Decision-making in Export Financing Services by Banks in Hungary

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SUMMARY

The purpose of this paper is to investigate decision-making in export financing services by banks in Hungary. The case studies are of one export credit agency and eight commercial banks. The data was collected through interviews and to interpret the data content analysis with an inductive approach was used. The results show that the decision-making system in export financing services in Hungary tends to be centralized and bureaucratic with a mostly participative leadership style. Effectiveness in the decision-making process is influenced by decision-related factors, human-qualification factors, and organizational contextual factors which can be amplified by certain other factors.
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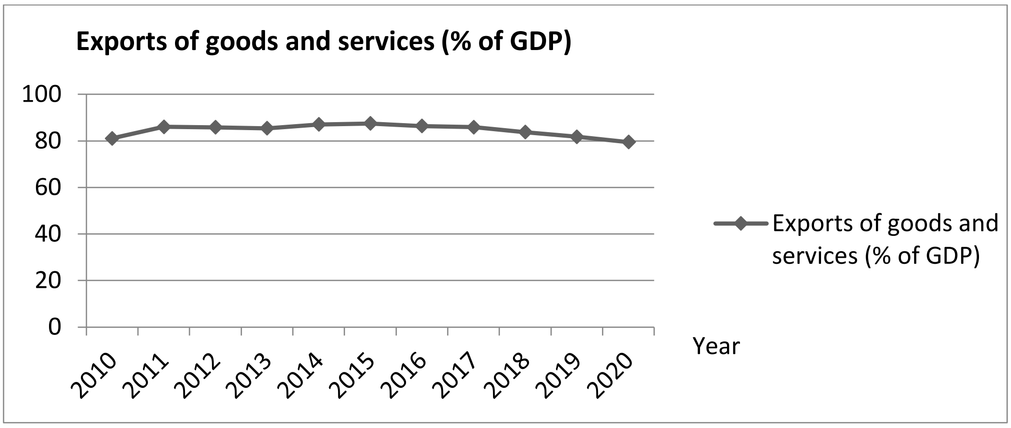
INTRODUCTION

In the international trade market, there has been very high uncertainty in predicting future circumstances. Problematic risks through Brexit (the withdrawal of the United Kingdom from the European Union), conflict in the Middle East, the trade war between major economies like the United States and China, the recent worldwide economic crisis due to the Covid-19 pandemic, the conflict between Russia and Ukraine and how it may affect future political and economic ties inside Europe as well as between Europe and the USA, and so on make the nature of international trade very uncertain and disruptive. Risks, uncertainties, and structural shifts have a wide range of effects on industries, "affecting every step in the value-chains of global trade, from the industrial strategy of oil-producing countries, through manufacturing, technology risks, currency fluctuations, and the cost of finance, to social changes impacting labor supply, consumer demand, and political and environmental activism" (Reguero 2019, p. 13). Export financing, guarantees, and credit insurance organizations are crucial drivers that let exporters export more successfully in the international market. According to the U.S. EXIM bank (2019, p. 12), "Many governments reported that export finance and promotion programs are policy priority based on the effectiveness and profitability of these programs."

According to Hensman and Sadler-Smith (2011), the banking and finance sector is critical in the world economy; in which decisions made by this sector's top management have gravity and importance that overshadows other organizational processes, affecting all the stakeholders and even the overall economy. Decision-making about the facilities for exports is more critical when a considerable percentage of GDP comes from exports. In Hungary, the export of goods and services is reported in the World Bank database as 79.48 percent of GDP for the year 2020. As shown in Figure 1, from the years 2010 to 2020 this value stayed at around 80 percent of the GDP of the country. As the share of exports in GDP is high in Hungary, it is vital to facilitate and support the export activities financially that is usually done by services offered by the financial institutions.



Source: World Bank: https://databank.worldbank.org/

Figure 1: Exports of goods and services (% of GDP) in Hungary, 2010-2020

This study aims to discuss decision-making in export financing services by banks in Hungary. The case studies are on the Hungarian export credit agency (EXIM) and eight commercial banks in Hungary. In Hungary, the only bank that is specialized in supporting exporters is the state-owned Hungarian Export-Import Bank Plc. (Eximbank). Eximbank is integrated with the Hungarian Export Credit Insurance Plc. (MEHIB) and the joint organization is called EXIM. EXIM is a Hungarian export credit agency (ECA). According to OECD (n.d.), "Governments provide officially supported export credits through Export Credit Agencies (ECAs) in support of national exporters competing for overseas sales. Such support can take the form either of 'official financing support', such as direct credits to foreign buyers, refinancing or interest-rate support, or of 'pure cover support', such as export credit insurance or guarantee for credits provided by private financial institutions." Some commercial banks in Hungary provide some export financing services for exporters in addition to their regular services.

In the following, we introduce the banking system's history in Hungary, provide a literature review, present characteristics of export credit decisions, explain our research process and data Analysis, share our findings, discuss them, and finally present our conclusions.

History of the Banking System in Hungary

In this chapter the highlights of the history of the banking system in Hungary are discussed. The aim is to show how the banking system has changed in response to economic and political changes over almost 70 years in Hungary.

In 1948, the National Bank of Hungary (NBH) obtained the monopoly of money circulation and all credit activities in the market, establishing the Hungarian banking system, which was modeled after the Soviet Union's structure (Hasan & Marton 2003). In the late 1970s, financial deregulation led to a sharp rise in the number of rival banks. As a result of disintermediation, among other things, commercial banks lost several significant positions against investment banks and against investment and counter-investment funds. The market share of these more recently established financial organizations grew, which led to a steady reduction in the role of banks in handling deposits and credit outsourcing. "Hungarian banking system had few years delay in the development process" (Pintér 2017, p. 56). According to Hasan and Marton (2003), the government of Hungary allowed a number of foreign banks to establish offshore activities in the early 1980s, despite the fact that these banks competed with state-owned banks in the foreign exchange and trade-related transaction markets. This was a relatively early step in the reform process. In 1987, the NBH took over as the central bank and handed its commercial activities to three new commercial banks, replacing the centralized mono-banking system with a two-tier banking system. In the 1980s these changes were important in Hungary because they made it possible for the post-socialist administration to start major reforms. A regulatory framework resembling a market economy was developed by the democratic government in 1991. Both the Bank of International Settlement's 8% capital adequacy ratio standard and the provision of reserves to cover faulty or dubious loans were mandated. The framework also outlined minimum capital criteria for new banks and stipulated that state ownership in all commercial banks should be reduced to no more than 25% by 1997 (Hasan & Marton 2003). According to

Pintér (2017) the quick process that came from Hungary's bank privatization program during the ten years leading up to 1997 saw four of the country's five largest state-owned banks sold to foreign investors. Privatization, followed by the banking sector's consolidation and a wave of deregulation and liberalization in the last two decades laid the groundwork for future financial system mergers.

In the early 2000s, fiercer rivalry in the local and international banks' retail credit markets indicated whether their strategies were comparable or dissimilar. At that time, local banks started to expand throughout Eastern Europe, competing not only with the parent banks of "foreign" banks but also with their subsidiaries. The balance sheets of the two groups during this time were marked by a rapid expansion of credit, significant profitability, and the emergence of liquidity and credit risks (Banai et al. 2010).

The next considerable change happened when Hungary joined the European Union on May 1, 2004. After joining, there were quite a few urgent changes made to the legal system (Csáki & Gelléri 2005). The national Act on Public Procurement had been altered as a crucial part of harmonizing legislative procedures to comply with EU requirements. The implementation of new legal and procedural requirements has had a significant impact on both bidders and tender issuers, as well as on current procurement procedures (Csáki & Gelléri 2005).

The recent two worldwide crises have had a considerable effect on the banking industry. The first one was the financial crisis in the years 2008–2009 and the second one is the Covid-19 pandemic. According to Banai et al. (2010), banks had to rely heavily on external help (but only temporarily) due to the liquidity crisis caused by the financial crisis of 2008–2009. The state and central banks provided this in the case of local banks, while parent banks provided it for foreign banks. Due to the large liquidity and credit risks in the Hungarian banking sector, which were exacerbated by the 2008 financial crisis, Hungarian banks exhibited severe procyclical behavior in response to the altered financial and macroeconomic environment. Wieder (2020) pointed out that according to the National Bank of Hungary, the domestic banking system was in considerably better form at the start of the Covid-19-induced economic crisis than it was at the start of the 2008–2009 crisis. He added that by the end of 2019, risk indicators for corporate lending had also made significant progress; the proportion of project loans in sector-level portfolios had reduced since the previous crisis, but businesses were still dealing with the coronavirus outbreak and unfavorable supply and demand shocks. Companies that lose a large amount of revenue may have trouble paying their debts. Hungary's institutions have a high cost-to-asset level when compared to other EU countries. The relatively low usage of electronic service channels, the poorer efficiency of economies of scale, and the spread of automation and digitization solutions to a lesser level could all be contributing factors. According to Tóth (2021), the Covid-19 epidemic, in addition to its multiple detrimental social and economic impacts, may lead to relevant developments in the domestic credit institution sector in the aspect of digital development; however, the issue is too complex and there are too many unknowns to tell for sure.

