages researcher considered when chose the case study as the research tool were that the case study uses as subsequent research tools, as document analysis, participative and nonpartisan analysis, opinion poll and the reality-proven experiment. In the case of our research, we decided to use as much as possible the tool

that Yin (2008, pp.79-85) presents in his paper "Case Study Research: Design and Method", namely the exploratory, descriptive and explanatory case study. In this situation, field research, collecting data from various sources, can be made before defining research assumptions. Finally, in capitalizing the conclusions we will identify the cause-effect elements and explain the causal links that were identified in our study. Multiple case studies give us much more convincing conclusions because we have the benefit of comparing cases in addition to individual conclusions. Based on the methodological basis described earlier, this section presents the empirical data we have gained from our case study companies.

In the current case study, we have two examples as a research base. One example is Dacia, being a good example of adapting the factory to the new capitalist environment. The other one is ARO, nowadays, the car factory is closed for many years. This happens even that ARO was in the 70's and 80's more successful than Dacia. The fact that both car factories were selling many export cars creates a good and equal starting point for our study. How each of the subjects analyzed after the state privatization evolved depending on the financial risk management measures applied by the new shareholders in each case.

The analyzing criteria for two kinds of organizations are highlighted in our case study. To make the case study possible to compare the two factories, the paper takes into consideration the old corporate governance rules for ARO. The board of directors was not organized for efficiency and effectiveness for the free market. The company was viewed as a strong hierarchy, with centralized imposed hierarchical decision rights and structure. Their administrative structure was not based on business function with functional leaders and global functional management groups. During the communist ages, the corporate culture was ruled by fear of failure and perception of others decision makers from the center. To the contrary, the situation at Dacia is different from that at ARO. They are part of Renault holding, organized for learning innovation and customer impact. This company focuses on process to build capabilities and stronger ecosystem (Wereda et al., 2016, pp. 22-23). The company is viewed as an agile network. Collaboration and knowledge sharing fuel the team leaders. The structure is based on work and projects, with teams focused on products, customers, and services. The old and new rules made the difference between the nowadays Dacia - Renault and the bankrupted ARO. In the crisis times, the organizations that develop their businesses are resilient organizations because adapting the risks and threats and transforming in an opportunity is an organization that looks to the future, it is not stuck in time. Based on our research, we found that one of the most important factors for transformation of Dacia in a successful international brand were the leadership in the company, the inter-institutional communication and the implementation of the risk management system.

The main research hypothesis that we propose is that the success of a company (be it state or private) grows directly proportional to the quality of financial management of the company's assets. A very good financial risk management can make a difference between success and bankruptcy.

Beyond the description of the methodology used and the reasons why we consider this research tool to be the most appropriate to the surveyed situation, it remains to establish as the main objective of this research the identification of some lessons that company's managers must learn from now on. The actions taken in the case of Dacia

must be emphasized and remembered because they have led to the mitigation of risks and the mistakes made by inappropriate actions or even by inaction in the case of ARO.

