UNDER THE CASH POOLING: DOES THE COOPERATION MATTER?*

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Abstract. This paper presents comprehensive data on cash pooling between companies of the biggest cooperative corporation in Spain Mondragon Cooperative Corporation. The case study highlights financial phenomena using the concept of stakeholder theory based on management to create and generate value into the economy. Using Delphi technique combined with Cross-impact Matrix, we find that there are short and long variables necessary to an efficient cash pooling model: a mutual benefit based on trust is the main element but others as cycle and cooperation within managers’ skills are relevant, as well. Our results highlight that a high future positive expectation and the need for trust and mutual results in holding the cash are factors dissuading the isolation of a unique self benefit of the implicated companies.

Keywords: cash pooling, cooperatives, cash management, trust, treasury, efficiency.

JEL Classification: G32, M14, N20

Introduction

One of the most important financial decisions the firm makes is how much cash to hold to guarantee the survival into the economy in the future. Firms hold a significant portion of their assets in the form of cash; but the management of the cash establish the efficiency development of the company that influence and it’s influenced by the external economy determinants. In this line, the grey literature shows that big banks and big companies are using the cash as reserves instead of invest it to growth the economy. One of the main reasons is that the economy situation will not be change to a better situation; the conservative view; or at least it will be very difficult to guarantee the liquidity of the invested cash, that mean into economic theory that “the corporate bigwigs just don’t see the opportunities for profit”. The data shows the situation; for example the latest report from the Federal Reserve of USA shows that big banks’ cash reserves are just under $1.6 trillion – an astonishing 80 times the $20 billion they held in reserve in 2007. In the other side, large non-financial institutions’ reserves are more than $1.7 trillion. All that parked money translates directly to lost growth and missing jobs. A recent study of Political Economy Research Institute at the University of Massachusetts Amherst found that if America’s largest banks and non-financial companies moved just some of that cash into productive investments instead, that would
give the economy a huge boost, creating about 19 million jobs in the next three years and lowering the unemployment rate to fewer than 5 percent. Scientific literature has studied this aspect as well. The most important article written by Opler et al. in 1999 establishes that corporate cash holdings of the S&P 500 companies alone amount to $716 billion in 1994; and a more recent article written by Dittmar and Marth-Smith (2007) state that the sum of all cash and marketable securities represented more than 13% of the sum of all assets for large publicly traded US firms. In this line Martínez-Sola et al. (2013) established that show empirically that the optimal level is around 14% for a sample of listed US industrial. Using the Amadeus database it is shown that the active companies, more than 470.000, during 2013 hold €18 billion in cash in 2011; nearly half of the shareholder funds amount.

But a company could maximize the value of cash holding if it takes into consideration the interests of all stakeholders using and sharing it into a control and getting benefit for the sharing action in opposite of a selfish action that reduce the whole stakeholders’ efficiency. This option is possible under the criterion of efficiency in which the result will be effective when those who benefit from a change can compensate those who suffer the consequences (best result according to Pareto). The lack of studies regarding these aspects in business (cash holding and financial relations, stakeholder theory, value and efficiency criteria) makes necessary to develop a causal model that optimizes the value created by the financial relationships between stakeholders in the company into cash management relationship. The main issue and purpose is to delete the cash breaks between stakeholders of the companies that adversely affect the financial costs and increased financial distress.

In this regards, the aim of the paper is to develop a share cash administration model in which the companies of a corporation could split the cash with the proposal of get value; as consequence there is a positive repercussion into the economy. It is used a case study to show the possibility to establish this cash model: cash pooling. The company is called Mondragon Cooperative Corporation (MCC). It is relevant and significant because it is the seventh largest Spanish company in terms of asset turnover and the leading business group in the Basque Country. Moreover it provides employment for more than 80,000 people working in 256 companies.

Our study contributes to the existing literature in two ways. First, we expand the empirical evidence available on the cash holding models (Martínez-Sola et al. 2013) because of the cooperation basic view. Secondly, we make headway in delimiting the factors that support the cash pooling by proposing a broad set of variables to capture the impact of future positive expectations into mutual benefit and trust requirements. The proxies of the model are performed using a Delphi technique combined with a Cross-impact Matrix that integrates and provides for testing the sensitivity to changes in probabilities and deal with some of the disadvantages of Delphi technique as long synthesis phase, according to the study of Helmer (1977).

The paper has the following structure. The next section develops the literature on the debate relative to cash holding and generation of value based on the stakeholders’ interest. This is followed by a description of the methodology used for this article. The results of the case study are then described. The conclusion ends up our article.