LITERATURE REVIEW

The decision-making process

In the studies of Drucker (2001) and Daft and Marcic (2016), six steps are defined for the decision-making process, which are almost the same in both studies. The six steps are:

1. Identify the necessity of decision-making, and classify the decision to see if it is a generic decision or an exceptional one that may need more creativity and new rules.
2. Examine the problem completely.
3. Specify the possible answers to the problems and their limitations.
4. Choose the solution(s) with the least degree of risk and solve the issues in more details.
5. Implement the decision.
6. Evaluate the result and effectiveness of the decision.

To make the process successful, it is not only important to follow the steps but also to know how it can be effective to employ this knowledge efficiently. In the following subchapters, we talk about the effective decision-making process and its limitations.

Effective decision-making process

As Simon (1948) stated, the key concept of managerial science is decision-making. Therefore, the effectiveness of decision-making should be studied deeply in any organization. Effective decisions result from "a systematic process with clearly defined elements and in a distinct sequence of steps" (Drucker 2001, p. 19). The process of decision-making is effective only if it can achieve business objectives. According to Drucker (2001), to have effective decision-making, decision-makers should identify whether the issue is to be handled as a generic issue or an exceptional one. He noted that a common error of decision-makers is to treat a generic problem like a unique and exceptional issue, which can just result in "frustration and futility". This can be because of the lack of knowledge and the power of discernment of decision-makers about the issues.

In addition to these factors, according to Argyris (2001, p. 60), “the effectiveness of decision-making of top managers relies on the degree of innovation, risk-taking, flexibility, and trust in the executive system.” In a survey (Argyris 2001), about 95% of executives believed that the effectiveness of the organizations mostly depends on the qualifications of their top-level people. For effective management decision-making, after determining the alternatives, managers should predict the possible outcome of the alternatives and decide which decision they should make (Swami 2013). Kittisarn (2003) mentioned that a suitable decision-making system should be selected for the organizational structure to make sure that the appropriate decisions are taken at the appropriate levels.

For an effective decision-making process, the implementation phase of the decisions is also so important. Drucker (2001) pointed out that in the decision-making process the most time-consuming stage is usually to turn a decision into effective action. Without implementation, the decision is just a concept. He stated that “Converting a decision into action requires answering several distinct questions: Who has to know of this decision? What action has to be taken? Who is to take it? What does the action have to be so that the people who have to do it can do it? The first and the last of these questions are too often overlooked” (Drucker 2001, p. 13).

Limitations in the way of the effective decision-making process

Drucker (2001) considered meeting the boundary conditions as the most difficult phase in the decision-making process. Simon (1979) stated that the rationality of people is limited by information shortage, people’s cognitive limitations, and time limitations. In his bounded rationality model, he mentioned that according to the limitations, completely rational decision-making is not possible; decision-makers become satisfied with the decision that seems to them to be good and acceptable.

Argyris (2001) pointed out the behavioral limitations that exist in an organization, which is the contradiction of decision-makers’ behavior in decision-making meetings with their real opinions about an effective executive order. The contrast between what leaders say and how they act in the workplace contributes to causing obstacles to transparency and trust, as well as the effective investigation for solutions, creativity, and flexibility that become more harmful in important decision-making than the normal one. Hammond et al. (1998) found eight traps in the psychological aspect to make decisions in organizations. “The anchoring trap” causes us to place undue emphasis on the first set of information we obtain. “The status-quo trap” pushes us toward keeping the status quo, even when better options are available. “The sunk-cost trap” leads us to repeat previous mistakes. “The confirming-evidence trap” causes us to search out evidence that confirms our existing biases while dismissing material that contradicts them. “The framing trap” happens when we misinterpret a situation; the entire decision-making process is jeopardized. “The overconfidence trap” causes us to exaggerate the precision of our forecasts. “The prudence trap” makes us overly cautious when making estimations regarding unknown circumstances. And “the recallability trap” causes us to overestimate the importance of recent, spectacular occurrences. In some cases while correct information is accessible, alternatives are well-defined, calculations of risk, benefit, and costs are correct, etc., still, good decisions may not be made because of the mindset of the decision-makers. The mentioned behavioral limitations and psychological traps can damage the decision-making process. However, being aware of these elements can help to avoid them.

Some limitations are more often observed in public organizations. According to Rainey (2003), some of these limitations are the extent to which managers have authority, the government bureaucracy, the powerful role of adjudication units, dependency on governmental funding, relying on other organizations for information and some other services, and employees’ preferences and values. In public organizations, the authorization of employees is usually limited to people at higher levels and according to Rainey (2003), internal managers’ influence and authority in public organizations have been reduced by external power, politics, and also adjudication units. Public organizations usually are so bureaucratic that they may negatively influence the adaptation of the organization. In public organizations employees may not be as committed as in private organizations.

Decision-making styles

Understanding and choosing the proper decision style in different situations make the decision-making process more effective. The ways that managers at different levels implement the decision-making process are different. They need to behave and decide differently based on the level and circumstances. Brousseau et al. (2006) showed that decision-making styles can have an effect on executive success and failure. Managers should have the ability to choose the appropriate style based on the circumstances they face. They proposed four decision styles based on how much managers focus on information collecting and in what way they create options; some decision-makers believe in one course of action and others prefer multiple courses. These four styles are Decisive, Flexible, Hierarchic, and

Integrative. To figure out how managers choose among these four decision styles, Brousseau et al. (2006) did empirical research. They investigated the behavior of managers at different levels across regions. By comparing every level of the four continents, they saw differences in each level of management among the regions. However, inside every continent, the behavior of managers at different levels was found to be almost similar in their leadership and thinking styles. In addition to the region, they also mentioned that in a public organization, decision-makers act differently in comparison to private organizations. This is because they are responsible to the government.

Vroom and Yetton (1973) proposed another category for decision styles based on the extent to which the managers involve the group in the decision-making processes. Their categories ranged from highly autocratic to highly democratic:

AI: Manager decides alone

AII: Manager decides alone by using the collected information

CI: Manager decides after getting ideas from individuals

CII: Manager decides after consultation with the group

GII: The manager allows the group to decide.

The decision-making style can range from the highly autocratic style (AI), in which the manager decides alone, to the consultative style (CI), in which before making decisions, the manager consults with individuals, and to the highly democratic one, that is the group style (GII), in which the manager gives the authority of decision-making to the group. Besides their thinking styles, managers can also change their approach to decision-making by considering the urgency of the case and the impact of the decision.

In group decision-making versus individual decision-making, more information and knowledge can be available related to the issue, a greater number of options can arise, the final decision can be accepted and comprehended better, and the overall knowledge of group members may increase. However, it can be more time-consuming and conflict between opinions can make the process slow and unpleasant. In some cases may become over-focused when it may not be necessary, and some people may have more power in the discussions (Kittisarn 2003, citing Bartol et al. 1998). Accordingly, in cases when time is more important, individual thinking matters, while group decision-making may be preferred while when more information, accuracy, and creative decision-making is more suitable. Although being fast is highly valued in today's financial sector, that should not limit the importance of information, as mentioned by Godbillon-Camus and Godlewski (2005). However, some other factors like the size of organization, the number of business cases, organizational and national cultural characteristics, power distance, and hierarchy level also affect decision-making methods. One decision-making way is the four-eyes principle, where the decisions can be made by two authorities. In this way, the individual authority is limited because the decision should be approved by another authorized person as well. In this way, the aim is to avoid individual errors (Lambsdorff 2015). This method also can be good for incorporating different opinions and using more competences compared to individual decision-making, and additional control can be applied by the second person. In comparison to decision-making in committees, it can reduce the time for arriving at decision. In some studies, it is mentioned that in a financial institution, the four-eyes principle is used to avoid corruption in decision-making. However, Li et al. (2015) referred to some studies that showed that this method is usually not useful to avoid corruption because the entire group can be corrupted. In their studies, they found that groups were more corrupt than individuals.