## **Research results**

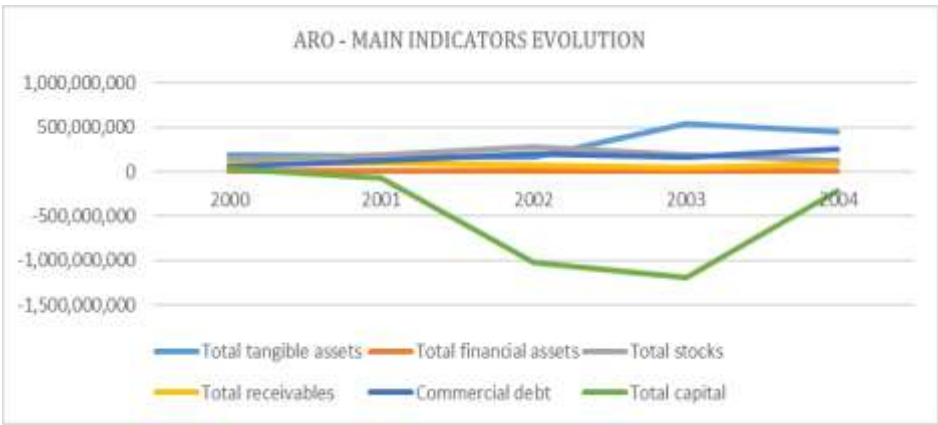
### ***ARO Case Study***

We used as sources of information to carry out the research, first, the accounting statements of the two companies, ARO and Dacia, filed with the Ministry of Finance and which are public information. These financial and accounting studies have been analyzed, processed and restructured in order to be better understood, to highlight some indicators more clearly. What follows is a capitalization of research, a synthesis of how the two companies have evolved.

In 1957, the ARO production started with a model called IMS-57 (IMS-State Metallurgical Enterprise), but the production was stopped in 1975, after 80,000 assembled copies, according to Dnistran (2015, pp.1-3). Until the early 1980s, ARO was a world success, ranked fourth in the world after the number of field cars sold and outlets (after Jeep, Land Rover and Toyota), the end of the decade brought a moment of the epiphany: ARO factory had to be upgraded if export competitiveness was to be maintained.

We chose to analyze the ARO's registered indicators during the most sensitive period of the factory, 2000-2004, years in which ARO was sold by the state in a questionable way to a phantom company that did not continue the company's successful business, but sold the piece of the company's assets and fired the employees. The huge volume of debts exceeds the value of current assets in the years 2000 – 2004. Between 2001 and 2003, the current debts exceeded the total assets. In this period, the company's own capital registered negative values, as can be seen in the following figure. The situation at ARO, during these years, was bad. It was no possibility to pay the debts to third parties, both during the course of its activity and its liquidation.

Because of poor indicators, as can be seen in Fig. 1 above, ARO is no longer receiving loans from banks, but other tick-borrowers borrow on its behalf and buy cars at lower prices than those dictated by the market, which they then sell up to four times more expensive. The debts of the company were growing exponentially year by year, reaching a peak in 2003.



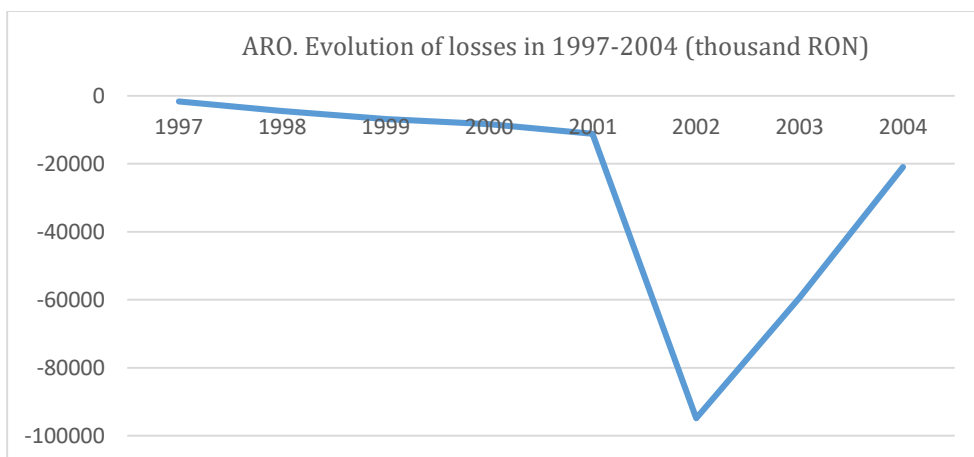
**Figure 1. ARO Main Indicators Evolution**

At the end of 2004, corporal assets have a downward trend due to their alienation, as well as to the disposal of fixed assets. The shares held by ARO in other companies represented the financial assets of the company. The receivables of the company and the cash reserves of the company reach a minimum of - 682,232 thousand lei. The equity of the company recorded annual negative values. Year 1995 was the last year with a significant profit. Until 2004, the company recorded losses at an exponential rate.



