

Cash Management in Practice

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Abstract: *One of the major components of banking is commercial banking and innovation of its products. Banks in an effort to retain significant clients create new, sophisticated banking products that safeguard the bank even at the cost of lower profits, if these clients remain with her, it will make a profit through the economies of scale and creating competition to other banks. Cash Management and Cash Pooling are considered as innovative banking products. These products have been in important position in recent years. Paper is devoted to Cash Management from the sight of its provision in banking practice and the motivation of involved subjects in Cash Management in its use.*

Keywords: Bank, Client, Cash Management, Cash Pooling, Profit.

JEL codes: five JEL codes at most (see http://www.aeaweb.org/jel/jel_class_system.php)

G210 - Banks; Depository Institutions; Micro Finance Institutions; Mortgages

G290 - Financial Institutions and Services: Other

G390 - Corporate Finance and Governance: Other

M14 - Corporate Culture; Social Responsibility

M21 - Business Economics

1 Introduction

Cash Management is one of the determining tasks each entrepreneurial entity has to deal with to optimize its management.

The fundamental types of participants in Cash Management relations are banks and companies. These are both connected and divided by their interest in achieving higher profits, which can only be reached at the expense of another entity, either from a different category or from the same category.

A change in the amount of profit (an increase or a decrease) needs to be evaluated at the level of individual entities and not at the level of all entities within a category.

Non-banking entrepreneurial entities achieve a higher profit by cost saving with a better use of financial flows, which is reflected in a reduction of used borrowed (bank's) financial means, a better use and appreciation of their own financial means.

As regards banks, there is a decrease in incomes within the entire banking sector; but individual banks increase their profits at the expense of other banks that do not offer Cash Management.

Cash Management can be defined as:

- management of the available amount of money in the right place and at the right time in the necessary volume;
- cash management is related to the organization's liquidity and includes decisions on the management of cash flows in the field of its planning and monitoring;
- activities that are directly or indirectly harmonized with the organization's financial potential;

- a complex of measures and solutions following from a short-term prognosis of surplus and deficit.

There are two opposing tendencies within the relations of banks to Cash Management. On the one hand, banks are aware that they need to offer their top clients from the "blue chips" category most interesting and innovated banking products and services. On the other hand, they are aware that these offers reduce the profit made from these clients. These are also marketing strategies aimed at gaining and keeping a client – especially a client who is strategically significant. Banks perceive these costs as costs of keeping clients in the environment of growing competition and with the purpose of achieving economies of scale.

1.1 Methodology

In this paper we draw mainly of the following methods. Positivist research methodology, followed by the methodology of pragmatism. On the methodology of critical rationalism, followed by economic and statistical methods to evaluate lessons learned.

Model Specification (Other heading – not numbered, Verdana 10, bold)

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2 Current situation

For an application of Cash Management, it is necessary to know basics of banking and particular banking products and services which are interconnected within Cash Management so that they form a complex banking product. This is necessary to understand the position and function of Cash Management.

The most often stated aim of banking is achievement of profits, which is also a prerequisite for a stable position of a bank at the market. A bank should not aim at profit maximization at the moment (in the short term). The amount of the achieved profit should respect a long-term perspective of the bank (long-term achievement of profit) and its permanent competitiveness.

Besides the direct achievement of profit, we can define the aims of banking as follows:

- achievement of the maximum market price of the bank or achievement and maintenance of a significant position at the banking market; these aims are closely related to the achievement of the maximum profit;
- other possible aims are banking stability, security for the client and the bank's owner, but also here the original aim of banking – profit achievement – is reflected.

The primary aim (profit achievement) has to be put in harmony with secondary aims (profitability, bank growth and goodwill). Prerequisites necessary to achieve these aims are security and liquidity of the bank. The bank has to search for a compromise between the aim of profit and security (stability).

The formation of the Eurozone enabled organizations to centralize a huge part of their cash and liquidity, not only within a state, but also on an international level. This allows for a better control of treasury operations in banks as well as businesses. At the international level, it is necessary to take into account the different currencies, legal environments, regulatory frameworks, payment systems and tax regulations in particular countries. Especially tax regulations are highly autonomous in each member state as the tax harmonization is not one of the European Union's priorities at the moment. This means that it is necessary to know all the above mentioned legal conditions and their application. Companies (also the big international ones) often have no capacity to deal

with them themselves. As a consequence, they need to use sophisticated banking systems and products.