The authority of decision-making

Power and authority are required for people to achieve goals and engage in decision-making (Rainey 2003). To boost the effectiveness of an organization's performance, the structure of the organization and decision-making should be matched for decision-making to be centralized or decentralized (Kittisarn 2003). This categorization is referring to how the authority is divided between managers and units. In organizations with a vertical structure, centralized decision-making is mostly followed, in which authority is kept at top organizational levels to create vertical coordination. However, in decentralized decision-making, in addition to top managers, authority is distributed to lower-level managers as well. Kittisarn (2003) pointed out that in decentralized decision-making, speed and flexibility should be ensured in responses to client issues. It should be noticed that in real life, organizations are not totally decentralized or centralized and these concepts are relative (Kittisarn 2003). Top-level management has more control in centralized decision-making than in decentralized decision-making. In centralized decision-making, an organization may not be able to respond fast and effectively to changes compared to in decentralized decision-making. In decentralized decision-making, organizations may respond to customers' needs more quickly. Kittisarn (2003) added that most studies argue that the employees are closer to the clients and so can be better prepared to make most of the decisions but it may be more difficult to achieve efficiency through standardizing. However, depending on the organizational structure, its environment, and its needs, managers can see which method can be most beneficial for the organization. Centralization can be more suitable than decentralization since the environment of the organization is more stable, the capability and experience of lower-level managers in decision-making are lower than those of upper-level managers, lower-level managers are less eager to take responsibility for decision-making, and organizational culture also does not allows them to do so, decisions are more major, organizations are in crisis, the size of the organization is larger, the organization is geographically less dispersed, and finally, managers must have more control over the process for organizations' strategies to be implemented effectively (Robbins et al. 2000).

To analyze the authority of decision-making in banks, Senyuta (2013) pointed out that estimates showed that more delegation of decision-making to lower levels affects the quantitative measurement of bank performance positively but has a negative effect on the quality of the decisions. This means that for example in loan services, the number of loans given to clients increases by delegating the authority to lower levels but the quality of the loans may not be guaranteed. Accordingly, to maintain the quality of decisions and at the same time keep the quantitative measurement of bank performance, the balance should be kept between these two elements. When considering soft information, the importance of delegation for decision-making comes into the picture (Senyuta 2013). However, the author pointed out that in the banking sector, more centralization has taken place in the decision-making process. The reasons for these issues can be advancement in informational technology by easy and cheap accessibility of information to higher levels and changes in market regulations (like the European Union's single-market policy). However, for soft information, it may not be so practical to send it to the top levels of a hierarchy without cost. It should be noticed that the expert knowledge of lower levels makes a difference to the competitive advantage of the organizations.

According to Godbillon-Camus and Godlewski (2005, p. 1), banks can access "hard information, which is external, via public information (quantitative data like balance sheet data, rating, scoring . . .), and soft information, which is internal, via bank-borrower relationship (qualitative like judgment, opinions, notes, reports . . .)." Analyzing hard information gives insight more into the past but soft information gives more insight about future plans. Although soft information is not verifiable and it is easy to manipulate, including it in risk analysis can improve the accuracy of borrowers' quality estimations. Soft information improves the predictive capacity of hard information (Godbillon-Camus & Godlewski 2005). To have precise information, a combination of both soft and hard information should be used. In an organization whose structure is more decentralized, soft information can be used more extensively because lower levels have increased authority over decision-making and can use their judgments of the organizational situation.

Another issue about hierarchy is that decision-makers at higher levels can decide more intuitively than the lower-level ones and this way is used mostly in cases of high uncertainty, limited time, less available precedent, unclear information, unpredictable variables, and the existence of a number of acceptable alternatives (Hensman & Sadler-Smith 2011, citing Agor 1989 and Parikh et al. 1994). Hensman and Sadler-Smith (2011) pointed out that their study on the banking and finance sector revealed that the decision factor, individual variables, and organizational contextual variables affect the decision-makers' reliance on intuition. Decision factors may not suggest a clear answer (multiple acceptable alternatives), uncertainty, conditions when there is time pressure, and lack of proper data that altogether make it hard to analyze the case rationally, and decision-makers may refer to their intuition. Individual variables like decision-makers' experience, expertise, confidence, and seniority give the decision-makers the competence to apply intuitive decision-making. Finally, some of the organizational contextual factors are organizational limitations, agreements, and formal regulations that limit intuitive decision-making, the hierarchy, authority, the politics, the team relationships in the organization that make people not show their opinions in order to keep the connections and respect the higher levels, and the organizational culture – that is, to what extent it allows people to share their intuitions.

CHARACTERISTICS OF EXPORT CREDIT DECISIONS

Decisions connected to financing export transactions belong to the category of decisions with high level of risk. This is especially true in the case of Hungarian companies exporting to countries outside of the European Union. The foreign trade policy of Hungary aims at entering into new markets, such as India and China, which contributes to the increasing the level of risk of exporters. Gergely Jákli, the CEO of EXIM, said in an interview: "Hungarian export companies can be the most successful if they also seek new markets outside the European Union. However, they need help to do that." (Jákli, 2021). EXIM has introduced new financing programs to increase the number of foreign countries in which they provide services for exporting companies (EXIM 2021).

The types of risks involved in exporting can be divided into three categories: market, credit, and operational risks. Credit risk includes the probability of default, loss given default and exposure at default

(Homolya & Benedek 2007). Direct state financial support is crucial for MEHIB in the portfolio of the bank, as export markets have dominant position where financial and legal risks are high (Roncz 2011). Parallel with the increasing global uncertainties of economies, the modeling of risks has gained more and more attention in exporting, which is true for banks financing export transactions (Vanek 2009). Risk handling aims at reducing the possible consequences of risks to a minimal level (Vértesy 2013, p. 29).

Related to the strategic importance of increasing exports of Hungary, EXIM is controlled by state level institutions. MEHIB provides insurance for exporting companies which is supported by the state budget. EXIM has close cooperation with the Hungarian Development Banks and the International Trade Development organization in developing export promotion strategic aims. The strategic goals of strategy involves the following (Roncz, 2011):

- Implementation of a coordinated strategy specified for organizations involved;
- Creation of a common knowledge base;
- Sharing information;
- Simplification of decision processes.

EXIM cooperates with 40 Hungarian financial institutions – among them commercial banks and leasing companies – to finance companies with an active role in export transactions. According to Jákli (2021), 13% of the credit provided for companies in 2020 was financed by EXIM.

RESEARCH PROCESS AND DATA ANALYSIS

In this study, by practical research on EXIM and eight commercial banks, we attempt to answer the following questions in the case studies:

- What is the mechanism of decision-making authority in the process of decision-making?
- To what extent is there flexibility in decision-making processes?
- Which elements are effective to reach a successful decision and what are the limitations in the process?

The case studies of this study are from EXIM and eight banks in Hungary. The names of the banks are not included due to our agreement with the interviewees. EXIM is the integrated company of Hungarian Export-Import Bank Plc. (Eximbank) and Hungarian Export Credit Insurance Plc. (MEHIB). Among these case studies, only EXIM's activities are specialized in supporting exporters as an Export Credit Agency (ECA); for this reason we have not included it with the banks' group and have mentioned it separately. In the other cases, export financing activity is one of the services they provide. Although our subject is about banks and EXIM is an ECA, we should note that Eximbank and MEHIB share the same management structure.

In this study, eleven semi-structured interviews were conducted in banks in Hungary. Interviews were held one by one and face to face with each interviewee in the bank's office. The language of the interviews was English. The list of interview question can be found in the Appendix.

The interviews are divided into:

1. 2 interviews with the same person from EXIM in 2019 and 2021
2. 9 interviews in 8 commercial banks. For Bank 3, there are 2 interviewees. The second interviewee is now working for another bank. He worked as a manager in Bank 3 for 2 years till 2019.

Each interview was conducted in 2021 except for one interview from EXIM in 2019.

Banks number 1, 2, 3, and 7 have a mother bank in another country and are called foreign-owned banks in this study. The mother of Bank 1 is Austrian, Banks 2 and 3 are Italian, and Bank 7 is Dutch. The others are local banks.

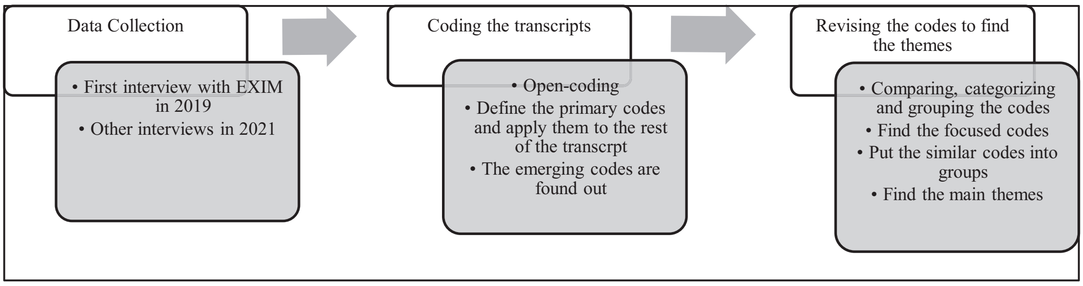
The positions of the interviewees are as follows: Seven heads of departments (Banks 2, 3 (two interviewees), 5, 6, and 7; and EXIM), one head of unit (Bank 8), two senior experts (Banks 1 and 4). Four of them are working in the trade finance or/and international relations departments; two of them are working in the risk management department and the other four are working in the different departments that mostly had previous experience in the area of trade finance. The criteria for choosing the interviewees were the ones who are mostly in the middle or lower level of management and who have considerable experience and knowledge in export financing activities. In middle and lower management, they are somehow in a position of decision-making and at the same time see the issues touching the results of decisions.