**Figure 2. ARO-Evolution of Equity**

At the end of 2003, the debts of the company are growing from year by year, reaching the pick, 194,361 thousand RON. The huge volume of debts made it exceed the total value of the net current assets in the years 2000 - 2004, more in the years 2001-2003 the current debts exceed the total assets. The total cumulative loss between 1997 and 2004 was 207,684 thousand RON. From the above figure, it is clear that ARO has a big problem with the sources of financing, the value of Equity being negative.



**Figure 3. ARO-Evolution of Losses**

From Figure 3 above we can understand how hard ARO has been in terms of P / L financial results. The Company recorded losses during the period 1997-2004, a maximum of these operating losses representing the year 2002 (of 95,588 thousand RON), the main cause of these losses being the limited volume of activity and fixed cost (electricity, natural gas, the expenditure of labor, damping, etc.). The most significant operating expenses are expenditures on raw materials and consumables, personnel expenses, expenses on external services, and in particular, costs related to the passing on costs of interest and penalties claimed by state bodies for non-payment of their obligations. The loss of RON 20,000,000 at the end of 2004 further aggravated the situation of the state, which had great difficulties in privatizing ARO, pushing the company into the arms of a dishonest entrepreneur from the US.



**Figure 4. ARO - Evolution of Employees number vs. Salary Cost**

Figure 4 shows us the evidence of an unsatisfactory cost management, because while many employees were fired, unperformed management increased the cost of wages, paying large amounts inefficiently to people in at least dubious relationships with the factory. While in 1995 staff costs represented 25% of the 2004 production, it was 53% of the products sold. (values in thousands RON). This has led to a critical situation since in 2004 the labor cost reached 52.6% of the value of the production (see Fig. 5).

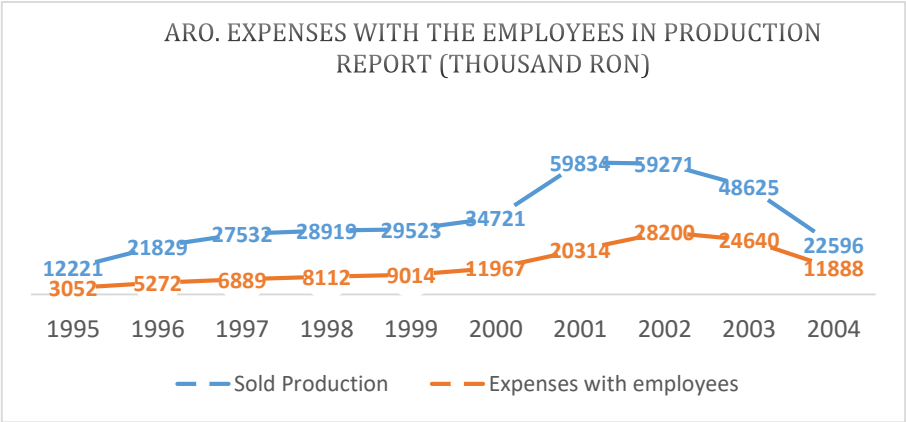


Figure 5. ARO-Evolution of Production vs. Salary Cost

DACIA Case Study

Dacia began his story in 1966, with the construction of the Mioveni Automobile Plant and in 1968, it was started to build a first national car, Dacia, based on an agreement between Renault and the Romanian state as cited from Dnistran (2015). Nowadays Dacia is one of the five brands in Renault holding, exporting cars to all continents of the world. The research sources behind our analyses of Dacia were mainly the annual financial statements and the annual report of the Board of Directors (2012-2016) quoted on the company's official website ([www.daciagroup.com](http://www.daciagroup.com), 2016). To these sources, we added information that was taken from the financial accounting reports of the analyzed years, respectively 2012-2016.

