



Business Adaptive Strategies in Crisis

The use of cash pooling in Treasury as a reaction to Covid-19 crisis –
Case of a luxury jewelry brand

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Dissertation written under the supervision of Professor Ricardo Reis

Dissertation submitted in partial fulfillment of requirements for the
MSc in International Management with specialization in Strategy and
Consulting, at the Universidade Católica Portuguesa, January 2023.

Acknowledgments

I would like to express my deepest appreciation to all the people that supported me in writing this thesis.

Firstly, special thanks to my supervisor Ricardo Reis for his guidance and availability throughout the whole process. Our joint discussions have always been very helpful to me in fine-tuning the details of my thesis!

Secondly, I could not have undertaken this journey without my lovely colleagues from the Finance and Treasury Management team from KPMG Switzerland that provided me with all the information about the case study. Thank you for giving me the chance to deep dive into a real-life project example that has just been successfully accompanied over the past few months. You gave me the chance to combine relevant professional knowledge with my academic background. This helped me a lot by broadening my horizon in treasury-relevant topics. Special thanks to Benjamin Gayet and Dennis Kiratli for the close collaboration and the time that you spent together with me for discussing the case!

Lastly, thank you to the people that helped me with optimizing the quality of my thesis.

Abstract

Title: The use of cash pooling in Treasury as reaction to Covid-19 crisis – Case of a luxury jewelry brand

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This master thesis describes the use of cash pooling as a strategic tool in treasury to overcome the Covid-19 crisis. As a case study format, the thesis follows a pedagogical structure, providing students with a real-life scenario of how a luxury jewelry brand applied strategic adjustments as crisis management.

At the beginning of the Covid-19 pandemic in 2020, the company was challenged by dramatic cash and liquidity problems for the first time in its company history. As a reaction to the pandemic challenges, the company decided to launch a global cash pooling program to enhance cash management within the corporation. The purpose of the program was to further concentrate the global cash positions within the headquarter.

Incorporating evidence from interviews with industry experts, company sources and online sources, the case study evaluates the strategic suitability of cash pooling. The findings demonstrate three main strengths of cash pooling as a tool to overcome a crisis. Firstly, increased transparency due to centralized structures offered better visibility of available funds. Secondly, higher flexibility ensured that the company had more efficient decision-making processes. Lastly, long-term cost savings due to structural adjustments enhanced the company's profitability. However, further side projects need to be considered in parallel to exploit the full potential of cash pooling structures.

Keywords: Cash pooling; Treasury; Cash and liquidity management; Covid-19 crisis; Strategy; Luxury segment

Resumo

Título: O uso de cash pooling em Tesouraria como reação à crise do Covid-19 - O caso de uma marca de jóias de luxo.

Autor: Jan Zirener

Esta tese de mestrado descreve o uso de cash pooling como uma ferramenta estratégica em tesouraria para superar a crise do Covid-19. A tese apresenta uma estrutura pedagógica em formato de caso de estudo, apresentando os estudantes com um cenário real sobre como uma marca de jóias de luxo fez ajustes estratégicos para gerir uma crise.

No início da pandemia Covid-19 em 2020, a empresa foi desafiada com problemas sérios de dinheiro e liquidez pela primeira vez na história da empresa. Como reação aos desafios da pandemia, a empresa decidiu lançar um programa global de cash pooling para melhorar a gestão do dinheiro dentro da companhia. O programa tinha como propósito centralizar as posições globais do dinheiro na sede da companhia.

O caso de estudo reflete a capacidade estratégica de cash pooling incorporando testemunhos de entrevistas com especialistas da indústria, dados da empresa e fontes online. As evidências mostram três principais mais-valias para o uso de cash pooling como uma ferramenta para superação de crise. Primeiro, a centralização das estruturas proporcionou melhor visibilidade sobre os fundos disponíveis, havendo assim um aumento na transparência. Segundo, a flexibilidade acrescida assegurou que a empresa tivesse um processo de tomada de decisões mais eficiente. E, por último, a poupança de custos a longo prazo devido a ajustes estruturais, aumentou o lucro da empresa. Porém, outros projetos precisam de ser considerados em paralelo para explorar todo o potencial das estruturas de cash pooling.

Palavras-Chave: Cash pooling; Tesouraria; Dinheiro e gestão de liquidez; Crise Covid-19; Estratégia; Segmento de luxo.

List of Abbreviations

ABC	Fictitious Company Name
B2B	Business-to-Business
CFO	Chief Financial Officer
IT	Information Technology
KPI	Key Performance Indicator
RBV	Resource-based view
SWOT	Strengths, Weaknesses, Opportunities, Threats

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1 Motivation for thesis

The following thesis, written in a case study format, follows a more practical approach. It aims to provide students and prospective young professionals with an actual example from the business about a cash pooling implementation in crisis situations. Representing a real-life consulting project example sets the focus on a valuable learning experience.

A detailed described case and teaching devise part enables hands-on learning experience and the chance for professors to incorporate an actual business project in the theoretical learning experience at university. Applying learned theory to a case study allows for connecting theoretical knowledge with practical experience.

The case is examined from a consulting perspective which should value the fact that a strong connection to a consulting company was used to present the project. Detailed interviews with managers involved in the project provide extra interesting insights. This unique chance to embed professional expertise broader the horizon of practical knowledge.

2 Theoretical framework

The theoretical framework section serves as a basis to get a better understanding of relevant aspects of the upcoming case study. Important terms will be defined, and relevant strategic concepts are described in more detail.

2.1 Treasury Management

The notion of treasury management becomes more and more complex. Businesses are growing and enterprises need advanced treasury management to achieve progress in their profitability (Donepudi, et al., 2020).

Cash and liquidity management are one of the main tasks of treasury management. Here, the management of an organization's holdings is the main focus. Because it plans, organizes, and manages the cash assets, the treasury department can help a business achieve its financial objectives. Nevertheless, accounting and treasury management have independent roles (Mulligan, 2001). To be more precise, one of the treasury's primary duties is to determine the ideal cash level so that payments can be made and received as necessary for the company's smooth functioning. Other duties include treasury forecasting, negotiating with financial institutions as well as establishing connections with them. Financial risk management is also a part of treasury management (San-Jose, Iturralde, & Maseda, 2008).

Other aspects focus on the goal that treasury management has. In this case, it is the ultimate goal of raising the company's profitability and enhancing working capital administration (Torre, 1997). Further, treasury covers the management of interest-rate and exchange-rate risks. Also, the planning of disposable treasury assets and their subsequent monitoring as well as a plan for investing surpluses to achieve maximum profitability is considered. Treasury management aims for finance shortfalls at the lowest possible cost and ultimately the management of banking activities (Charro & Ortiz, 1996).

The notion of treasury management for the purpose of this thesis can therefore be defined as the recording and management of cash flow-oriented financial resources for internal and external financing. This dynamic profitability evaluation seeks to maintain the existing and forecasted volume of business in balance with the company's financing capacity through corporate-wide liquidity management.

2.2 Cash Pooling

The term cash pooling can be described in various forms. Different emphases in definitions focus on several aspects. Nevertheless, the core of the statement follows the same logic. To find a uniform definition for the purpose of this thesis, some aspects need to be considered.

One of the main aspects of cash pooling is the focus on centralized cash. Therefore, cash pooling can be described as a financial management approach that enables the centralization of cash inside an organization by combining the cash balances of several units, including subsidiaries. To participate in cash pooling, a company must physically or virtually transfer its cash balance to the "master account," which is normally kept by the parent company (CMS, 2010). Due to the unified treasury management, there is a tendency to have only one debit or credit position in the central account for the balance of the entire company. This integration and automatic grouping of functions enables a tradeoff between accounts and accounts deficit position with excess cash (San-Jose L. &, 2013).