To analyze the data from interviews, we used qualitative content analysis with an inductive approach.

The process of collecting and analyzing data is summarized in Figure 2. To implement this method we first implemented the 'Open Coding' by reading the transcript word by word and line by line. Following Easterby-Smith et al. (2015), open-coding let us divide the long text into manageable codes. After this phase we could identify some primary codes and implement coding the rest of the transcript by these codes and also in cases that we could not put it into the defined codes, we created some emergent codes. Then we compared, categorized, and grouped the broad range of codes. We looked for some more focused codes to label the groups in a more organized way. Then we could make some groups with similar concepts from the related coded parts. For an easier and more intelligible interpretation of data, we categorized the themes into the final six main concepts as follows:

1. The authority of decision-making
2. Reaction to change in the decision-making process and approach
3. The decision-making approach in urgent/emergency times and crisis
4. Limitations of effective decision-making
5. Important factors for effective decision-making
6. Implementing decisions effectively.

To understand deeply the decision-making authority, flexibility in the process, and decision-makers' view, we think the first three categories show the decision-making process and its environment, and the fourth category 'limitations of effective decision-making' can help to understand the reasons for the approach. To recommend what can be done to make the process more effective, the limitations and the two last categories may help us.



Source: Own construction

Figure 2: The process of collecting and analyzing data

FINDINGS

The authority of decision-making

In this section, the aim is to investigate the banks' decision-making authority. For this reason, the level of authority and the regulations of banks define the authorized people for decision-making. The group or individual decision-making, members of the decision-making groups, the involvement of people in decision-making, and finally the leadership style of the organization are discussed based on the interviewees' responses.

We categorized the case studies into EXIM, local banks, and foreign-owned banks. Except for EXIM which is specialized in support of export activities, the interviewees in the banks mostly pointed out that the decision-making process in export financing activities is the same as other risk-taking activities in their organizations. The National Bank of Hungary's regulations should be followed by all banks. The authority of decision-makers is classified based on the amount of credit limit. It means that when the value of the credit is above the maximum limit defined for one level then the case shall be decided at a higher level. All the processes of these authorizations are written in detail and are tightly controlled.

Decision-making units in all banks are formal committees where each official member has voting rights and/or they rely on the four-eyes approval principal. Top management is usually involved in the committees in addition to the middle managers of related departments. The difference is in the number of levels. In local banks, there are mostly three levels, which are four-eyes approval (two people), credit committee, and the boards' committee. Sometimes there can be some levels in-between the layers. For example in Bank 8, there is another level that is called the management committee that is between the credit committee and the boards' committee; it is not directly a group of decision-makers but controls the cases that should be decided by the board. In the case of Eximbank, there are five approval levels. The first and second levels from the bottom of the hierarchy are in the shape of four-eyes approval. The first level is four-eyes approval by two decision-makers from different departments. The second level is four-eyes approval by two decision-makers from the same department who can approve the specific questions. The third level is the credit committee. The fourth level is the board of directors. The fifth layer is above the boards, that is the state bodies as a shareholder of EXIM (the Ministry of Foreign Affairs and Trade). In case of MEHIB (the insurance company), there are only four layers, as instead of the credit committee, there is an insurance committee. In the foreign-owned banks, the case is a bit different. With the exception of Bank 7, the foreign-owned banks, in addition to the three levels, also have two more layers that are related to their mother bank: the credit committee at the mother bank-level and its management board level.

In addition, according to the interviewee in Bank 1 decision-making authority for regional managers is very limited and it is only used when rather limited values are concerned. It should be noted that in case of export credit and financing, usually, the value is larger than the limits defined for the lower levels, and accordingly, such cases are decided by the credit committees.

The four-eyes principle in the banks is exercised usually by one decision-maker from the risk side and one from the front side (business or underwriting side). The decision-makers are usually managers, but it happens to be at the expert level in the case of rather limited value decisions where the protocols have already been accepted in the past and no new issues are involved. The interviewee in EXIM in 2021 stated that:

> "[…] at the lower levels, decisions are possible to be taken which are deemed to be technical and which do not intake an additional obligation from either of the institutions. In the case of first level four-eyes approval, we may talk about approval of even undertakings but not new deals and new limit undertakings. These decisions are connected to undertakings which are influenced by already executed deals or risks […]."

In Bank 7, one of the foreign-owned banks in Hungary, the decision-making process is different from that previously discussed. Decisions typically are not made in committees. Our interviewee said that:

> "In the credit chain only the higher-level approval body is the committee. So this is a very flat organization and personal accountability is really important in this organization."

She added that:

> "[…] we have a risk-taking system for 1 to 22 rates. The clients take credit ratings and based on the risk-taking and the seniority of the people, the decision-making levels are identified. The local mandate is the 'c' mandate, the regional mandate is the 'b' mandate and the global mandate is the 'a' mandate. So, it also is a hierarchal issue. Certain amounts can be approved in each mandate. Ex: we have a front office and risk management office. So the first line and the second line approval bodies together can sign a credit proposal."

Strategic decisions are made by top management. Middle managers are not decision-makers in strategic issues but they are involved in their preparation; they provide updates for top managers regarding the requirements in the micro-level, front side, and the local market. The interviewee in EXIM added that:

> "When the strategy is prepared definitely everyone is asked for their thoughts, inputs but later on strategies are finalized based on internal negotiations with top management, with the owner and with state representatives, etc. and at the end of the day strategy is always approved by the highest level of the bank."

According to the interviewees, most banks seem to follow participative leadership. However, the leadership style in Banks 3 and 5 tends to be somewhere between autocratic and participative. In Bank 7 the leadership style tends to be much more of a laissez-faire style. For EXIM, the interviewee believed that the precise explanation of the leadership style for the organization was to call it 'collegial' leadership and it was hard to put it into the three categories of autocratic, participative, and laissez-faire styles. He added that:

> "[…] I think that such an answer should be for any other financial institution in Hungary because it is required to operate in a specific way by law. So setting up committees, having 'collegial' decisions, having a primary review of the discussed matter, opinions provided from different units, independent evaluations of the matters discussed by different units, these are all requirements of the law banding for credit institutions."

The interviewee in Bank 7 pointed out that the laissez-faire leadership style can be successful in normal times but when there is a crisis, it may not be so effective. The direction will be lost and she mentioned that in her experience in crises a more autocratic style could help. She added that it should be taken into consideration "what kind of management approach would fit to the actual situation."

Reaction to change in decision-making process & approach

Here we discuss how the banks react to the needs of change and the limitations they face in deciding about change and/or implementing it. We provide information on how the decision-making process regarding export financing activities can be flexible in banks in Hungary, who can initiate changes, and who is authorized to decide on their approval.

Because of the highly regulated decision-making process and the obligatory transparency in Hungarian banks, it is hard to implement any change which requires a lot of extra effort. They need to follow a very formal process. If there is any room for flexibility, it is clarified in the regulations and applies to very few cases, according to the interviewee in the Bank 2. The first interviewee in Bank 3 pointed out that in case of this possibility, they still needed to get permission from higher levels. Each employee can initiate changes but it should be approved by top management. In case of foreign-owned banks it is a bit more complicated because after the approval by the top management in Hungary, it should be approved by the mother bank. In both cases, the National Bank of Hungary's approval is a must. All of these difficulties make it hard to initiate and implement any changes. Therefore, in the banks, the procedures have remained mostly unchanged. However, this is not necessarily a negative aspect. The interviewee in Bank 2 mentioned that it could be good as everything was clear and everybody knew exactly what guidelines they should follow. He added that:

> "[…] They are minor changes in decision-making due to the organizational changes. But the main logic and the authority are actually pretty fixed. However, there is always a revision of every internal regulation biannually at least. And the proposal goes to the related board to see if it is feasible or not."

According to the first interviewee in Bank 3, although theoretically implementation of some changes can be possible, in real life, radical changes have not happened. However, the second interviewee mentioned that during his two years of working in Bank 3, there was one considerable change which was to shorten the procedure, and they eliminated certain documentation. In Bank 5, the interviewee mentioned that in the last five years, the only change was because of the Covid-19 pandemic, which made them review the decision-making process.

The case for Bank 7 is a bit different because of the Dutch culture of the mother company. The organization is more open to change compared to other institutions in this case study. The interviewee mentioned a big change in the decision-making process. About ten years ago, it was decided to change the decision-making process from a committee basis to a mandate basis with a four-eyes approval principal. In their experience, the committees were not working effectively. They are now satisfied with the new way and do not see any need to change it.