In spite of all this, the current situation within the field of banking services does not fully reflect the needs of entrepreneurial non-banking entities for sophisticated banking services and everything that is related. This is not a problem of the Czech Republic only; we can see similar tendencies in the surrounding countries. The current Czech literature deals with Cash Management only to such an extent that it states that such a phenomenon exists. Mainly the clarification of Cash Pooling and its significance and impact on economies of banks and organizations is insufficient.

Multinational holdings that operate in several countries cannot coordinate financial flows in all their subsidiaries at the same time. And these are the entities that banks' offers of Cash Management are designed for as in large volumes one can reach the necessary savings that follow from its application. Naturally, banks are also interested in non-profit organizations, organizations of the state administration and mainly self-government for which they have offers of Cash Management as well.

However, this issue does not relate to multinational organizations only. This also relates to all medium-sized and mainly large companies that have their accounts in more currencies or are divided into several independent entities with their own accounts and differing financial consumptions.

The requirement concerning the information systems securing Cash Management are huge and they follow from the need to process large volumes of financial data. Banks especially have mechanisms for their monitoring and liquidity management and it is better to use these within the business sector.

The determining factors for further development of banking services, especially Cash Management, are:

- Development of information technologies. Their development and new opportunities they have brought in the last 30 years (since the mid-1980s) have enabled banks to use them fully within their offers to clients. The development of information technologies enabled the creation and development of sophisticated banking services as well as the possibility to offer banking services to a higher number of clients, mainly the development of banking for a wider range of small clients. Retail banking is directly related to a growing capacity of bank computers that are able to process a huge amount of data. This is then reflected in an increase in profits of the banking sector.
- Pressure of large clients and clients who are significant for the banks, and mainly their consultants, to use and create new and more sophisticated products that bring cost savings.
- Marketing strategies of banks that focus on gaining the market and needs of large and multinational clients who are able to bring huge profits even with the low margins, due to the low costs of services (much fewer bank employees are needed for them than for a comparable volumes and profits in the case of smaller clients). This indicates the need to offer these clients services that are attractive for them.

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These strategies are applied to gaining and keeping clients that are significantly interesting for banks. These are the clients that are related to other bank's clients or its potential clients.

This all increases the significance of Cash Management as a highly innovative product of modern banking in the conditions of growing competition at the banking market.

Cash Management is in its basis formed by a combination of classical banking products. An important innovation is its part – Cash Pooling. A significant role is also played by Shared Services Centres whose use is offered by banks within Cash Management. Thanks to the interconnection and compilation of classical banking products into the resulting product offered to clients, Cash Management is considered a sophisticated banking product.

The centralized management of liquidity performed by banks for their clients (Cash Management) was created in the 1980s and the 1990s as a result of:

- pressure of top bank clients;
- demand for new, more sophisticated banking services;
- development of information technologies, fast and trouble-free connection that allows banks to offer new products;
- expansion of the clearing interbank payment system, which is considerably cheaper and faster than correspondence payments;
- implementation of "clearing centres" within bank holdings;
- initiatives of the European Commission, which in 2004 cancelled the tax on cross-border interest payment in most EU member states and thus made the real Cash Pooling more attractive; in January 2006 charges for cross-border transactions up to 50,000 EUR were reduced as they cannot be higher than charges for inter-state transactions (in both cases this concerns interbank transactions and is valid for the states of the Eurozone).

These factors made banks able to expand the range of Cash Management products (especially its determining part – Cash Pooling) for organizations. Cash Management and Cash Pooling are offered to banks' best clients, especially:

- clients who actively show interest in these products;
- as an offer during acquisitions of the clients banks are interested in;
- to keep significant clients other banks are interested in.

2 Model of Cash Management and Cash Pooling application suitability

Based on the analysis and the conducted survey, discussions with experts in banks, authors' own experience, and SWOT analysis of Cash Management and Cash Pooling, a model was designed that allows for evaluation of Cash Management and Cash Pooling suitability for a client.

The model is not to establish exactly to what extent of the client's final ranking it is suitable to apply Cash Management or Cash Pooling, but to demonstrate a bank's expected interest in the client. Each bank has its own conditions for acquisition of clients and this model aims to make their work easier.