1. Review of literature

Jensen (2001) concludes that a firm cannot maximize value if it ignores the interests of stakeholders. It is true that the stakeholder theory contains no specific conceptual about making tradeoffs among stakeholders, but it should do (Freeman 1984; Freeman et al. 2010). Specifically, value creation requires more than acceptance of value maximization aim of the organization as the global object itself because it does not take advantage of the energy and enthusiasm of employees and managers to create value (Jensen 2001). In this line, the market value may be one of the variables used to evaluate the success or failure of the organization (Martínez-Sola et al. 2013), but the value is taken as a whole that cannot adhere to the concept of market value, much less when there speaking of large publicly traded companies, must be complemented by a vision, strategy, tactics and relationships linking all its stakeholders. These relationships translate into financial terms so that these interconnections could lead to shed some light on how to optimize the perspective of value increases and global sets, and independent and individual (Freeman et al. 2012).

Previous studies such as the Hillman & Keim (2001) who analyze S&P companies in order to demonstrate the relationship between stakeholders; conclude that may lead to the generation of value. Specifically determining that building better relationships among stakeholders leads to increases in value in terms of productivity. However, this study supports its argument by using the company as a means to achieve wealth for shareholders. So, its central axis confined to a single stakeholder and not all of them and it focuses only in terms of human behavior and optimization techniques, so we could say it is a complete study of all or at least not with a global perspective.

The basis of the research presented is valid provided there for companies that manage all stakeholders. In this regard, we can say, that although only empirical data have been obtained and scientific rigor of large companies such as J & J, eBay, Google, Lincoln Electric and AES (Collins 2001), and is. Furthermore and following Freeman et al. (2010) we can conclude that there are many companies that have developed and implemented their business in very consistent
with stakeholder theory. Also work Agle & Agle (2007) in their research on a sample of 100 companies drawn from Fortune 500 companies found that only 10 emphases defend “pure shareholders” while 64, that is, a vast majority embraces approach “to maximize the welfare of all stakeholders”.

Following Jensen (2001) and on the theory of stakeholders can suggest that the creation of value in the company can be achieved basing it on the management of the business organization based on satisfying the interests of stakeholders.

Once detailed argument on which we base the importance of this work we must clarify and explain, at least two aspects: the current state of the theories in the field of financial relations and the theory on which we sustain this paper.

Regarding financial theories point out that so far the efforts of academics and finance professionals (Damodaran 2011; McLaney 2009, Hillier et al. 2010; Van Horne, Wachowicz 2008, among others) have focused on the study and advancement of techniques and instruments “optimization” of the treasury, but in the first instance to obtain this “optimization”, at least total, you should modify the egocentric thought for thought in the whole techniques developed to promote optimal financial situation for all stakeholders or companies related to financial stocks (San-Jose 2009).

The second refers to the more detailed description of the theory that underpins the model we propose to measure the evolution of financial relations ethical grounds. We speak of the stakeholder theory. This theory goes back its origins to Stanford Research Institute in 1963, and features contributions from some economists previous relevant as Ansoff (1965) and Ackoff (1970). However, its systematic approach, as we know it today dates back to the work of Freeman, 1984, which states that organizations are composed of stakeholders, which would be defined as “groups or individuals who can affect or be affected by achieving the company objectives” (Freeman 1984: 25). Freeman believes that the interests of these groups are legitimate organization and management should try to find a balance between the satisfactions of all stakeholders, including shareholders are included. This approach runs counter to the logic of capitalism, in which the only interest group with its own legitimate rights is the shareholders (Friedman 1970). In classical theory assumes that the exclusive right of participation of shareholders is based on that they alone bear the residual risk (Coase 1937, 1960; Boatright 2008), since the other participants of the company have secure rights recognized under the contracts between the parties according to the model of contract theory (Arrow 1971). This perhaps may reflect the reality of the nineteenth century, but at present there are two circumstances that distort this argument, on the one hand, capital moves from being the ultimate resource that allows the acquisition of other resources, a resource parity with another set of resources that the company may have, as outlined in the resourced Based View (Wernerfelt 1984) and current theories relating to the value of intangibles in business (Alle 2008). It has also been argued that capital is the only one who bears the risk (or benefit) residual, which does not seem right. First, the legitimacy of contract theory as the sole source of law of the stakeholders involved should be based on symmetry of information and prior to the signing of the contract, which does not always happen. Moreover, the current crisis has clearly demonstrated that the risks are borne by many stakeholders besides the shareholders, such as citizens suffering from lack of cash banks.