Another aspect of cash pooling structures is the involved parties that benefit from such a strategy. Multinational corporations effectively manage the liquidity (working capital) needs of the group by using excess cash available with some cash pool participants, typically subsidiaries, to fund the needs of other cash pool participants (Chand, 2016). The ultimate goal is the centralization of a company's treasury so that its parent company can serve as the parent bank for other group subsidiaries (San-Jose L. &, 2013).

Cash pools can further be distinguished between physical and notional cash pools. The balances of the participating entities do not move when notional cash pooling is used. Instead, the interest rate is determined using the netted amount of all participating accounts. Although each participating subsidiary still maintains its own bank account with the full physical balance and the group can profit from interest optimization. Without moving money to one account, the banking partner determines the interest based on the net worth of all connected accounts. Through the physical transfer of cash from all participant accounts to the parent company's master account, physical cash pooling centralizes both, the cash flows and the banking relationship (Jansen, et al., 2011). A target balancing method or a zero balancing method can be used for physical cash pooling. The cash pool participants send all of their funds to the cash pool leader under the zero-balancing strategy.

Cash is not physically moved to any bank account under a notional cash pooling arrangement. There are no intra-group loans as a result of this type of arrangement. The parties to the cash pool agreement manage their own bank accounts independently (Chand, 2016).

Further aspects set the attention on the financial impact of implementing cash pooling structures within a corporation. Here, the corporation can lower its overall debt to financial institutions and cut costs, because interest is computed on the total sum. Units could be funded through the cash pool at a more competitive rate rather than having to take out external loans to reduce liquidity risk (Jansen, et al., 2011). Also, by better utilizing resources, the cash-pooling helps assure greater control of the daily position in value data, lower financing demands, and lower financial costs (Polák & Kocurek, 2007).

For the purpose of this thesis, cash pooling is therefore defined as centralized cash management inside a corporation to fund the monetary needs of the cash pool participants by following a physical or notional approach to lower financial costs and external dependencies.

2.3 Dynamic Capabilities

The theory of dynamic capabilities aims to examine the sources of wealth generation and appropriation by businesses. Therefore, a dynamic capability is defined as “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments” (Teece, Pisano, & Shuen, 1997). The dynamic capabilities approach developed as an extension of the resource-based view (RBV) of the firm (Barney, 1986). The RBV aims to clarify the circumstances in which businesses may obtain a long-lasting competitive advantage based on their collections of assets and skills. Resources are "stocks of readily available elements that are held or controlled by the firm", whereas capabilities "refer to a corporation's capacity to deploy resources, typically in combination, through organizational procedures, to accomplish the desired objective." (Amit, 1993). Nevertheless, the RBV is thought to be fundamentally static in nature and insufficient to account for enterprises' competitive advantage in fast-changing environments (Priem, 2001). Therefore, the dynamic capabilities framework was developed by Teece.

Teece’s theory of dynamic capabilities was built on several main elements. It began by classifying the concept as an "ability" (or "capacity"), highlighting the crucial function of strategic management. Here, a unique capability is added to RBV. Second, the integration, development, and reconfiguration of internal and external competencies as the expected outcome (i.e., the role) of this specific capability was outlined. Here, the function of routines,

path dependencies and organizational learning from an evolutionary economics approach was articulated (Nelson, 1982). Thirdly, the focus was set on a specific category of external context, namely situations that change quickly. This was a logical outcome of the approach, which took a more entrepreneurial stance for regimes of rapid change and saw dynamic capabilities as an extension of the RBV (Schumpeter, 1934). Fourth, it was assumed that dynamic skills are often created rather than purchased. Further, the development and evolution are part of organizational processes that are influenced by businesses' asset positions and their historical evolutionary routes. Fifth, it was noted that dynamic capabilities are heterogeneous between organizations since they are based on firm-specific routes, distinctive asset situations, and distinctive processes, much like the resources and capabilities examined within RBV. Finally, the strategy made it clear that dynamic skills directly lead to persistent competitive advantage (Barreto, 2010).

Further, a firm's dynamic capabilities are specific strategic and organizational processes like product development, alliancing, and strategic decision-making capacities. They create value for the firm within the uncertainties of dynamic markets by manipulating resources into new value-creating mechanisms (Eisenhardt & Martin, 2000). Operational or "ordinary" capabilities, which are relevant to an organization's current operations, can be distinguished from dynamic capabilities. In contrast, dynamic capabilities refer to "the capacity of an organization to purposefully create, extend, or modify its resource base" (Helfat & Peteraf, 2009). Businesses are thought to have a competitive advantage based on methods of coordinating and combining, which are influenced by their asset positions. Also, the evolution paths they have chosen to follow or inherited influence their competitive advantage. Here, path dependencies become more significant under conditions of growing returns. Whether and how a firm's competitive advantage is lost depends on the consistency of market demand. The simplicity of replicating and copying a product plays a significant role. The theory implies that improving internal technological, organizational, and managerial processes within the corporation is a key factor in private wealth generation in regimes of rapid technological change. In general, spotting new possibilities and planning successfully to seize them is more crucial to creating private wealth than strategizing. This condition is fulfilled if strategizing means participating in business practices that prevent rivals from gaining an advantage, drive up rivals' expenses, and keep new entrants out (Teece, Pisano, & Shuen, 1997).

3 Luxury jewelry case study

The following section connects the theoretical framework with a practical case study. The case serves as an example of how a luxury jewelry brand strategically reacted as a response to Covid-19 related issues and challenges. External experts from KPMG Switzerland, that accompanied the case during the execution, give an assessment of how successful the execution of the cash pooling strategy was conducted. Further, general implications about cash pooling are presented.

3.1 Company overview

The anonymized company, in the following indicated as ABC company, is a leading luxury producer of precision-cut crystal for fashion and jewelry. Family-owned, the company has a presence in more than 120 countries (Crunchbase, 2022). Located in Europe, ABC company offers a broad selection of products with unrivaled quality, craftsmanship, and originality. The business, which was established in 1895, creates, produces, and sells high-quality crystals, real gemstones, produced stones, as well as finished goods including jewelry, accessories, and lighting. With 2,800 stores spread over 170 nations, and sales of nearly 2.6 billion euros in 2016, ABC company is managed by family members in their fifth generation. ABC Company is a member of the ABC Company Group, which also includes its sibling firms ABC Optic (optical devices) and Tyrolit (abrasives). The Group had over 32,000 employees and earned roughly 3.37 billion euros in revenue in 2016 (ABC, Kristallwelten ABC Company, 2022). ABC company is active all over the world and therefore generates cash in all regions and jurisdictions with various sales channels such as point of sale, eCommerce or b2b business. Due to the impact of Covid-19 related issues, ABC company faced a lot of challenges in their cash management. In the following, strategic adjustments due to the pandemic will be described in more detail.

3.2 Introduction to the case

The COVID-19 outbreak started in December 2019 and quickly spread to the rest of the world. It caused a serious health catastrophe and a significant economic downturn that has negatively impacted societies, businesses, and governments. Still suffering from the economic consequences several industries got more affected than others. Sectors of the luxury economy that produce jewelry, for example, were labeled as non-essential and received little attention. However, one of the retail industries most impacted by the pandemic was said to be the jewelry industry (Moore, 2022). With a global market volume of approximately over \$230 billion, the jewelry industry cannot be neglected with little attention due to its high volume (Shahbandeh, 2022).

ABC company as one of the major players in the jewelry industry is still recovering from the negative economic impact of the pandemic. One of the major challenges was the downgraded cash flow of the company and the strong need to generate new cash sources. This problem was mainly caused by closed branches during lockdowns and the collapsed market due to the pandemic. Reduced demand as well as supply chain disruptions posed major challenges for the company. ABC was faced for the first time in its history with missing liquidity and financing problems throughout most of its legal entities.

As a reaction to the pandemic issues, the company decided to launch a program to enhance cash management within the company. To improve the liquidity and financial management of the group, ABC company has started a cash pooling program to further concentrate the global cash positions within the headquarter. This allows ABC to improve its financial KPIs, to make use of the liquidity available in the group and ultimately to save the cost of finance and operations.