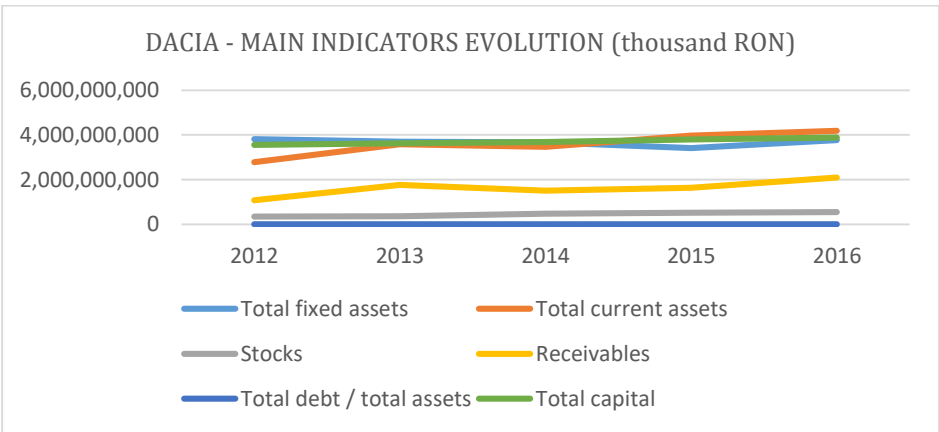
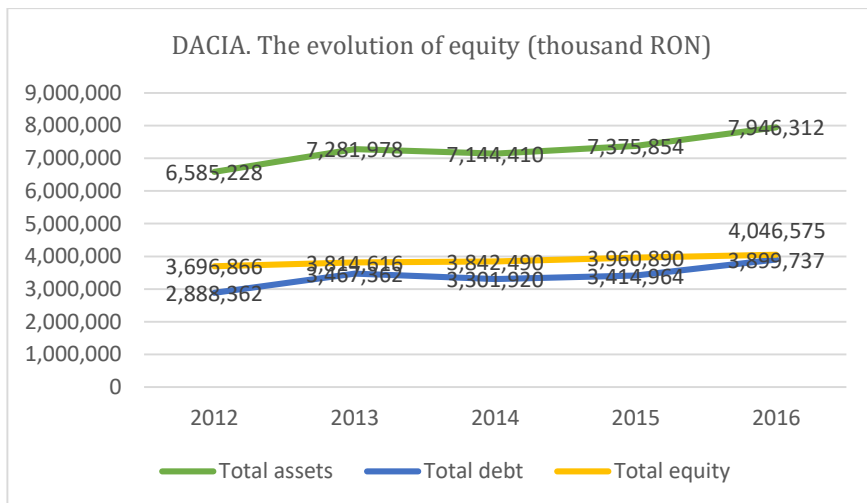