The interviewee in EXIM in 2021 mentioned also that the decision-making process and regulations are the same as in 2019, when we had the first interview with him. Only some minor technical changes may have happened since then. He pointed out that:

> "[…] in the decision-making approach itself, there can be no change. However, they know the freedom given by the overall general regulation of EU and Hungarian regulation which is concluded based on the EU requirement. So you do not have the maneuver to change your internal processes on substantial matters. However, in the process itself, I would say there are some possibilities to implement changes. For example, there is no specific regulation neither prescribed by the European Central Bank nor by a financial institution of the country (which prescribes the authority regulation) which would define that a bank and/or an insurance company need to conclude a decision on the board level after 5 billion HUF."

So, the ECA has the space to maneuver to change this limit but cannot change the decision-making approach.

The decision-making approach in urgent/emergency times and crisis

The core aim of this section is to discuss what the decision-making approach of banks is in response to times of crisis or times when there is a need for urgent/emergency decisions. We analyse the possibility for the banks to have some different way or approach of decision-making in these cases, and see to what extent the banks can be flexible in irregular cases.

The solutions of the banks in response to urgent situations are different. For example, the interviewee in Bank 2 pointed out that:

> "In the regulation there is the possibility to have emergency committees. To organize an emergency committee, the members should agree that the case is so important that it should be decided earlier than regular time."

The second interviewee in Bank 3 noted that if there were an emergency case, more meetings than in regular times could be held. In Banks 5 and 8, in case of emergency, within the allowed terms in regulations, lower levels may have been delegated to specific decisions. In Bank 6, the interviewee mentioned that decision-makers would agree on prioritizing decisions for a specific purpose. In Bank 8, in case there is no time to implement the decision-making process in its formal time and process, the chief risk officer (CRO) is allowed to speed up the process of preparing documents.

To bring up the question of how they would respond to the crisis, the example of the Covid-19 pandemic was used. The interviewees mentioned that the most considerable change was to hold meetings virtually, start home office functioning, change a few policies about decisions, and arrange more cooperation among managers and employees. The banks that already had the systems – digitalization and facilities for home offices – could respond more efficiently to this situation. Accordingly, if banks are up-to-date with technologies and facilities they can confront such crises better. In Bank 7 the interviewee mentioned:

> "They did a lot of cooperation, renovation and collaboration. Covid-19 did a larger push for digitalization and it is needed worldwide now."

In addition, Bank 7 has a strong culture of organizational learning. When they encounter an issue, they go back and consult the lessons learned or have a discussion. This assessment is done twice a year. She also pointed out the flexibility to use different people when it was needed:

> "[…] In cases we needed different people, and then those people came to the picture because different situation needs different types of people."

The interviewee in Bank 5 stated that making a rapid decision was not a good idea since you would need to see the outcome and he added that:

> "[…] In Covid-19 time, we know that we have to be more conservative for project finances which are in the field of the hotel business. So it is not important to make decisions quickly but we should see it in a strategic way. We have to specify the worth this project has and then make the decision and implement it."

Similarly, the interviewee in Bank 8 mentioned that during COVID-19 the rules were more conservative, the number of loans was reduced, and the bank was not as business-friendly as it formerly was. He added that while the decision-making process has so far not changed, a few policy documents have changed slightly during the pandemic.

In EXIM, during Covid-19no regulation changed in some elements that the interviewee in EXIM pointed out that:

> "In the point of view of approval, preparation of decision-making materials, no regulation changed in lower level or at the supervisory authorities."

The changes were to ease the repayment conditions for a domestic portfolio for the clients who already had contracts with EXIM. The interviewee in EXIM added that:

> "In pandemic time we cannot speak of a huge amount of new portfolio. There was not the time of new deals; there was a time of normalizing the already available deals."

In EXIM, during the pandemic, all portfolios were affected in some way, and some moratorium circumstances were altered, resulting in a period of intense decision-making to make the right decisions. In addition, they established a Covid committee to deal with specific operational issues that were difficult to fit into the regular operational committee.

In EXIM, the interviewee indicated that sometimes in unexpected circumstances, the standard established set of processes might not be followed; they might put the decision-making process on hold to avoid losing the business cases while waiting for a proper decision.

Limitations of effective decision-making

In the previous sections the decision-making approach in the banks regarding export financing activities, their reaction to the needs for change, and their decision-making solutions to irregular times were discussed. However, in all cases there may be some limitations decision-makers face in making the process of decision-making effective. In this section, we discuss the most important and frequent limitations regarding the interviewees' experiences. The limitations are in regulation, time and speed, lack of willingness to make decisions, people who are involved in the process of decision-making, information, budget, standardization, lack of willingness for simplifying the process, and not enough measurement of efficiency of decision-making process.

The most frequently noted limitation was the 'regulation'. In the opinions of most interviewees, banks in Hungary are over-regulated. For foreign-owned banks may be more difficult because as the interviewee in Bank 3 stated:

> “[…] there are a lot of internal and external rules. There are a lot of governmental rules, regulations, and policies from the mother company and also the Hungarian banking system.”

The interviewee in EXIM referred to regulation as the biggest limitation in Export Credit Agencies (ECAs). He noted that:

> “Hungarian Export-Import Bank is a financial institution which is fully under the regulation of banks and financial regulations of both Hungary and the European Union.”

He gave one real example of how regulations can result in considerable limitations:

> “After the crisis 2008-2009, the first obstacles for financial sector participants in preparing the development plan were regulations. More than 20% of companies and banks who are doing business in the European Union pointed out that the regulation was the biggest obstacle. Because in all cases when the new regulation is introduced, the regulators do not always know how the market functions in real life and the new regulations are always hard issues to be solved […].”

In general, requirements and the volume of information, documents, requesting a large amount of collateral, and other material from clients are sometimes unnecessary that makes dissatisfaction among clients.

According to the interviewee in Bank 1, the overregulation makes the process very time-consuming and if the client only has a short time, they may lose the client. Interestingly, the second most frequently mentioned limitation is time and slow speed in the process of decision-making, especially when the case is export credits, because it is not an easy product and therefore is time-consuming to decide properly (interviewee in Bank 4). The existing bureaucracy and lack of authority at lower levels in decision-making are considered to be a very important issue as they increase the time needed for decisions. This can be even more time-consuming in the case of foreign-owned banks, as the interviewee in Bank 1 noted:

> “[…] this is the common problem for the Hungarian banks owned by foreign mothers because a lot of deals must be sent to the mother bank for approval. And this is a problem because officially all these Hungarian banks are independent banks but officially or not officially big deals should be sent to the mother bank. This is the same structure for every Hungarian bank owned by Western mother bank […].”

However, the interviewee in EXIM had a different aspect to time. He mentioned time is needed for the preparation and analysis of the information. He mentioned that there should be a balance between time and the depth of information. As he said:

> “[…] definitely if you want to have a full picture of what you approve, then time needs to be spent to present the specific matter what you approve. Decisions could be taken much faster but whether these decisions would be the best, it is hard to tell. […] But in the end, you need to have some balance between the need of time for the specific decision and the deepness of information you get, the deepness of analysis you do.”

In today’s business world, one solution to access proper data in as short time as possible is that organizations should access blockchain technology. Hungarian financial institutions still do not have access to this technology.

As the interviewee in Bank 7 pointed out, a lack of willingness to make decisions can be a limitation for effective decision-making:

> “When people are not able to make a decision or when people don’t want to give their name to the decision, they ask lots of questions, and they push back the proposals so many times to reconsider and they don’t submit again.”

She noted that sometimes it is not about lack of willingness but can be about a lack of decision-making ability of people or very slow decision-makers, even if had an infinite amount of data.

The interviewee in EXIM also said that:

> “Decision-making is very much limited theoretically by the people who are participating in decision-making.”

So in EXIM, in all phases of the decision-making process, eligible and skillful people should be used. They have an impact on the quality of the decisions for example by interpreting the information properly. He mentioned that the other limitation is information, which is influenced by how it should be collected, evaluated, presented to the decision-makers effectively.

However, the interviewee in Bank 3 mentioned that hiring skilled employees and keeping them in the organization needs a high budget. The budget also is needed for providing better facilities in the decision-making process. In addition, the interviewee in Bank 1 mentioned that hiring enough employees requires a big budget and added that:

> "The client's executives are serving a lot of clients. It is very difficult to serve every client's day-by-day issues they have. We should not forget that after having financial sources there is a quite long process to check the flow of process as making extra monitoring is required. This is the main problem that we are facing."

Therefore, one important limitation is the budget. The other limitations noted by interviewees are standardization, lack of willingness for simplifying the process, and not enough measurement.

Important factors for effective decision-making

It is important to know which factors are important to have an effective decision-making in the organization. In this point, these factors are discussed.

Data, information, and knowledge are noted as very important factors for effective decision-making by most interviewees. Some of them mentioned the necessity of proper technology, well-integrated systems, and clearness for an effective decision-making process. Everything must be clear, such as having clear rules, a clear understanding of rules, clear information, and clear expectation of clients and banks, and proposals should be clear and have the key points. The interviewee in Bank 2 pointed out that:

> "[…] for the clients also the clear expectation is a value because the business colleagues know what they can deliver and what not. In most cases, we know what can fly at risk and what cannot. We have a common understanding of risk levels. And this is not measured and it is not written. It is coming from management, I think. For years we have stable management and they deliver these messages. We saw in the committees that which risks were considered and what the approach was."