The model design will include its testing and establishment of approximate values for the suitability of Cash Management and Cash Pooling offer and application.

The model results can be used as a marketing tool for acquisition of clients; the bank can demonstrate the suitability of these applications for its clients using the mathematical model.

Further, they can be used by banks' clients as a tool that declares their attractiveness for banks and also from the perspective of their clients' interests. Due to the parameters of the correlation analysis, where individual factors are put in relation to clients' savings, the model also presents the client's suitability for application of Cash Management and Cash Pooling from their own point of view, related to cost savings.

If the conditions for Cash Management to be offered are met, conditions for Cash Pooling are tested. Some conditions are repeated, they need to be evaluated separately for Cash Pooling, where the risk of active banking trades is partially included. These can be not only operating loans and investment credits but also off-balance sheet trades on the asset side and credit cards. A complex modular method was used for the evaluation itself. The method allows us to create an evaluation model for Cash Management and Cash Pooling application suited to the current needs, while keeping the needed input parameters.

After we had studied the options modular methods provide, we chose Mařík's "Complex Modular Model", which provides the best conditions thanks to its variability. The model enables the user to change individual criteria if necessary. The significance weights within the model were established based on the results of the correlation analysis. The results of the correlation analysis reached values of correlation coefficients from 0.08975 (negligible correlation) to 0.94654 (very high degree of correlations). Correlation coefficients were used for the establishment of significance weights of individual criteria within the "Complex Modular Model".

For the evaluation of Cash Management and Cash Pooling, the following factors and criteria enter the model and are specified closer if necessary based on the division between Cash Management and Cash Pooling:

- **Factors** – basic factors that are established so that they express the suitability of a client for the application, e.g. external factors, internal factors, etc.
- **Criteria** – divide the factors; the criteria that express the necessary extent of the factor are chosen: e.g. external factors include criteria such as local interest rates, inflation, client's solvency and the sector where the client is active.
- **Value of criterion** – four values of criteria are used.
- **n** – total number of criteria within the model for Cash Management or Cash Pooling.
- **RP** – increment per one degree of significance,
 - $RP = c * r_1,$ **(1)**
 - where:
 - $c = a^x - 1.$ **(2)**
 - **x – degree of criterion significance** (value of criterion), this number of degrees is the same for all factors. The significance of the criteria is established so that the criterion that is of the highest quality and the most suitable for Cash Management or Cash Pooling application is marked 1 and the one which is of lowest quality is marked 4.
- **a** – coefficient of scoring range (evaluating increment) for one criterion established as follows:

$$a = \sqrt[x]{\frac{r_{11}}{r_1}} = \sqrt[4]{\frac{11}{1}} = 1.82116. \quad \textbf{(3)}$$

- **r** – the final ranking of the client within the factors, based on the degree of their significance. Their sum defines the client's suitability for Cash Management and Cash Pooling application. The lower the final ranking, the more suitable the client is for their application. The final value of client's ranking for Cash Management and Cash Pooling is between 10 at minimum and 100 points at maximum (10 points were chosen),

where $r_1 = 1$ and $r_{11} = 11$, at most a client can reach a value of 10 within the final ranking of client's significance.

Individual factors, criteria, their significance and weight are designed so that they express the potential bank's interest in a client in the best possible way. They were designed using mainly:

- results of the survey in the banking sector;
- author's own experience;
- conclusions and recommendations following from discussions with employees of banks who work in departments of corporate banking.

Factors establishment was based on:

- results of the survey in banks and the business sector;
- experience from the practice;
- simplicity of their application;
- discussions with employees of banks;
- requirements the model should meet.

Weights of individual factors were assigned based on:

- results of the correlation analysis of the relationship between individual factors and the savings achieved by application of Cash Pooling, reflected in Cash Management;
- qualified evaluation of the results of the correlation analysis:
 - experience from the practice;
 - results of the survey in banks and the business sector;
 - verification by regression analysis.

Conclusions

The conducted analyses confirmed that the company size has generally an important position within the motivation to use Cash Management and Cash Pooling and these products being offered by banks. We used Pearson's X^2 – test to verify the associations and Pearson's coefficient to determine the degree of association.

Regression analysis verified that from the perspective of client's financial savings the amount of used loans and loan costs with Cash Pooling are of the highest significance.

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