3.3 Situation before the crisis based on SWOT analysis

The financial situation of ABC company changed significantly with the onset of the pandemic. To be able to better assess the situation of ABC before the crisis, this section is based on a Swot-analysis. The SWOT analysis examines the situation on a more practical level as the framework is mostly used by consulting companies. SWOT Analysis, also known as external and internal analysis, is an element of the strategic management process. An organization can determine the important threats and opportunities in its competitive environment by doing an external analysis. It also looks at the expected evolution of competition in this environment and how that evolution will affect the dangers and opportunities that an organization faces. On the one side, internal analysis helps an organization in identifying its organizational strengths and weaknesses. On the other side, the external analysis concentrates on the environmental dangers and opportunities to which a business is exposed. Additionally, it creates a better understanding of which of an organization's resources and competencies are most likely to be sources of competitive advantage and which are less likely to be. Using the results of the SWOT Analysis, firms can select the most appropriate strategy (Gurl, 2017). Therefore, it helps to examine the strengths, weaknesses, opportunities and threats of ABC. The following classifications are based on internal project sources.

ABC Company SWOT Analysis

Overview of the Strengths, Weaknesses, Opportunities and Threats

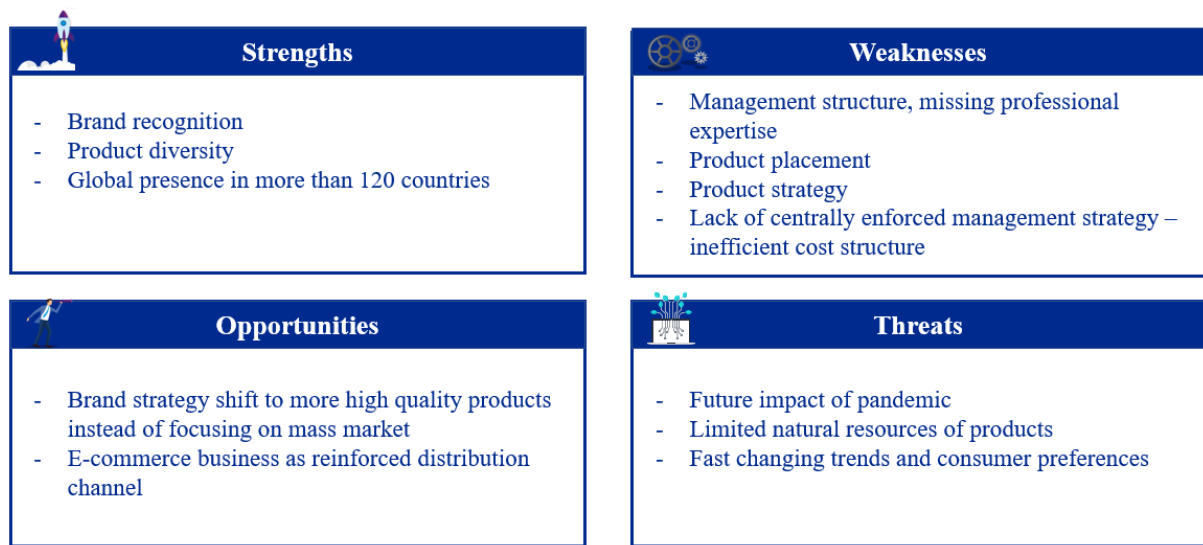


Figure 1: SWOT analysis ABC company

Strengths

ABC company is one of the main players in the jewelry industry and can therefore rely on strong brand recognition. According to ABC company data, consumers believe that "items made with ABC crystals and manufactured with the finest-cut crystal are part of the world of luxury and fashion". ABC company discovered that "customers are willing to spend 44% more for products with the ABC seal", which contributes to revenue growth. Customers are therefore willing to pay a premium for high-quality goods because they want them (ABC, Harman Beads assets, 2022). Furthermore, the company has a wide range of product diversity and can serve different consumer preferences. The business creates, produces, and sells finished goods like jewelry, accessories, and lighting as well as premium crystals, genuine gemstones, and created stones (ABC, ABC Company Homepage, 2022). Moreover, the global presence of the company underlines its strong positioning in the market (ABC, Kristallwelten ABC Company, 2022).

Weaknesses

The weaknesses play a major role in why the company is still suffering from the challenges of the current pandemic. A combination of several aspects forced the company to make necessary strategic adjustments.

The family-owned management structure is one of the aspects that caused trouble within the company. Disputes between family members caused disagreement about the strategic direction

of the company. The missing external management expertise bordered the horizon and limited the visibility of the company for new ideas and changes. At the beginning of the pandemic, the company was in the strategic transition of renewing its product strategy and product placement. ABC tried to place its products in a more affordable direction for the mass market. This strategy was intended to move away from the luxury product segment. Over time, the company realized that this strategy was inefficient and caused more financial problems than it was intended to solve. Related to the financial aspect, the company suffered under an inefficient cost structure and searched for solutions to lower its financial expenses. Most of the company functions were decentralized and had the potential for improvement by changing the structure.

Opportunities

After ABC company realized that the lower cost segment with the goal to address the mass market was inefficient, the company decided to make a shift. ABC changed its approach by focusing on its strong brand recognition as a luxury brand. Therefore, they changed their strategy and focused on promoting their products as high quality. As the willingness of consumers to pay a premium for ABC company's quality products, they expected to lower the gap of their financial losses. The further boost for the e-commerce business during the pandemic enabled the company to enhance its presence over this distribution channel. The fact that ABC suffered under closed branches due to several lockdowns, the company was dependent on focusing on different distribution channels different from their traditional ones.

Threats

The uncertainty of the pandemic is still causing major problems in the decision-making processes and the strategic orientation of the company. An unknown final end of the pandemic situation forces the company to be more responsive to possible changes due to restrictions. Especially, cash management practices are affected, because ABC needs to make sure to have available liquidity for all possible scenarios. This ensures that the company avoids being in the same situation as at the beginning of the pandemic. In general, the jewelry industry is known for fast-changing consumer preferences and trends which makes it necessary for companies to be reactive in every situation. Production changes and necessary investments are also triggering cash management. Also, limited natural resources for the jewelry industry are forcing ABC to look after alternative raw materials. Here, the uncertainty in the future is addressed again.

3.4 Challenges during the crisis

With the beginning of the pandemic, ABC company was facing liquidity problems for the first time in its company history. The shutdown of branches due to pandemic restrictions as well as the drastic decline in business activities challenged the company significantly. In the midst of the strategic realignment of the company, the liquidity problems forced them to get cash for ensuring the maintenance of their business activities. A decline in cash flow by a three-digit million amount due to the pandemic presented the urgency to take on action. ABC was able to raise a lower two-digit million amount in cash from internal reserves. The remaining amount had to be procured externally from banks, which presented a huge cost factor due to interest costs. The huge amount of missing cash in general made it necessary to elaborate possible strategies to reduce the costs of raising cash as well as implement long-term cash management structures to increase the company's profitability.

The lack of a treasury management system with a centralized cash pool made it difficult to manage the challenges effectively. The global presence with different entities all over the world led to very decentralized structures within cash management. Different cash-equipped entities created a disbalance in the company's cash management. On the one side, less equipped entities had less cash and huge cost positions for raising cash externally. On the other side, well-equipped entities only achieved low-interest income and were forced with the problem of penalty interests for high cash deposits by banks. Further, a non-standardized and non-centralized approach for raising and lending cash created inefficiencies and huge costs within the company. ABC was not able to use synergies between their different entities. The different currencies and regulatory requirements for cash management in each country made it costly and complex to move cash between entities. Especially in Asian countries, the regulation and exchange costs posed problems for ABC.