The interviewee in Bank 7 pointed out that:

> "[…] how many questions, what kind of information you obtain from these questions, the data availability is important for effective decision-making. Decision-makers also should know the basics to make the decisions and should have broad knowledge about the area and have enough time to make decisions. So if you have the right people with the right knowledge and experiences and the right personality, good group dynamic, clear questions, good cooperation among people and be able to rely on each other, … then they can make good decisions. […] it is important to have a supportive environment in the organization and to have an inclusive environment that your opinion is heard. So you can express your opinion because it not results [in] punishment."

The interviewee in Bank 8 explained why simplified, good quality, and clear proposals play an important role:

> "Right way of presentation of the facts, risk, and documentation is so important. Because the application is sometimes too long, so it is important to provide the most important facts and risks is presented to the decision-makers. […] By standardization, we would understand certain limits and requirements for decisions."

The interviewee in Bank 2 pointed out that the proposals for export financing activities should be deeply analyzed because of the complex environment and he said that:

> "[…] it is important to have the clear definition within the bank what is the expectation of the proposal, what it should contain and what should not because the managers and the decision-makers have no time to read 100 pages without any added value. So that is the main topic."

Some interviewees put value on delegating more authority to lower levels because they believed the effectiveness of the decision-making process could be enhanced. They also mentioned that from the risk side, delegating more authority to lower levels may not be so valued. As the interviewee in Bank 2 pointed out:

> "There is always a hard procedure to align the authorities. Because from the business side we would like to be more flexible and have more authority to decide more freely, but we have risk department which is thinking the other way around and want the decisions to be made at the higher level possible."

In EXIM as an ECA and a state agency, more than being effective, the point is to be prudent. They need to have transparency and prudentiality to achieve the defined goals. The interviewee in EXIM added that:

> "[…] from the business point of view, it can hardly become effective. This is always a conflict of interests between effectiveness, quickness, and transparency and prudentially inside the financial organizations, especially in state financial organizations. It is important to find the balance between these important factors […]."

Implementing decisions effectively

While we discussed the importance of having effective decision-making process, it should be mentioned that while a good quality decision may be made, it will matter if the decision is not implemented in an effective way. As mentioned earlier in the literature section of this study, "Without implementation, the decision is just a concept." Accordingly, here it is discussed how the decisions regarding export financing services can be implemented effectively.

In addition to the qualified employees who will apply the decisions, clear, simple, and convincing decisions are required to effectively achieve the purpose of decisions. Digitalization and high technology were mentioned by interviewees as important in today's business environment to implement decisions effectively. The working speed in the organizations is crucial to achieving effectiveness. In this context interviewee in Bank 3 pointed out:

> "The problem of losing clients is sometimes because we are not fast enough. […] and if we don't have a system to have a quick process then we need at least 2 or 3 weeks to answer the request of our partners. But in real life clients need an answer within 1-2 days, so you lose the client. So, lots of clients left us because we were really slow."

The interviewee in EXIM mentioned that as Eximbank and MEHIB are integrated, they are unified with one structure and share the same staff, management, leaders, decision-making bodies, and the same owner. Nevertheless, sometimes there may be a conflict of interest between the insurance company and the bank. However, because of this integration, the client can deal with both issues in one place and it reduces the paperwork and increase efficiency. Accordingly, if there will be collaboration and harmony in the export financing industry in a country, the whole process can be more efficient.

DISCUSSION

From the interviews, it seems that EXIM and the commercial banks' organizational environments tend to be hierarchal with a relatively stable environment. It seems that there is an approximate tendency to centralization and bureaucracy in their decision-making processes. In lower levels, the four-eyes approval principal with very limited authority is followed and at higher levels, they decide in committees. However, Bank 7 compared to other banks seems to be more flexible, less centralized, and more flat but it is still a hierarchal organization. In the foreign-owned banks and in EXIM, there are more layers of decision-making than in local banks because above the board meeting, in EXIM there is another decision-making body which is the owner (Government bodies in the Ministry of Foreign Affairs and Trade) and in foreign-owned banks, in case of Banks 1, 2, and 3, there are two more levels, which are the credit committee and the boards in the mother bank. In Bank 7, the case was different as they follow a different organizational culture (Dutch culture). They have three mandates. Based on these mandates, the levels of decision-makers change and it is in the shape of four-eyes approval decision-making (one from the front office and one from the risk management office). The only approval level in the shape of the committee is in the higher-level bodies.

Decision-making in Hungary is always group decision-making and nothing can be decided alone, whether the process involves committees, higher-level meetings, or the four-eyes approval principal. The committees are always very formal. The leadership style in the case studies tending to be mostly participative or lies between autocratic and participative leadership styles, except for Bank 7 which has the laissez-faire leadership style. The mother bank of Bank 7 is Dutch, Banks 2 and 3 are Italian, and Bank 1 is Austrian. According to the GLOBE project, the Country Practice Score of the cultural driver 'power distance' which shows to what extent people accept unequal distribution of power, is reported between relatively high and high for Hungary and Italy, relatively high for Austria, and almost medium for the Netherlands. This can explain the considerable difference in the decision-making authority distribution between Bank 7 and the other case studies.

Regulation plays a very crucial role in the decision-making process in the financial institution in Hungary. All details about the decision-making process are regulated and written. According to the interviewees in some cases it is even overregulated, which may not be really necessary. All the banks need to follow regulations defined by the National Bank of Hungary in addition to their internal regulations. In the case of foreign-owned banks, they also need to follow the mother banks' regulations, which is influenced by another country's rules. In EXIM, in addition to internal regulations and given regulation by the National Bank of Hungary, they need to follow the EU and OECD requirements for ECAs.

As all of the banks operating in Hungary need to follow the regulations given by the National Bank of Hungary, the general processes of decision-making in banks are almost the same. Transparency is highly valued and controlled in the banking industry. They are not so change-friendly because if they would want to apply any change they need to go through a very time-consuming and hard path, get approval from the higher levels, the National Bank of Hungary and in the case of a foreign-owned bank, the permission of the mother bank also is needed. However, the organization of Bank 7 is more flexible towards change due to the Dutch national culture.

In case of emergency, the banks in general act more flexibly than in normal times. Different solutions were told by interviewees in different banks, such as having more meetings at a time, giving more authority to lower levels to decide, having some emergency committees if necessary, prioritizing the decisions based on the urgent situation, and accelerating the preparation of documents needed for decision-making.

In response to the Covid-19 crisis, the banks acted almost the same way. They shifted to the home office where possible, continued their meetings in virtual platforms, digitalization was improved, and more collaboration among employees and managers was put in place. In EXIM, in addition to these actions, they created a Covid committee for the Covid-related operational issues that were not so easy to deal with in a regular operational committee. The banks which were ready with their digitalized and home office facilities before the pandemic could change over to virtual work much faster and more successfully.