In this line and concretely the cash pooling, the basic of this paper is supported by the positive benefits to all companies of a group because of the centralization of their cash that converge into an efficient management of the cash amount. The cash-pooling is a means to ensure better control of the daily position in value data, reduce financing needs by making better use of resources, and reduce financial costs (Polák, Kocurek 2007; Vetter, Schwandtner 2008). Furthermore, in the case of fully centralize cash proceeds to be used to the central treasury as if it were a bank, who in turn has balances with financial institutions (Polák, Kocurek 2010). This technique helps to obtain treasury cash balance desired zero value date as the integration of all company balances enable and facilitate its analysis synthesized form, allowing monitoring and control of the position in simplest value date (San-Jose et al. 2009).

Centralization in the area of holding the cash can be defined as “the process by which the functions relating to cash flow are managed, analyzed and monitored on a pooled basis” (San-Jose 2011: 73). That is, the centralization of the treasury of a company with subsidiaries involved that its parent bank perform functions for other group companies. This integration and automatic grouping of functions enables a tradeoff between accounts and accounts deficit position with excess cash, there being a unified treasury management tends towards a single debit or credit position in the central account for the balance of the entire company.

In this sense, companies with collection and payment flows in different geographical locations could improve liquidity management by centralizing them. According to Messner (2001) on grounds of anticipation and improvements in credit conditions and covers cash management should be a centralized department. Thus, it is simplified to a single cash position can be controlled on the value date and can be managed in a more synthetic.

However, the decision to centralize cash management will depend primarily on the type of company to be registered, not being a decision independently treasurer (San-Jose 2011). It will be mainly in companies with a peripheral network of branches or subsidiaries, although the introduction of this technique for managing the treasury in medium even in small companies is imminent.
The Cash pooling as a technique for the centralization of the treasury was first used in American corporations for over three decades, but in the euro zone, until recently not been consolidated. This consolidation has been made possible by the existence of technologies at competitive costs, improved control and information on the activities of the company, reducing the administrative cost of the Treasury Department, as well as an unpredictable environment in which economies globalize, and where every day becomes more important business internationalization and increasingly competitive market (Watson, Head 2010).

In sum the cash management is a key factor in the relationship and equilibrium between the various stakeholders and their interests. It is therefore necessary to ensure that cash management satisfies stakeholders' interests, who may conflict in the short term, in such a balanced manner, that they converge in the long term. In the long term, the cash holding shared by stakeholders will produce benefits for all of them, for example because it increases solvency and liquidity. Also it will benefit the society and the economy as a whole because of the reducing the insolvency and the unemployment. “Its theoretical acceptance will ultimately depend on a change of attitude towards cooperation and the elimination not only of information asymmetry and of barriers to mutual trust which prevent people from accepting the obvious before even considering how the system might work” (San-Jose 2009: 66).

2. Methodology and case study

Case study is a particular method of qualitative analysis where “the logic at work partakes of discovery and meaning construction” (Paillé, Mucchielli 2003). Collerette (2004) explains that “one main advantage of the case study method is to supply a situation where the interaction of a huge number of factors as a whole can be observed, thus allowing due recognition to the complexity and richness of social situations”. Yin (1990) recommends using a unique case study for three situations; one of them is revealing a phenomenon which is not rare but that was not yet accessible to the scientific community. Using a unique case study (one of the biggest cooperative holding in the world and very relevant in terms of turnover in Spain) allowed focusing on the holding aspect and the understanding of the phenomenon of cash management in a specific organization, which has not been done till today as far as we know. Furthermore using qualitative research, where contextualization is an essential part, allowed focusing all the more on the context of the cash pooling in cash management efficiency context. Thus, the studied Mondragon Corporation (MCC) actuation aims at using the cash pooling in order to show the possibility to an efficient management of the cash. MCC is a corporation and federation of worker cooperatives based in the Basque region of Spain. It was founded in the town of Mondragón in 1956 by graduates of a local technical college. Their first product was paraffin heaters. Mondragon cooperatives operate in accordance with Statement on the Cooperative identity maintained by the international Cooperative alliance. The standard statement of cooperative identity largely eliminates perverse incentives that contribute to many problems of governance found in organizations with more traditional management structures.

It is used to understand the Cash Pooling of MCC the main objective of this paper a Delphi Technique (Linstone, Turoff 1975) in which the basic was the common understanding of the financial experts of the corporation around a subject; the Cash Pooling. It is shown in the table 1 (See Table 1) to a most important descriptive variables around the research study; the Research Sheet of the empirical analysis of this paper. It has been necessary 3 rounds to get a Unique Model based on the very similar ideas of the Financial and Treasury Directors of the MCC (past and present ones). This technique has been using with the help of a Cross-impact Matrix1 to a better explanation of the relationship of variables relate to Cash pooling and using the quantitative matrix to a more objective representation of the correlation between variables. It has been used 15 hours and interviews were fully recorded and transcribed. Content analysis was carried out using Nvivo10 software: going regularly from theory to fieldwork and back, allowed the codification, the organization into a hierarchy and the theorization of collected data, more particularly finding and including the concept of organizational routines.