Another challenge that came along was the missing reporting structure within the company. ABC was not able to create effective visibility of its available and non-available internal cash sources throughout all entities. The missing reporting structure was one of the major aspects, of why the company experienced a lack of efficiency. Particularly a missing cash status report for each entity affected the visibility of cash sources. Therefore, the management had it difficult to make proper decisions. A missing cash forecasting report within the company structures further amplified this challenge. The availability of cash could not be properly determined which made it difficult to make the right decisions.

3.5 Cash pooling as tool to overcome crisis

ABC company decided to implement a centralized cash pooling structure in their parent company to overcome the challenges. The goal was to achieve more efficiency and lower the dependency on external cash sources. Therefore, ABC applied a physical cash pool with zero balancing per end-of-day sweeping.

To get a more detailed overview of why ABC company decided to implement a cash pooling structure, the dynamic capabilities framework can help to frame the strategic reasons behind it. Dynamic capabilities examine the situation on a more empirical level. According to Teece's concept of dynamic capabilities, corporate agility—the ability to (1) sense and shape opportunities and threats, (2) seize opportunities, and (3) maintain competitiveness—is what matters for businesses. This is accomplished by maximizing, combining, safeguarding, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets (Teece, Pisano, & Shuen, 1997).

ABC Company Dynamic Capabilities

Keys to organizational evolution

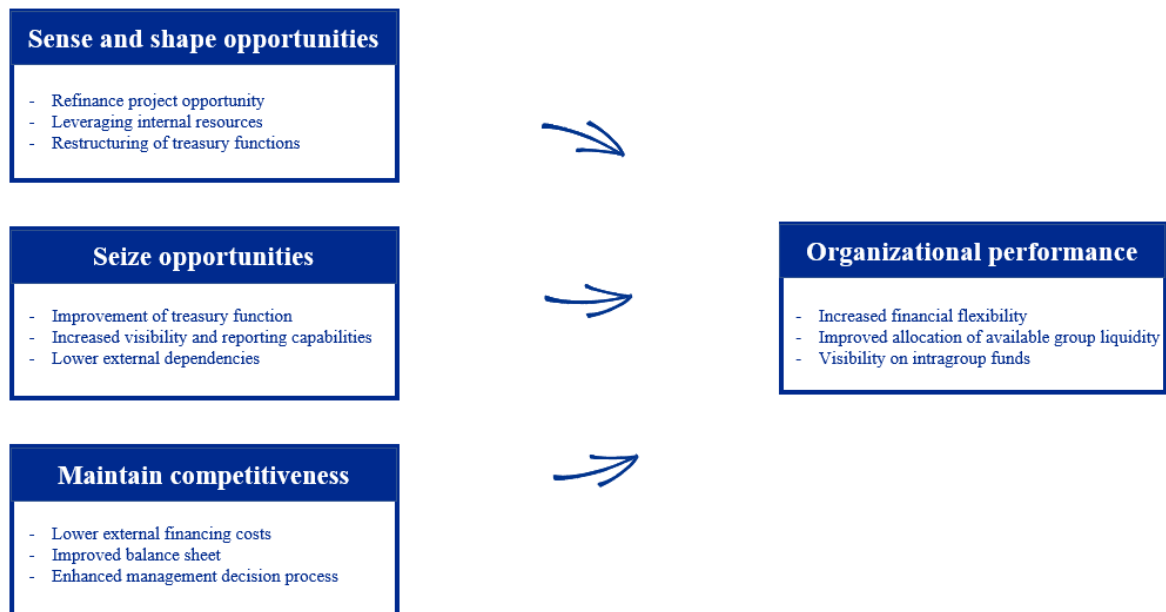


Figure 2: Dynamic Capabilities framework

Sense and shape opportunities

Due to the dynamic of the pandemic situation and the need for ABC company to react quickly to the missing liquidity, the company was able to sense and shape opportunities out of it. The opportunity to develop a refinance project strategy was born out of necessity. The Covid-19 crisis forced the company to rethink its financial strategy and structure. Therefore, ABC decided to restructure its corporate treasury functions and its banking landscape. By leveraging internal cash resources throughout their different entities and building an internal banking system, ABC improved the allocation of available group funds. A clearly established corporate treasury served as the sole business partner to the entities for all banking and financial services. This centralization strategy increased the financial flexibility of the company in a sense that cash was available faster.

Seize opportunities

After the recognition of necessary adjustments, ABC was willing to seize the opportunities to further optimize its structures. The restructuring of treasury functions enabled ABC to improve the procedures in the treasury department. Managing the liquidity on a central account increased the visibility of all available group funds and made it easier to conduct reporting activities. Information was centrally available and the need to collect information from different entities was lowered to a minimum. External dependencies in the case of collaborations were lowered because the need for funding based on bank credits was no longer present to such an extent. Available cash was distributed internally over the implemented new banking structure.

Maintain competitiveness

ABC company is one of the few corporations that decided lately to implement a cash pooling structure. To maintain competitiveness, the strategic decision helped ABC to enhance certain variables. The fact that cash pooling offers an internal borrowing of money between different entities allows improvement of the balance sheet. Lower external financing costs with banks are the main reason for the improvement.

Due to the centralized structure, the corporate treasury has better transparency of available group funds. The management of the company has therefore an enhanced decision-making process. Visibility on the as-is-state as well as the possibility of cash forecasting makes it easier for the management to validate necessary expenses. Also, the allocation of resources can be better managed and planned.

Organizational performance

All of the above parts have a positive impact on organizational performance. Due to the restructuring the company enjoys higher visibility on intragroup funds of all entities. The central treasury department ensures the smooth functioning of cash pooling activities. Further, the allocation of the company's available liquidity is improved. Cash-poor and cash-rich entities are no longer existing because funds are distributed efficiently. Increased financial flexibility to the leverage of internal resources ensures a better reaction to external shocks. The company can shorten the reaction time based on more efficient decision-making and the continuous availability of financial resources.

3.6 Cash pooling structure at ABC company

To gain a better overview of cash pooling structures the following figures serve as guidance. The first graph shows the situation of ABC company before the cash pooling structure was implemented.

ABC Company Cash pooling structure (1/2)

Overview of the structure before cash pooling

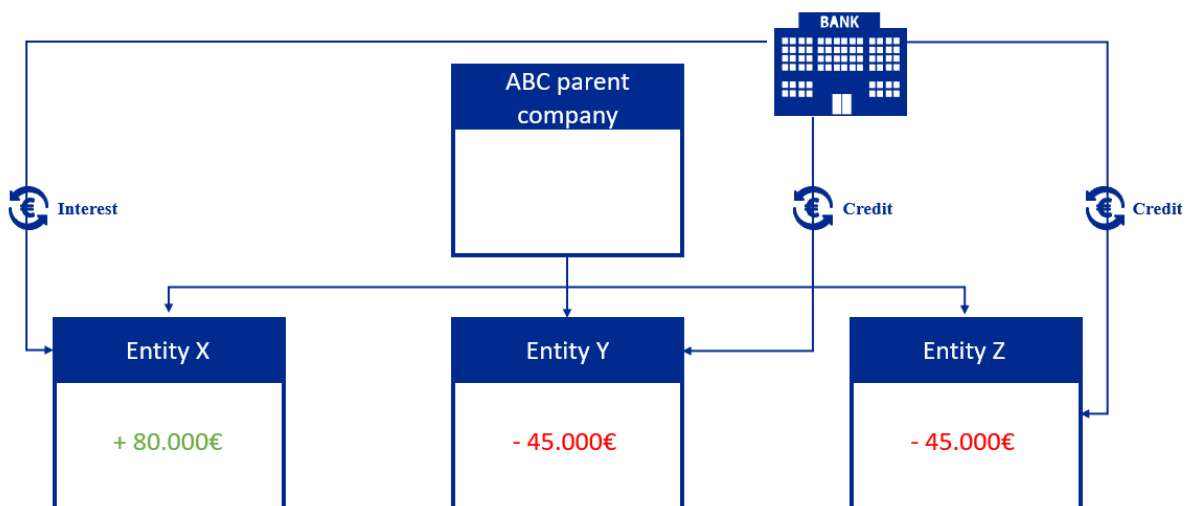


Figure 3: Pre-cash pooling structure

The example structure shows how entities had a decentralized cash management structure. Each entity managed balances on its own bank accounts. Cash-rich entities like entity X placed funds in bank accounts and received in return interests based on current market rates. Cash-poor entities like Y and Z were forced to borrow the required amount of money at banks for high-interest rates. This cash management structure was inefficient and costly, as interest rates were

low and credit rates comparably expensive. To make use of internal resources, cash pooling offered the chance to increase efficiency. The following figure displays an example structure of how ABC’s cash management looked like after the restructuring.