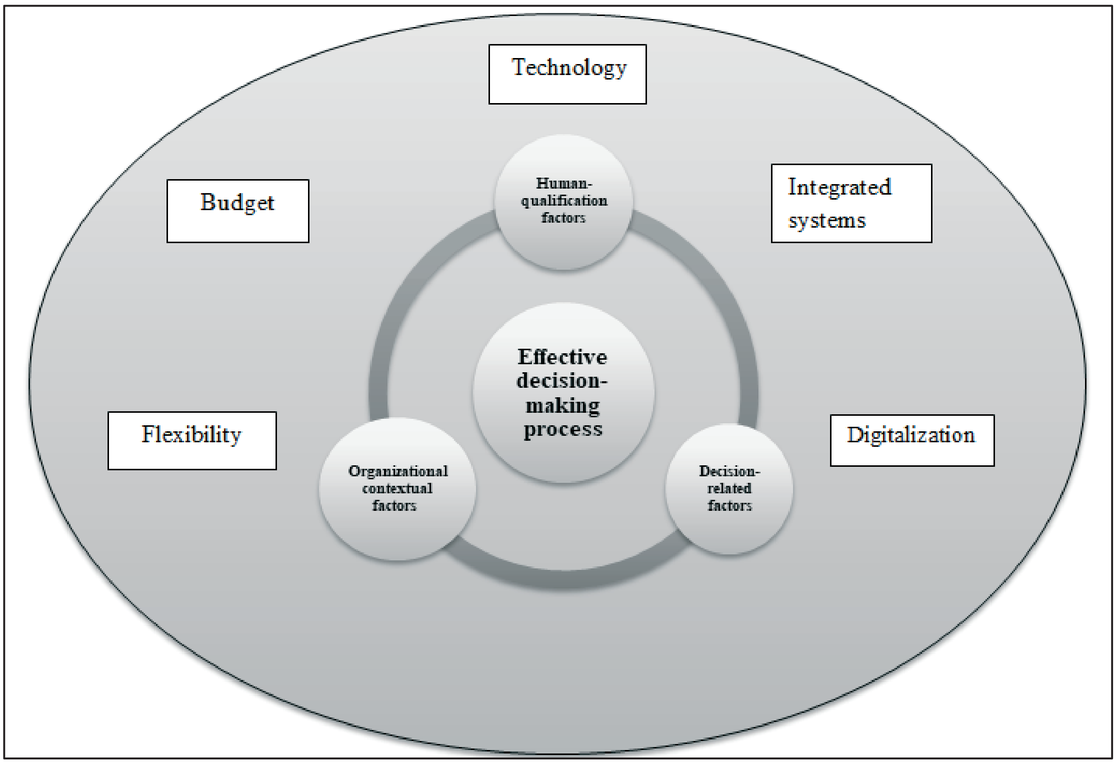
To discuss the effectiveness of decision-making in export credit and financing activities in Hungary, it should be noticed that clearness in every requirement and phase of the decision-making process was mostly mentioned as an influencing factor. This means clearness in information, proposals, rules, and its comprehension, in expectations from banks and clients, etc. The simplicity and clarity in which the purpose of decisions is considered at all phases of decision-making and implementation are highly valued. Access to high technologies, up-to-date facilities, and skilled human resources is essential to keep the balance between clearness and not missing any important points. In addition to competence, being skilled and experienced gives employees the confidence to make decisions. In general, the quality of decisions and the efficiency of the process are dependent on the skilled and experienced decision-makers and other employees and also on the facilities, both of which need a high budget. In 2019, the Human Development Index is reported as 0.85 (the maximum can be 1) for Hungary by the United Nations Development Programme (UNDP). This shows that Hungary has a good human infrastructure and capabilities. Therefore, employees, lower-level managers, and middle-level managers most probably have the ability and are qualified to be involved in the decision-making process. However, as mentioned above, hiring and keeping qualified employees requires a good budget for high incomes and an efficient process to decrease the costs. More clients bring more money. However, complicated regulations, requirements, paperwork, and processes that require too much time lead to losing clients. By decreasing the unnecessary requirements and documents asked from clients, giving more authority to lower levels, and decreasing the existing bureaucracy level, the process can be made faster. Foreign-owned banks asking for approval for some cases from the mother company is another factor that makes the process slower. In addition to faster processes, access to soft information in decision-making will be much higher when more authority is provided to lower levels.

The accessibility of good quality data and information and the ability to analyze it effectively are factors that play a crucial role in the effective decision-making process. To achieve this aim, high technology, digitalization, and integrated IT systems in the organization and even in the industry are a game-changer. In today's business world, access to more artificial intelligence and blockchain technologies should be achieved. In Hungary, banks are not yet accessing blockchain technology.

According to the literature, effective decision-making supports the achievement of business objectives. The meaning of effectiveness in commercial banks and Eximbank is different. As mentioned above, what is important for EXIM as an export credit agency is to fulfill the requirements defined by the state to support exporters. However, in commercial banks, it is important to increase profitability in addition to meeting the requirements defined by the National Bank of Hungary or other superior organizations. Accordingly, considering the goals and strategies of the organizations is very important in the effective decision-making process.

Based on our results, the factors influencing the effectiveness and efficiency of the decision-making process can be categorized into three categories: decision-related factors, human qualification factors, and organizational contextual factors. These categories are almost the same as the categories given by Hensman and Sadler-Smith (2011) regarding the factors affecting intuitive decision-making in the banking sector. Data, information, time, clearness, and simplicity of the proposals and the decisions made belong to the 'decision-related factors category'. The qualifications-related factors like experience, skills, courage, ability, the willingness of decision-making, and knowledge of the people in the organizations belong to the 'human-qualification factors' category. Finally, the factors like bureaucracy, delegation of decision-making authority, power distribution, hierarchy, goals and strategies, regulations, and laws belong to the category called 'organizational contextual factors'. The three categories are shown in Figure 3.

As shown in Figure 3, some other factors can also influence the quality of decisions and the influence of the three above-mentioned categories on effective decision-making; we call these 'amplifier factors'. These factors are budget level, having some flexibility (in regulations and decision-making approach), technology (ex: artificial intelligence and Blockchain technologies), digitalization, integrated systems, etc. Accessibility to these amplifier factors can create a competitive advantage for the organization in the market.



Source: Own construction

Figure 3. Conceptual framework to describe the factors influencing the effective decision-making process in export financing services by banks in Hungary

One factor can be a limitation in one situation and in another situation it can be a factor to increase the effectiveness and efficiency. What really matters is in what context it is used and how it is implemented. Keeping the balance between all the elements and not just putting all energy and attention into some factors is essential. None of the factors should be sacrificed for others. All of them should be taken into consideration and the balance among them should be kept. The key is balance. Each of the factors influences the other ones. It is like a chain where the elements have an effect on each other.

CONCLUSIONS

Based on the large share of the export income in the GDP of Hungary, research on export-related topics is crucial. As export financing is very important in the growth of exports and decision-making in this area is very crucial, this study aimed to discuss the decision-making in export financing services provided by banks in Hungary. The case studies are EXIM and eight commercial banks.

The result of most of the case studies shows that the decision-making procedures appear to have a relative inclination toward centralization and bureaucracy. The decision-making is in the shape of a committee at higher levels and the lower levels with limited authority often employ the four-eyes principle. In banks in Hungary, there is no individual decision-making. The groups of decision-making are all formal. They mostly follow a participative leadership style except for a few banks with a leadership style between autocratic and participative and one bank (foreign-owned bank) with the laissez-faire leadership style. The regulations in Hungary are very strict and need to be followed very carefully. If there is some flexibility for example in urgent cases or crisis situations, then it should be included in the regulations and decision-makers should follow them.

We categorized the factors that directly influence effective decision-making into three groups: decision-related factors, human qualification factors, and organizational contextual factors. In addition, some amplifier factors can influence the quality of these three categories. These factors are budget level, flexibility, technology, digitalization, integrated systems, etc. A competitive advantage can be achieved by amplifier factors in addition to the decision-related factors, human-qualification factors, and organizational contextual factors. In addition, to be effective, the interests of both the risk management side and front office side should be taken into consideration.

We recommend that the amplifier factors should be given more attention. Among them, flexibility is an issue that is not followed in many Hungarian banks. That probably is due to point of view of the political system in the country and EU that defines the external regulations for the banks. Having flexible regulations provides the managers with the possibility to choose a style that is suited for the situation they are in. The style can be based on the nature of decisions, the amount of information they have to ask from clients, the time they may spend on the decisions, the authority they may delegate to the lower levels, the special consideration they may apply for some clients, and so on. For example, when the case is urgent with a previous reliable client, they should be able to make some shortcuts to keep the client but in a case of a crisis, they may need more information and more time for the decision. More group decision-making in the shape of committees or large groups at higher levels can be suitable when there is time for a decision. But when there is an urgent case then the individual or four-eyes approval methods may be more suitable, especially when the question of a decision is more generic. In addition, as the larger the size of an organization, the more efficient it may be to give more authority to the lower levels with a larger allowed credit limit. By giving authority to the lower levels there is the advantage of using soft information besides hard information. Although, as mentioned in the literature section, the four-eyes principle may not be an effective way to avoid corruption, it is useful for building in different opinions and more controls. What is important is to have the flexibility to be free to choose the best option possible at a particular time. Another issue that should be taken into consideration in Hungarian financial institutions is access to blockchain technology, which can help in gathering a large amount of information in a shorter time, which would help to satisfy both the risk management side and the front side of the organization.

For future studies, we are planning to compare the issue in Hungary with data from another country.

REFERENCES

AGOR, W. H. (1989). Intuition in organizations: Leading and managing productively. Sage, Newbury Park, CA.

ARGYRIS, C. (2001). Interpersonal barriers to decision making. In Harvard Business Review Press (ed) Harvard Business Review on Decision Making. Boston: Harvard Business School Press, 59-95.

BANAI, A., KIRÁLY, J. AND NAGY, M. (2010). The demise of the halcyon days in Hungary: "foreign" and "local" banks–before and after the crisis. BIS Papers chapters, in: Bank for International Settlements (ed.), The global crisis and financial intermediation in emerging market economies, 54, 195-224.

BARTOL, K., MATTIN D., TEIN, M., & MATTHEWS, G. (1998), Management: a Pacific Rim focus, McGraw-Hill, Sydney.