<table>
<thead>
<tr>
<th>Description Variable</th>
<th>Qualitative Research</th>
</tr>
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<tbody>
<tr>
<td>Company</td>
<td>MCC (Mondragon Cooperative Corporation)</td>
</tr>
<tr>
<td>Qualitative technique</td>
<td>Personal Interview (Recorded)</td>
</tr>
<tr>
<td>Interviewers</td>
<td>Experts with Financial and Treasury Directors of MCC</td>
</tr>
<tr>
<td>Data</td>
<td>From June 2012 to January 2013</td>
</tr>
<tr>
<td>Time</td>
<td>5 hours in person + 10 hours action research (matrix-discuss-mail-telephone)</td>
</tr>
<tr>
<td>Place</td>
<td>Mondragón (Basque Country-SPAIN)</td>
</tr>
<tr>
<td>Analysis Software</td>
<td>Nvivo 10 Software</td>
</tr>
<tr>
<td>Analysis Technique</td>
<td>Delphi Technique using a Cross-impact Matrix</td>
</tr>
</tbody>
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Resource: own elaboration

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1 It is developed by Theodore Gordon and Olaf Helmer in the 1966 to help determine how relationships between events would impact resulting events and reduce uncertainty in the future.
Moreover it is necessary to take into consideration that MCC is growing into the internationalization and globalization processes because as the conventional companies it is the aim of the companies to expand their product and services and create value in a global sense. It is necessary into the international economy to the survival of companies (San-Jose et al. 2013). But, most of the Mondragon multinationals are market-seeking, in the early days of the internationalisation process, and some of them are obliged to follow their big manufacturing clients abroad as suppliers. There are other motives for the internationalization, for example the low production costs; primarily through cheap and well-motivated unskilled or semi-skilled labour. “If the MCC cooperatives are to compete against large industrial multinationals, they must develop their own multinational production and distribution networks” (Errasti et al. 2003: 559). However, although its interest and relative influence the internationalization it is not the aim of this paper.

3. Results

We explore using the Cross-impact Matrix\(^2\) the relations between short and long terms variables that influence in cash pooling in MCC. Academics and finance professionals (Damodaran 2011; McLaney 2009; Hillier et al 2010; Van Horne and Wachowicz 2008, among others) have focused the optimization of cash management models based on the self benefit instead of a common benefit of the implicates companies based on cooperation. We estimate our model differently; we believe that the model is misspecified unless all proxies relate to the cooperation are included because they are necessary with the aim to promote optimal financial situation for all stakeholders or companies related to financial stocks (San-Jose 2009).

The three round of Delphi and the Cross-impact matrices show the proposal of the cash pooling model (see Fig. 1).

The main results once has been done the content analysis of the interviews and an exhaustive analysis of the Cross-impact Matrixes are the following ones:

- There is a necessary condition: the relationship between expectations and trust must be strong and positive. In addition, mutual benefit is a variable to feedback on this relationship making the cash pooling system may occur in the long term.
- The variables that influence the Cash Pooling model analyzed are grouped into short and long term. On the one hand, the long variables are: Mutual Benefit expectations, Trust, Mutual Benefit Management

\(^2\) Because of not spreading out too much we do not included the cross-impact matrices; however they are for the disposal for those interested
and Results. On the other hand, the short ones are the following ones: Confidence, Management and Guarantees (negative: that has no negative impact). [*The Risk (linked to guarantees) arises in the Short and mutual benefit can be observed only at Large]*

There are some relations that significantly influences in other variables (results from the Cross-impact Matrixes) that are explain briefly:

1. What influences expectative?
   Potential Synergies Treasury (Companies), Cycle (Companies), Size (corporate), Complement-Earnings (Companies)

2. What affects the Trust?
   Potential of the company, Reputation of Managers, Managers Skills, Cooperative Behavior (could be good but not trust of them and this involves performing the Cash Pooling). Take into consideration that moral hazard and adverse selection causes the absences of opportunistic behavior.

3. What influences Management?
   Cycle, Size, Complement-Accrual, Potentiality Company.

4. What affects the Guarantee System?
   Essentially the guarantee system is affected by the Cycle, Size, Warranty, Bank and Countries.