ABC Company Cash pooling structure (2/2)

Overview of the structure after cash pooling

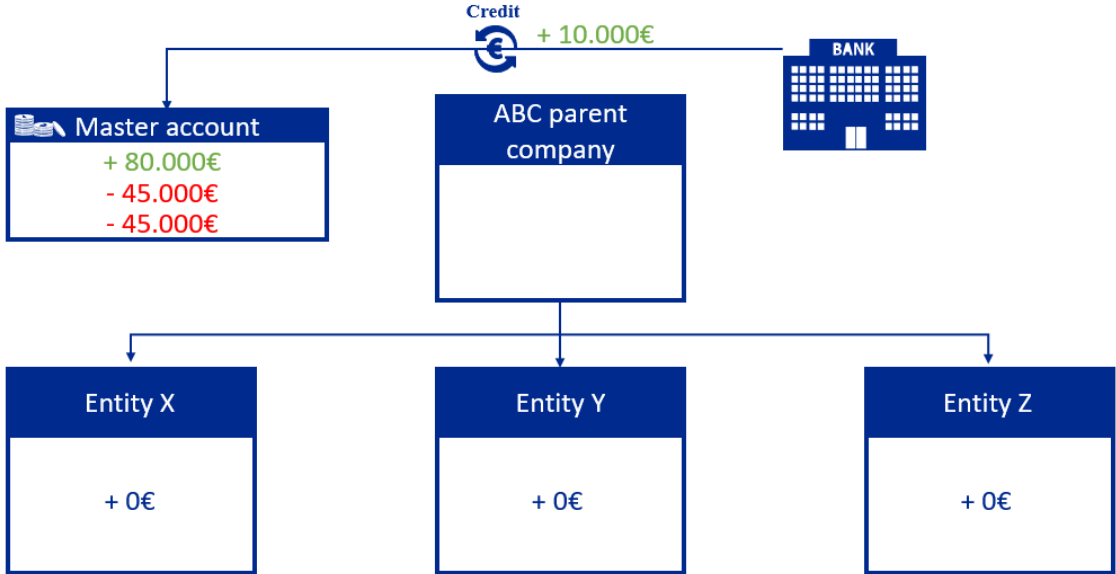


Figure 4: Post-cash pooling structure

The balances of entities X, Y and Z are transferred to a master account of the parent company. If an entity places its available cash on the master account, it receives in return a claim for payment from the master account. In practice, entity X lends his 80k to the master account. This applies in general to cash-rich entities. Cash-poor entities like Y and Z need money from the master account to ensure the stability of their daily business transactions. Here, the master account serves as an internal bank and lends the required 45k to the cash-poor entity based on certain interest regulations. An interest rate comparable to the current market level needs to be applied. In return, the master account receives a repayment claim from the entity. The fact that balances of each entity are centrally managed on the master account builds an internal banking system. Cash-rich entities borrow indirectly money to cash-poor entities. This avoids that cash-poor entities’ need to borrow money from banks for expensive rates. If the master account lends too much money to the entities and the balance is negative, banks come into place and serve as donors in the secondary stage. The first need for money is always covered through the internal master account.

3.7 Suitability of cash pooling as tool to overcome crisis

The following section describes the suitability of cash pooling as a finance strategy tool in the specific case of ABC company as well as within the situation of global market shocks like Covid-19. For the purpose of this thesis, two interviews were conducted to obtain external insights from industry experts in treasury management and cash pooling. In collaboration with KPMG Switzerland, the case is analyzed and assessed. To analyze the suitability of cash pooling as a tool to overcome a crisis, a first interview was conducted.

Benjamin Gayet is a Senior Manager in the Finance-, Treasury and Commodity Trading team and provides advisory expertise. He has been supporting several corporate clients for years with market expertise among others in liquidity management, cash management and financial instruments. His expertise is provided in the following to include further information about the case. Benjamin accompanied ABC in various projects and has deep knowledge of the new structure. The following information are based on the interview with Benjamin.

The cash pooling structure offered certain advantages for ABC company. Especially three main aspects are identified that came into account. Transparency, flexibility and cost efficiency are the focus pillars of ABC company.

Transparency

Through the implementation of the parent company master account, ABC enhanced the visibility of available funds. The fact that each of the entity's balances was transferred makes it easier for the company to foresee possible liquidity gaps. The parent company has daily visibility on each entity's funds and can manage its cash more efficiently. Current and future cash states can be better assessed which ensures an optimal constant cash flow for each entity (Gayet, 2022).

Flexibility

Especially, ABC's management benefits from the restructuring. Decision-making processes are more efficient and faster than before due to increased transparency. This enables the company to react faster to necessary adjustments. Particularly in times of market shocks like the pandemic, value is added to the decision-making. The shortened reaction time allows the top management to ensure a stable cash flow within all the company functions. ABC's finance strategy strived to be centralized which also allows leaner decision-making processes. The fact that each entity follows the same central approach makes decisions faster and more efficient.

Differences are therefore eliminated, and every entity has a clear policy on how to act in the new central cash pooling structure. Moreover, the cash pool is very flexible for adjustments. ABC can adjust the cash pool for single entities if needed. Especially in situations of market shocks or crises, flexibility is valuable for the company (Gayet, 2022).

Cost Efficiency

The implementation of a cash pooling structure requires certain short-term investments. A restructuring of the banking landscape by implementing the internal banking system reduces external dependencies on banks. ABC can serve most of the cash needs of its entities through the internal banking system. The need to borrow money from banks moves to a secondary stage. Therefore, external financing costs like interest rates are significantly lower than before. Borrowing money through an internal cash pooling structure avoids expensive interest rates by the banks. ABC avoids paying the credit surcharges that banks normally demand. In fact, the difference between the bank interest rate and the internal cash pooling interest rate reflects the saving for ABC. Cost optimization can thus be achieved at an early stage and maintained on a long-term horizon. Another part of the cost efficiency reflects the difference in interest rates that the company achieves. If ABC borrows money on a group level instead of borrowing the money on the entity level, the company gets cheaper interest rates from the banks. This fact applies because ABC requests higher amounts on the group level as the needs for cash are accumulated in one amount. Further, tax-driven savings played a significant role when it comes to cost savings within a cash pool. ABC had the chance to handle the transfer pricing differently to benefit from tax savings (Gayet, 2022).

3.8 Outlook after strategic adjustments

The strategic adjustments of ABC company enabled them to gain increased efficiency in their treasury processes. To assess the long-term advantage of cash pooling, the outlook for the future needs to be analyzed in more detail. For this reason, a second interview was conducted to evaluate the situation of ABC and include further professional insights.

Dennis Kiratli is a Manager in the Finance and Treasury Management team of KPMG Switzerland. He is an expert in the field of corporate treasury and has years of experience with projects related to cash management. Dennis accompanied the implementation of the cash pooling structure at ABC company as project lead. His expert insights about the project and outlook are mentioned in the following. Therefore, the upcoming insights are based on the interview with him together.