BROUSSEAU, K. R., DRIVER, M. J., HOURIHAN, G., & LARSSON, R. (2006). The seasoned executive's decision-making style. Harvard Business Review, 84(2), 110.
CSÁKI, C., & GELLÉRI, P. (2005). Conditions and benefits of applying decision technological solutions as a tool to curb corruption within the procurement process: The case of Hungary. Journal of Purchasing and Supply Management, 11(5-6), 252-259.
DAFT, R., & MARCIC, D. (2016). Understanding Management. Tenth edition. Boston: Cengage Learning.
DRUCKER, P. F. (2001). The effective decision. In Harvard Business Review Press (ed) Harvard Business Review on Decision Making. Boston: Harvard Business School Press, 1-19.
Exports of goods and services (% of GDP). World Bank. Retrieved: March 2022 https://databank.worldbank.org
GLOBE project. Retrieved: March 2022: https://globeproject.com/results#list
GODBILLON-CAMUS, B. AND GODLEWSKI, C.J. (2005). Credit risk management in banks: hard information, soft information and manipulation. MPRA Paper 1873, University Library of Munich, Germany. https://doi.org/10.2139/ssrn.882027
LAMBSDORFF, J.G. (2015). Preventing corruption by promoting trust: insights from behavioral science. Working paper. Passauer Diskussionspapiere-Volkswirtschaftliche Reihe, V-69-15
HAMMOND, J.S., KEENEY, R.L. AND RAIFFA, H. (1998). The hidden traps in decision making. Harvard Business Review, 76(5), 47-58.
HASAN, I. AND MARTON, K. (2003). Development and efficiency of the banking sector in a transitional economy: Hungarian experience. Journal of Banking & Finance, 27(12), 2249-2271.
HENSMAN, A. AND SADLER-SMITH, E. (2011). Intuitive decision making in banking and finance. European Management Journal, 29(1), 51-66. https://doi.org/10.1016/j.emj.2010.08.006
HOMOLYA, D. AND BENEDEK, G. (2007). Banki működési kockázat elemzése. (Analysis of operational risk of banks – modelling of catastrophy.) Hitelintézeti Szemle (Review of Credit Institute), 6(4), 358-385.
JÁKLI, G. (2021). Various services provided by EXIM Hungary to help Hungarian export companies enter new markets. Világgazdaság, August 2nd.
KITTISARN, A. (2003). Decision making: being a study to develop a decision-making style to amalgamate best management practice with traditional Thai society and culture. PhD Thesis, Southern Cross University (New South Wales, Australia).
LI, S., BÜHREN, C., FRANK, B. AND QIN, H. (2015). Group Decision Making in a Corruption Experiment: China and Germany Compared. Journal of Economics and Statistics (Jahrbücher für Nationalökonomie und Statistik), 235(2): 207–227.
OECD (n.d.). Export credits work at the OECD. Retrieved: May 2020: https://www.oecd.org/trade/topics/export-credits/
PARIKH, J., NEUBAUER, F. AND LANK, A. G. (1994). Intuition: The new Frontier of management. Blackwell, London.
PINTÉR, É. (2017). Development of Banking Industry in Hungary. International Journal of Economics and Management Systems, 2, 56-65.
RAINEY, H. G. (2003). Understanding and Managing Public Organizations. Third edition. San Francisco: John Wiley & Sons.
REGUERO, B. (2019). Introduction from the Berne Union President. In Berne Union (ed) Berne Union Yearbook 2019. Berne Union Publications, 12-14. Retrieved: May 2020: https://www.berneunion.org/Publications
ROBBINS, S.P., BERGMAN, R., STAGG, I. & COULTER, M. (2000). Management. 2nd edition. Sydney: Prentice Hall.
RONCZ, G. (2011): Provision of export credit: a successful means for realizing export-led growth. Presentation at the conference "Credit provision for supporting growth of export." EXIM, Budapest, July.
SENYUTA, O. (2013). Delegation and performance. Cerge-Ei Working Paper Series 497. The Center for Economic Research and Graduate Education - Economics Institute, Prague. https://doi.org/10.2139/ssrn.2358526
SIMON, H. A. (1948). Administrative Behavior. New York: Free Press.
SWAMI, S. (2013). Executive functions and decision making: A managerial review. IIMB Management Review, 25(4), 203-212. https://doi.org/10.1016/j.iimb.2013.07.005
TÓTH, T. (2021). The Effects of COVID-19 on the Digital Transformation of the Hungarian Banking Sector. In: New Horizons in Business and Management Studies. Conference Proceedings. Corvinus University of Budapest, pp. 56–64. https://doi.org/10.14267/978-963-503-867-1_06
United Nations Development Programme (UNDP). Retrived: December 2021: http://hdr.undp.org/en/composite/trends
U.S. EXIM BANK. (2019). The U.S. Congress on Global Export Credit Competition report 2019. [online]. Retrieved: May 2020: https://www.exim.gov/news/exim-releases-2018-competitiveness-report
VANEK, B. (2009). A gazdasági válság hatása a vállalatokra a kintlévőség-kezelés szemszögéből, avagy a hitelbiztosítás szerepe a válságban és az azt követő fellendülésben. (The influence of economic crisis on enterprises from the point of view of handling receivables, the role of credit insurance during crisis and recovery following it.) May. Website, Bankszövetség (Alliance of Hungarian Insurance Banks).

VÉRTESY, L. (2013). Kockázatkezelés és biztosítás (Risk handling and insurance). Gazdaság és Társadalom (Economy and Society), 5(1).
VROOM, V.H., & YETTON, P.W. (1973). Leadership and Decision-making. Pittsburgh: University of Pittsburgh.
WIEDER, G. (2020). Impacts of COVID-19 on the Hungarian banking sector. Website, KMPG. Retrieved: July 2022. https://home.kpmg/hu/en/home/insights/2020/05/impacts-of-covid-19-on-the-Hungarian-banking-sector.html

APPENDIX

Interview Questions

1. Interview questions asked from EXIM interviewees in 2019:

1. What is the approach of decision-making in the organization? Do you think the current decision-making approach in the organization is effective? And what is your suggestion for that?
2. What is your opinion about effective decision-making and what are the important factors to have an effective decision-making process?
3. To what extent group decision-making is used in the organization? Do you think the group decision-making is more effective for this organization's structure or individual decision making? To what extend do you think group decision-making can be efficient? Please explain how it is done in the organization?
4. In what condition can the decision-making approach change? (Please explain both permanently and temporary)? Who will decide about the changes?
5. By reading the strategies of the organization during 2017-2021, mostly it can be understood that the organization care about supporting the export rather than being profitable. Is it true? Please explain the details about this kind of decisions. Also please explain to what extent is the organization is dependent on Governmental budget?
6. What are the strategic decisions to avoid big loss during the possible financial crisis? Do you think the efficiency of the information systems can be effective in this area? What is the strategy for information systems and technology used in the organization?
7. What is the decision-making approach and solutions in urgent situations in EXIM?

2. Interview questions asked from all the interviewees in 2021:

1. What are the decision-making (DM) approaches & methods in the organization? What types of decisions are delegated to lower-level members in your organization? Are middle-level managers involved in developing the strategy of the organization?
2. What type of leadership is characteristic for the organization? (e.g. autocratic, participative, laissez-faire)? In your opinion, is this method effective? Can you mention examples from the last 3 years when the decision-making system resulted in failure, or led to problems in the organization? How can the decision-making process be more effective in the organization? Who is responsible in the organization for initiating changes in the decision-making system?
3. Which factors do you think are important for effective decision-making? To what extent are decision-making processes prescribed in written document? Is there possibility for decision-makers to implement changes in the decision-making process?
4. Is there a cause-and-effect relationship used in evaluation the efficiently of the decisions made? Are these measure quantitative or qualitative (or a combination of the two) types?
5. How frequently are evaluations in the organization in relation to efficiency of decision-making? If the answer is yes, then who can initiate the evaluation? Are the evaluations made in regulated intervals, e.g. annually, or biannually, or in five years intervals. Is this evaluation part of the strategy evaluation and control process?
6. What are the important factors for implementing the decisions effectively? What types of measures are used? Is the evaluation person-specific, or the unit of evaluation is a department or a directorate?
7. To what extent are the rules flexible, that can it be adapted to the specific conditions of the situation? What are the limitations in the way of effective decision-making?
8. What type of motivation means are used which intend to realize higher level of efficiency?

9. Is decision-making based on the goals and strategies of the organization? And how can be more in the same direction? What system is used in the organization to specify the requirements from lower level employees/managers (e.g. Balanced Score Card)?
10. To what extent is group decision-making used in the organization? Are there formal decision-making groups, or ad.hoc emerging informal groups? And what is its benefit? Are there intentions to increase the reliance on group decision-making?
11. In what condition can the decision-making approach change? Who is entitled to empower lower-level individuals/groups with decision-making responsibilities? How frequently were the decision-making approaches changed in the last five years?
12. What is the approach of the organization when there is a need for urgent DM or in a crisis time? Who is entitled to specify the new approach in case of regular operative decisions of credit decision or insurance solutions?
13. Your suggestions about improving the system? Is there a need to change the system in a short run, or can it be decided parallel with strategic changes or developing a new strategy?