   It is needed to considerate that the bank intermediation is eliminated in this cash model, and then the bank spread could be the benefit, although it could be a surplus in other financial transaction with banks. Moreover, this bank spread and the expectations are related in most of cases.

   The use of cash pooling into the international finance makes take into consideration the country aspect in which different country law could affect this international finance technique and in general makes it very complex and in some countries impossible to use, what mean the bank power and bank superiority and bank requirement.

   Cash Pooling Model must be created in situations of positive cycles, at least it will be easier, but really the need should appear Cash Pooling into negative cycles, at least efficient ones. Furthermore, this system in positive cycles will be competing with the banks that will be interested in this financial market operations where expectations are positive, the expected results and benefits create large systems is not required for the trust collateral and expected positive situation. At this point is when the company just does not require so imminent and tacit services of financial institutions, but it is usually when they are easy to obtain banking services.

   The cash pooling movement are made only because of the benefit of the companies implicated; but in this case not always are the same companies those that get a better situation; the cooperation is assumed into MCC that mean that depend on the cycle, moment or necessities the company is the promoter or the solicitor of cash support vs. help.

In terms of benefit firstly it is necessary to explain that benefits can be of two types: quantitative and qualitative:

Regarding the **quantitative aspects** can be considered the following ones:

1. The business volume. In this case both the companies that borrow money and those that lend money receive higher spread comparing with the received from a financial institution; moreover receiving the money paid less than what you would pay at a financial institution. The differential can be calculated haunt 0.75% in each of the directions (positive-negative) of the bank-transaction.

2. Consolidating positions and with the arbitrage of financings; and reduce idle balances. In this case we define the global position and needs to be offset surpluses and if necessary would take more favorable financing or invest in the product that is better paid.

3. Unification of banking conditions. It is possible to negotiate in a better position with financial institutions in terms of business volumes that increased business best possible prices, managing to reduce fees and improve rate differentials.

4. Savings in overhead costs in the treasury department of each company. With fewer people can properly manage the cash of more companies.

5. Savings for currency management: Being a very specific aspect of Cash Pooling currency management should be performed by a person with very specific knowledge of the foreign market, can bring benefits for different aspects: exchange risk management, funding Currency, compensation of long and short positions in different companies, buying and selling of foreign exchange fixing and using the same change for the purchase and for sale.

Regarding the **qualitative** can highlight:

1. Best image with the financial institutions, which improves our conditions.

2. More professional management. With people who are dedicated exclusively to Treasury.

**Concluding remarks**

In this paper, we have developed a cash pooling model focusing on short and long variables associated with get benefit together and get positive results into cooperation basic. We have used data of a case study the MCC case, Mondragon Cooperative Corporation, to analyze their well-done and to delimit the factors that ensure into long terms the financial relationship between companies sharing the cash amount. This question takes on particular prominence in a context of economic crisis in a download cycle in which there are many companies with cash distress or at least cash needs with the lack of government and bank cash support.
Our study contributes to the existing literature in two ways. First, we expand the empirical evidence available on the cash holding models but introduce the importance of the cooperation. Secondly, we propose a cash pooling model in which there are delimitate the factors that support the cash pooling. The proxies of the model are performed using a Delphi technique combined with Cross-impact matrices reducing the synthesis phase and quantifying the relations between each couple of variables making the model more robust.

The model that we propose in this paper increase the value generated in enterprises, reduce financial insolvency, reduce the need for external financing, especially bank and respond more effectively to the situation of inadequate credit by the financial system; what mean make possible the growth of the economy. But this model is complex and requires conditions as the relationship between expectations and mutual benefit/Result (variables of long term). Environmental circumstances such as banks or countries will be determining conditions. And other variables, some of the short-term as trust, efficient management and guarantees; and other from long-term as expectations of mutual benefit, trust, manager skills or results provide cash pooling systems between companies.

In sum, these results endorse the hypothesis that the cooperation attitude and the trust and positive expectative among companies in holding the cash tend to dissuade the effects of the isolation of a unique self benefit of the implicated companies.

It is worthwhile pointing out the implications of this study for researchers and corporate managers, since it shows that corporations can increase their value by being collaborative with their stakeholders into the management of the level of cash, which seems rational according to a confidence scenario and positive expectations with the aim to increase the value of all of them.

There are at least two limitations that are the next steps of the authors in this regards. On the one hand, as this model is based on a specific cooperative holding with collaboration prior, then to transfer this cash pooling model will be necessary to analyze other existing systems. On the other hand, it is necessary to confirm the model quantitatively; for what will be useful the modeling with the Structure Equations in which will be necessary to collect information of a representative number of companies doing cash pooling or similar.

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