The implementation of the cash pooling structure at ABC company enabled them to ensure stable cash liquidity throughout the whole company. Treasury functions were centralized under the umbrella of the parent company and cash-pooling activities are conducted daily by the treasurer. Cash pooling in large corporates is a common structure to achieve efficient cash management. Therefore, the implementation of cash pooling at ABC was a necessary decision and investment, especially in view of the pandemic situation. Smaller corporates have it more difficult to use the advantages, because of the small number of entities. The costs of cash pooling would exceed the cost advantages. A large corporate like ABC was therefore predestined to make use of the advantage. With the new structure and increased efficiency, the general outlook for ABC's cash and liquidity management is consistently positive for the future (Kiratli, 2022).

Nevertheless, some important aspects need to be considered when it comes to the implementation of cash pooling within a company to ensure long-term benefits. An effective cash pooling structure requires the restructuring of the treasury functions. Cash pooling is conducted daily and requires therefore 1-2 people that are responsible for the tasks. Further, the banking landscape needs to be validated in terms of relationships and effectiveness. Certain credit lines are provided for the company to manage the external borrowing process effectively. Most of the time, larger banks with an international scope are fitting best as a banking partner. If the new internal banking system cannot be implemented in existing software programs, the need for an investment in new treasury software is necessary. Companies need to consider this as part of their short-term investments (Kiratli, 2022).

With the implementation of cash pooling, ABC was challenged with other side projects in parallel that needed to be considered to generate long-term success. An effective reporting structure was mandatory to ensure compliance with regulatory requirements as well as make use of the advantages of transparency and flexibility. Especially, a cash forecasting structure was crucial. Here, the implementation on the entity-level was challenging. The fact that ABC company operates globally made it mandatory to include also unstable countries in the cash pool. The cash forecast was mandatory to be conducted properly as currencies in cash-unstable countries are not available daily. The forecast was crucial to avoid trapped cash and the ineffective back-and-forth payment within the cash pool. A good IT infrastructure with proper treasury software was the basis for reporting and forecasting activities. Furthermore, the support of automated market data was necessary to increase efficiency. If entities exchange money with the master account, different exchange rates are applied daily. Therefore, the automation of

market data was necessary to be part of the reporting structure. The side projects showed ABC that the implementation of cash pooling required a huge effort in building a proper reporting structure that supported the effectiveness (Kiratli, 2022).

3.9 Limitations of cash pooling

The implementation of a cash pool at ABC offered a lot of advantages for the company. Nevertheless, some limitations can lower the effectiveness and need to be considered to avoid disruptions in the realization.

One of the big obstacles in the implementation of a cash pool is regulatory requirements. Some countries reject the implementation of cash pooling. Especially in countries with unstable currencies, cash pooling is not common as local currencies are not available in the required amounts and authorities already struggle with liquidity problems. Countries in South America or Africa are known for shortages in the supply of cash. Here, it is recommendable to include local experts or external knowledge if a company wants to implement a cash pool in foreign countries. In the case of ABC company, external advisors accompanied the implementation with their local expertise (Gayet, 2022).

Further, tax and transfer pricing regulations within a cash pool challenge the implementation. The fact that specific transfer prices comparable to market conditions need to be applied within the cash pool requires a certain evaluation of interest rates. A good reporting and forecasting structure must build the basis to ensure compliance with legal requirements. Tax differences in each of the participating countries of the cash pool require further tax expertise. Different currencies and different regulatory requirements from each of the country's authorities can be a challenge. Especially if a company has a global scope, legal and tax requirements need to be assessed before the implementation. In best practice, companies assess the risks and cost savings with the use of a business case before the implementation. Smaller corporates are most of the time not benefiting from cash pooling as the investments for the implementation are higher than the long-term cost savings (Gayet, 2022).

4 Teaching Note

The following section serves as guidance for the instructor for the use of the case and suggestions for the best practice application approach. Overall teaching objectives as well as the practical deployment are further described.

4.1 Teaching Objectives

The cash pooling case study aims to provide students a real-life case scenario how companies can improve their intra company cash management practices. By illustrating the adaptation of the company strategy in exceptional circumstances like Covid-19, the case enables students to dive deeper into Treasury Management practices.

4.2 Target Audience

The case is intended for students pursuing a degree in Management, Business, Economics or Finance. Any level of university education, including undergraduate, master's or executive program can use the case as valuable learning material. Especially Finance related courses or programs benefit from the learning objectives as they cover a deep dive into Treasury Management. The overall strategy implications of the case make it of more general interest for strategy courses.

4.3 Teaching Approach

Several aspects for the best practice usage of the case within a class need to be considered. The case is intended to be used during one class which lasts for 80 minutes. Therefore, students need to fulfill some pre-work to be prepared for the class and to enable the professor to use the time effectively. The format follows an interactive approach with pre-work, group work, discussion and decision-making paths. Students are taking over management and supervisory board functions to decide if the company should implement a cash pooling structure. Arguments and challenges need to be filtered from the given materials and decisions are discussed within small groups. The goal is to bridge the theoretical knowledge learned in the classroom with a real-world scenario from the industry. By creating a discussion round at the end between pro and contra groups, students need to convince the counterparty of their assigned role and goals. Persuasion work allows to give students an insight into real-life company situations with management decision making. Each group needs to write down their answers to the case questions on the provided sheet and hand it in at the end of the class for grading purposes.

The following details give an overview about the pre-work that needs to be done before class and the overall structure of the case study approach.

Preparation

The information material about the case study will be distributed to the students one week before the class. This ensures that students already have an overview about the company situation and can directly start with the discussion at the beginning of the group work. Questions that the students should answer during the class are not mentioned beforehand. This enhances the group discussion during the class and challenges the students in a more efficient way as they need to develop their arguments more spontaneously. Further, a video about cash pooling is provided for preparation and allows a deep dive into the topic to recall the basic idea about the strategy ([Link Cash Pooling Video](#)).

Group compositions are published by the professor a day before class. This saves time and students can directly come together with their group members at the beginning of the class.

Group roles and structure

Generally, three main roles are assigned to the groups to engage students in the case.

Firstly, the CFO who is responsible for all Finance operations within the company and in favor with the implementation of a cash pooling structure in response to the challenges the company is facing. Groups that are taking over the role of the CFO are pro cash pooling.

Secondly, the supervisory board that controls larger financial expenses of the company and examines the legitimacy of such projects. Groups that are taking over the role of the supervisory board are contra the cash pooling strategy of the CFO.

Lastly, two students are assigned to take over the special role of the moderator. Their responsibility is to moderate the discussion round, collect mentioned arguments by the groups on the black board and to create a well- structured blackboard picture. During the case study time, the two students are also assigned to pro and con groups to join the discussion.

The groups are composed of 3-4 students depending on the size of the class. There is an equal number of pro and contra groups to create a balanced basis for the later round of discussion.

Duration

The class is intended to last 80 minutes as it represents a single learning session at school. Firstly, 10 minutes are of organizational nature. A short intro by the professor about the structure and the purpose of the class serves as introduction. After they come together with the other group members, the students have 40 minutes to work on the given questions they need

to prepare. The last 30 minutes are intended for collecting the arguments on the black board by the moderators and agreeing on the final strategy that the company should follow.

Case tasks

The following tasks will frame the case study and challenge the students to develop certain strategies and recommendations of actions to convince their counterparty of their opinion.

- 1) Identify three main challenges for each category that the company is facing during the Covid-19 crisis and group them accordingly. Please mark the challenge within each category that you think is most relevant.
 - a) Strategic
 - b) Financial
 - c) Organizational
- 2) State arguments based on your assigned role that will convince your counterparty to execute/not execute a cash pooling strategy.
- 3) Develop three recommendations of actions, based on your assigned role, to successfully execute your strategy.

Findings and discussion

In this section, the instructor can find best practice solutions and potential aspects for a discussion.

- 1) Identify three main challenges for each category that the company is facing during the Covid-19 crisis and group them accordingly. Please mark the challenge within each category that you think is most relevant.