Figure 6. Dacia-Main Indicators Evolution

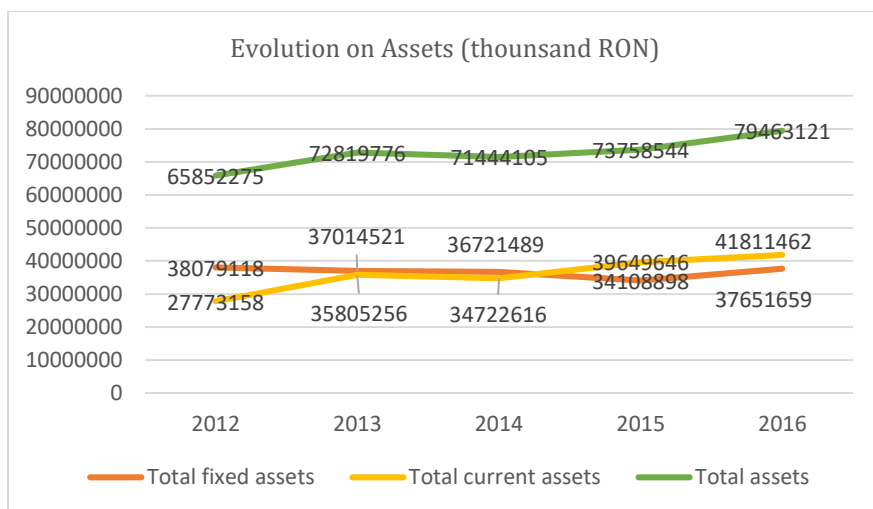


All the indicators we have calculated in the case study look great, they illustrate good financial management, which could have happened because the factory was managed well in all respects with an outstanding operational and commercial risk management.



**Figure 7. Dacia-Evolution on Equity**

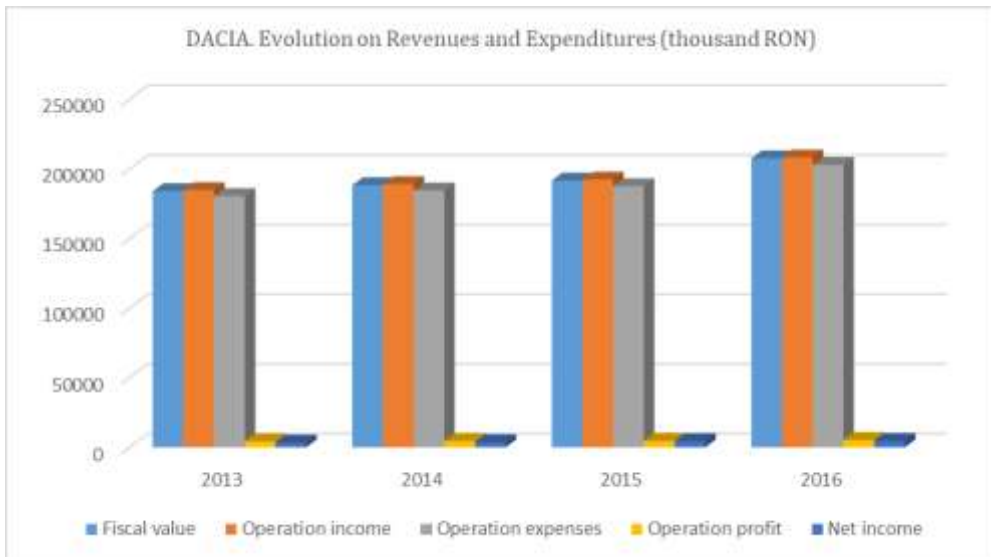
The total Assets of Dacia have evolved very well, increasing year by year, steadily, at a rate that has grown by 21% over 4 years we analyzed. In the following figure no 8, the substantial difference between Total Assets and Fixed Assets of RON 41,811,462 shows us without a doubt that current circulating assets have a high value, indicating an excellent return on capital and shows an annual growth trend



**Figure 8. Dacia-Evolution on Assets**

Operating expenses also had a growing trend, but they were lower than revenues, so the company earned operating profit in the period 2013-2016, the trend was positive from 429 million lei in 2013 to 532 million lei in 2016.

The evolution of turnover was slightly increasing, so in 2014 the turnover was RON 18,833 million, 2.34% higher than the one realized in 2013 when it was RON 18,402 million. In 2016 the turnover was RON 20,765 million, 8.4% higher than 2015 when it was RON 19,165 million. The Income from operations had a turnover-like evolution.



**Figure 9. Dacia-Evolution on Revenues and Expenditures**

Net profit increased from RON 3,370 million in 2013 to RON 4,560 million in 2016. The company had a favorable evolution that led to the continuous development and growth of the enterprise. Evolution of the number of staff was from 14,114 employees in 2013 to 14,001 employees 2016, so, the number of employees was constant during the analyzed period with a very small fluctuation, normal, but not upward, although production has diversified and steadily increased. This evolution has also allowed steady increases in labor productivity, once again highlighting sound financial management. The year 2016 reveals a tremendous increase over the past years in operating income, but proportionally and in fiscal value, which represents payments made to the state's fiscal budget, as we have seen from the AVAS Activity Report (2016), a government agency that deals with the use of state assets.