In the first task, students need to identify the key challenges of the provided text which serves as a basis for the upcoming ones. Through the challenges, students should generate a better understanding of the situation. The grouping of the identified challenges creates a structure that should help to develop recommendations in the last step. Further, strategic thinking is triggered as students need to figure out the most relevant challenge for each category.

Strategic

The most relevant strategic challenge is the source of generating the missing cash. Students should recognize that the old structure with decentralized entities enforces inefficiencies within the cash procurement process. The approach of sourcing money externally compared to the use

of internal cash resources is a sign to rethink the strategy. High costs of banking loans and low-interest rates for holding money in banking accounts can serve as an argument.

Further, decentralized entities need to be considered as a strategic challenge. Entities with decentralized structures follow their own approach. A non-standardized approach is reflected in higher costs and lower efficiency. Scattered banking accounts around the globe make it hard to create transparency. Flexibility is limited and processes take longer than necessary.

Another challenge that students should identify is the missing clarity about the market positioning of the company. An unclear strategic orientation if the company wants to target the mass market with affordable jewelry or to target the luxury segment results in inefficiencies. Marketing and sales activities cannot be tailored. Competitors have the chance to be one step ahead with a clear orientation which needs to be avoided by the management of ABC company.

Financial

The most relevant financial challenge is the dramatic loss of cash and liquidity due to the pandemic situation. Through the huge amount of missing liquidity, the company is endangered to ensure the stability of its business activities. The sudden need of generating cash makes quick reactions necessary.

Another challenge that should be mentioned is the high external dependency on banks. The provided structure shows the decentralization of entities and the streams of how they generate cash. Students should mention that high external dependency lowers the company's flexibility and cause high costs of sourcing the cash as interest rates are high.

Moreover, the required short-term investment into a new cash pooling structure brings financial risks with it. In a situation where cash is tight, investments need to be assessed carefully. Students should mention that the implementation not only requires financial effort.

Organizational

One of the organizational challenges is the missing cash management structure within the company. Students should consider this challenge as the most important one within this category. Lower efficiency as well as higher costs should be mentioned in this case. Internal resources cannot be allocated efficiently. Students should also mention the different equipped cash entities that are visible on the company structure.

Additionally, the lack of a proper reporting structure is another burden. It affects the visibility of available group funds and limits the management in their decision-making process. In the end, the ability to react properly in times of market shocks suffers. In the best case, students identify the reporting structure already as a necessary requirement to implement a successful cash pool.

Lastly, the family-owned structure plays a significant role when it comes to organizational challenges. Family-owned structures not only provide disadvantages but limits the range of visibility for innovations. The company experiences a lack of external knowledge and expertise and is stuck in its family structure.

- 2) State arguments based on your assigned role that will convince your counterparty to execute/not execute a cash pooling strategy.

The second task put students into the role of the CFO or supervisory board. Students are challenged to draw the right conclusions from the challenges and derive arguments from them. Strategic thinking is triggered, and persuasion work must be done to convince the counterparty. Hard skills as well as soft skills come into account. The following overview serves as guidance for the most relevant arguments. Further mentioned arguments during class need to be validated and added. Arguments will be collected on the blackboard. Therefore, the following table overview is applied.

Pro cash pooling (CFO)	Con cash pooling (Supervisory board)
Financial savings	Huge short-term investments
Long-term benefits outweigh short-term investments	Obligation to execute side projects like reporting structures or cash forecasting
Flexibility in the decision-making process	Tax and transfer pricing
Transparency on available funds	Redundancies through centralization
Lower external dependency on banks	The effort of restructuring the banking landscape
Better risk anticipation through a centralized cash pool	Regulatory requirements in different countries
Greater bargaining power with banks as higher amounts on the group level is demanded	Availability of cash in unstable countries

Table 1: Pro and con arguments cash pooling

- 3) Develop three recommendations of actions, based on your assigned role, to successfully execute your strategy.

The last task serves as a more practical application of the gained knowledge. Students should create recommendations of actions based on their assigned roles that need to be conducted to successfully execute a cash pooling strategy. The recommendations of the supervisory board have a specific point of view. Students with the assigned role need to keep in mind that the supervisory board collected con arguments before. Recommendations for this specific role also need to take care of the con arguments. Therefore, mentioned concerns from the supervisory board need to be eliminated by the action. In the following, a snapshot of best practice recommendations is provided. Further mentioned recommendations by students need to be validated.

Recommendations of action CFO

A first recommendation from the CFO's perspective is the analysis of the existing banking landscape. Costs of existing banking partners should be collected and compared. Banking services can be consolidated and a banking request for proposal should be demanded with the respective banks. Banks with the required service and appropriate costs for services can be chosen as a new banking partner.

Secondly, workshops for the new existing cash pooling structure should be conducted within the company. The restructuring not only affects the central treasury department as a global company has a lot of different legal entities. Change management activities come into account as employees need to be willing to take on changes. New processes require newly developed skills and behavior. With workshops, the top management can increase the willingness as well as the ability of its employees to conduct cash pooling.

Lastly, policies for the new processes need to be defined. A clear structure and guideline ensure smooth processes and avoids mistakes by conducting cash pooling. The fact that entities in different countries are faced with different regulatory requirements makes policies essential. Possible penalties for failure to comply with certain regulations is a costly risk that needs to be avoided.

Recommendations of action supervisory board

To avoid cutting jobs through the restructuring of cash management, the company should develop a social plan. This includes a detailed overview and explanation of how affected

personnel can be distributed across other departments or functions. One of the advantages is that the company experiences more acceptance of the restructuring by its employees.

Further validation of the costs can be ensured through the preparation of a business case. The business case is prepared before the actual implementation of the cash pool to give the management an example of how the costs look like. Afterward, the management has better visibility of possible disadvantages and can validate the case in a more detailed way.

Lastly, external support in the implementation process should be integrated as some countries are known as risk countries for cash pooling activities. Cash is not available daily. Local experts have better knowledge about requirements and possible solutions. Challenges can be better addressed and considered in advance. This ensures more qualitative planning of cash pooling activities.

5 Limitations

The case study gives an example of how a cash pooling structure within a company can serve as a tool to enhance cash and liquidity management. Nevertheless, some limitations need to be considered to better assess the use of the case and to draw suitable conclusions from it.

The mentioned case of ABC company only serves as one example of how one company used cash pooling at times of Covid-19 to recover from dramatic losses of liquidity. One case cannot be generalized to give a general picture of the suitability of cash pooling as a tool to overcome a crisis like Covid-19. Further research needs to consider more similar cases that can serve as guidance. With more evidence, it is possible to make more generic assumptions about the aimed research topic.

Further, shocks are mostly lasting over years and impacts are still noticeable years after they occurred. Therefore, research needs to consider long-term impacts instead of focusing only on short-term timelines. The case of ABC company only provides a picture from the beginning of the pandemic until now. Although, ABC is still suffering from the global impact of the pandemic situation.

Moreover, Covid-19 just provides information about a specific shock situation. Economic shocks or crises can have different impacts and origins. Therefore, it is hard to generalize the findings on all shocks. The findings are limited to the Covid-19 pandemic.

Nevertheless, the case study enriches research about cash pooling and provides valuable practical insights for students to get a better understanding of treasury management practices. In the following, the conclusion points out the main findings from the case study.

6 Conclusion

At the end of this pedagogical master thesis, I can conclude that cash pooling structures within a company can serve as a valuable tool under certain circumstances to overcome a crisis like Covid-19.

The fact that especially larger corporations can achieve short-term as well as long-term benefits provides not only financial incentives. Particularly the increased flexibility in decision-making processes through the cash pool serves as a valuable benefit in times of market shocks and crises. Companies can take precautions for larger impacts of future shocks within the market by making use of transparent cash positions and effective distribution of liquidity.

It needs to be considered that investments at the beginning seem to be a burden, but long-term benefits outweigh short-term investments. Nevertheless, companies should not underestimate the side effort that comes up with the implementation of cash pooling. Integrate a proper cash pool requires a lot of restructuring, organizational change and strategic adjustments. The company runs through a change management process that especially affects the treasury department. Effective cash pooling is generated above all through smooth processes, a transparent reporting structure and functional cash forecasting structures.

The case study provides a unique chance for students to combine theoretical university knowledge with a first-hand practical project from the business. The fact that the project was closed in Q4 2022 adds current relevance to the case and makes it outstanding. Expert insights from a big four consulting company shed new light on the case and provide valuable knowledge of how cash pooling structures are implemented in practice. The case will challenge students to trigger their strategic thinking and broaden their horizons about consulting projects.

Nevertheless, further research should examine more cases of cash pooling implementations in crisis situations to enrich the picture of the suitability.

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Appendix

KPMG Switzerland Interview questions

Interview with engagement lead of ABC company Benjamin Gayet

Interview conducted on the 05th of December, 11:30 am CET

1) Why are firms conducting cash pooling?

Ben: Companies are in general conducting cash pooling because they want to optimize their cash and liquidity management. If you think about a global company with its different decentralized entities, they experience a lack of access to centralized cash management. The company wants to avoid trapped cash through the improvement of processes and structures. Do not get me wrong, cash pooling also works in decentralized structures, but is way more complex and inefficient compared to a centralized cash pool. Companies want to achieve automatized processes that are working smoothly. Cash pooling offers certain flexibility because cash is mostly transferred to a centralized master account through which the central treasury team has it easier to react to the needs and cash demand of each entity.

In general, we can distinguish between two ways of conducting cash pooling. The first one is bank-level cash pooling. We have daily end-of-day bank statements, and the bank is conducting the pooling. The cash pooling activities are based on the bank balances at the end of the day. Demand and supply are triggered through the balances. Each entity has mostly a target and trigger (minimum amount) of cash that they need. The second one is the internal version of cash pooling over a treasury management system, so-called semi-automated cash pooling. Here, we have internal cash transfers between the entities and cash is available daily. Through internal agreements, cash is distributed.

2) What is the long-term value that cash pooling creates?

Ben: If we think about long-term value, it is definitely the optimization of cash management. Through the implementation of the cash pool, cash and liquidity management is also already optimized on a short-term basis. Also, the external dependency on banks is decreasing because fewer external financing needs are taking place. In general, also tax benefits and improved cash flow forecasting are advantages that a company can achieve. In the end, every cash pooling implementation should be assessed with a business case before the implementation to compare if the internal costs

for the cash pool are less than the costs for external borrowing of money. Cost-savings are mostly tax driven in the long term. But if you think about borrowing money on a group level, there is massive potential to save costs. Companies with a cash pooling structure borrow higher amounts of money due to the gathered cash need. For higher loans, they get cheaper interest rates and can save fees. There are certain regulations regarding interest rates and fees even for internal cash pooling. BEPS 2.0 is the overall regulation that covers the policy calculating the internal interest rate. On a high-level, the internal interest rate for borrowing money within the cash pool needs to be comparable with the normal market conditions. Yearly reviews ensure fair prices of the cash pool. That's how companies ensure compliance.

Further, the cash pool offers more flexibility in the long term. A pool can always be adjusted based on the need of a single entity. Internal rates can be better controlled.

3) What are the limiting factors in the implementation of cash pooling?

Ben: When we are talking about limiting factors of cash pooling, it has definitely something to do with legal and tax compliance. In some countries, cash pooling activities are difficult due to the availability of the local currency. Especially in unstable countries, this is a problem. We observe that mostly in South America and Africa. For this reason, it makes sense for companies to include local experts in the implementation process. External knowledge always helps to shed a different light on the situation and to validate it better. Also, some regulations reject the use of cash pooling in certain countries. In general, different tax and legal requirements for each entity make it way harder to implement.

On the group-level, a good IT infrastructure is required to conduct cash pooling. A weak transfer landscape with missing IT programs and knowledge can bother the effectiveness. On the entity-level, a proper cash forecast is mandatory. A lack of that good cash forecasting and monitoring on the entity-level can cause trapped cash.

4) What are alternative strategies for cash pooling?

Ben: The one real alternative strategy to cash pooling is the decentralized approach. Borrowing money externally from banks. For smaller corporates, this approach could be beneficial. Most of the larger corporates benefit from a centralized cash pool. As I said earlier, costs always should be assessed with a business case in advance.

KPMG Switzerland Interview questions

Interview with project lead of ABC company Dennis Kiratli

Interview conducted on the 25th of November, 03:30 pm CET

- 1) What outcome is ABC company expecting after the implementation of the cash pooling strategy?

Dennis: There are several aspects that need to be considered. Cash pooling improved the allocation of available group liquidity at ABC dramatically. The fact that the company was always cash-rich did not make it necessary to think about possible strategic adjustments until the beginning of the pandemic. Most of ABC's competitors already used cash pooling in their cash management. Normally, the use of cash pooling is a standard procedure in large corporations to ensure efficiency. ABC is, let's say the last mover in this field. Through the implementation of cash pooling, the finance position was enhanced in the short-term and cash efficiency was increased. Another important note is that the company was able to lower its financing costs by improving the use of internal sources. As you know, with cash pooling external need for money decreases and internally available cash is used more efficiently.

- 2) Why is cash pooling a successful strategy to overcome a crisis?

Dennis: Cash pooling offers certain benefits if we are especially talking about crisis management and the reaction to market shocks. Companies can increase their financial flexibility through centrally managed liquidity. If you think about the centrally managed master account, all the available group funds are listed there. This ensures higher visibility of the available intragroup funds. Through the improved transparency, the management has the chance to react more flexibly as funds are directly available and do not need to be transferred somewhere where they are required. Here, we also have the positive side effect that the management has it easier to make decisions based on the available cash. They can better plan certain things. In general, most companies are striving for their finance strategy to be centralized nowadays. We can say that there is a positive trend for centralization. Especially, transparency, cost efficiency and better reaction to market shocks are the main drivers.

- 3) Which aspects has the company to consider in the long-term to benefit from the strategic change (structural, organizational, strategic)?

Dennis: A company for sure needs to keep a centralized treasury structure in the long term. This ensures that all the benefits are constantly present and short-term investments were worth it. With this, change management activities need to be considered as well. When employees are faced with new structures and procedures, they need to be educated in that to ensure smooth processes and the willingness to take on the change. Workshops can be conducted in parallel to the implementation process for example. In the end, a clearly established corporate treasury serves as the sole business partner to the entities for all banking and financial services. Organizational-wise, which also has something to do with strategic activities is the fact that the company needs to take care of different regulatory and banking requirements throughout all the countries where they are present. Differences in policies and guidelines can be an obstacle in the long term when it comes to cash pooling.

- 4) What are the possible challenges that a company could face while implementing a cash pooling strategy?

Dennis: The main challenges are most of the time regulatory driven. A global company has different legal entities that are faced with different regulatory requirements. Further, if money is transferred throughout these entities, tax and transfer pricing aspects come into account. Money transfers within a cash pool cannot be transferred for free. Specific interest rates need to be applied that fulfill a certain comparable market condition. As all of this requires a certain amount of effort, smaller corporates are not really benefiting from cash pooling structures because the investments are higher than the cost savings they achieve.

- 5) How would you assess the future maturity of the treasury function of ABC company?

Dennis: For the specific case of ABC, we have a positive outlook for the future. The cash pool was successfully implemented, and side projects are close to being finalized as well. If we are talking about side projects, I mean the implementation of the reporting structure. We also automated cash forecasting and market data reporting. This is especially important because market data change every day and exchange rates play a significant role. We have now 1-2 people in the treasury department that is mainly responsible to manage the cash pooling. It was crucial before to set clear roles and

responsibilities to make their tasks clear and effective. Until now, the first phase after the implementation is of positive nature. What we are still doing in the last step is optimizing the banking landscape and relationships. We are currently comparing the prices of possible banking partners to optimize costs for the future.