## Conclusions and discussions

In the present chapter, we aim to verify whether the research done based on the two studies as a pair case (ARO and Dacia) gives us sufficient scientific and empirical arguments to conclude with a high probability that the research hypothesis is confirmed. We started with the main idea that we have checked, namely that a company's chances of success grow when an efficient management runs it. A very good financial risk management can make a difference between success and bankruptcy. Clearly, the research method used, namely the case study based on two companies that were created by the state many years ago, functioned in the centralized state economy in a similar way, provided scientific evidence and arguments that confirmed the research hypothesis.

We used in the case study research tools subordinated to the chosen method, derived from it, namely direct analysis of sources of information, analysis of financial and accounting databases, interpretation and processing of financial and accounting reports by graphic means, etc. All these research methods and investigative tools have led to clear conclusions as in the ARO case. The financial disaster occurred due to the lack of interest of the shareholder (the state), who appointed an incompetent manager's positions without real management skills. They did not put the company's interest first, did not worry about the correct and effective financial risk management and pushed ARO into bankruptcy. That, after they sold the factory negligently to a ghost company that decimated it in pieces for its own sake.

Through an identical but mirrored analysis, Dacia presents itself as a successful car factory, whose production indicators, accounting, operational, and efficiency and effectiveness indicators show year after year more and more.

Bocşaru (2016) argues that the growth of turnover in 2016 was driven by import and export markets. "As far as export is concerned, we have had a very good performance on the European market, but also on the markets in Africa and Asia, which makes exports this year to be about 90% of the turnover." Since 2000, the investments made by Renault Romania Group amount to 2.5 billion euros, being investments in new products (vehicles, engines, gearboxes, mechanical components) and investments in increasing the competitiveness of the processes production (social conditions, capacity increases, automation processes, quality and cost reduction). We obviously believe that the hypothesis built at the beginning of this research is confirmed, and success is due to good decisions to properly manage financial risk.

We can conclude that not many organizations spend time and money with cutting-edge technology, innovative, to meet their profit and the performance needs. Usually, every company uses the best measures available more than a couple of procedures for their business: e.g. financial reporting. Thus, the proactive metrics management solution could meet easily their indicators of the performances' criteria or from the different sources in the same company (Kernzer, 2017, p.332). Nevertheless, in the case of Dacia, it results from the analysis that the extraordinary results, a turnover of 3% of GDP and the number one company in terms of export, was achieved through real work, competent management, and moral basis.

If we allow ourselves to look retrospectively, the risk profile of ARO and Dacia companies was almost at the same level at the beginning of the 90's. There the corporate risk management had been conceptually different from the function of "trading/risk-taking" because the "corporate risk management does not focus on sporadic and opportunistic hedging based on an idea that the manager has at a particular moment... this activity must have a separate income statement, have objectives, be monitored and so on - in other words, be a classic trading/risk-taking activity" (Garcia, 2017, p.8). Cars manufactories are usually exposed to various kinds of risk, not only to the market risk, the exchange rates, the inflation and fluctuation of national currency (RON) in comparison with US dollars and Euro, the derivation to hedge-currency, interest rate or change in commodity prices risk – by forwards.

Looking back, we think that there was not only ignorance of the management, but it was greed and bad intention. We conclude that lessons to be learned by anyone

reading this research are that financial risk management in state-owned companies remains a thorny issue, and it has not been fully addressed today either. The authors of the paper acknowledge the limits of this research, namely that the case study has encountered difficulties due to the fact that ARO is bankrupt and the existing database is limited. On the other hand, it is difficult to extrapolate the findings of a two-nation research into a national economy, but in future work, we propose to do other case studies from various industries.

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