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# Key Success Factors of a Shopping Mall Project: Creditors Perspective in Serbia

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**Abstract:**

**Research question:** The study researches the key success factors of a shopping mall project (SM) from the perspective of creditors in Serbia. **Motivation:** In Serbia, the retail landscape has seen a continuous increase in the number of SMs over the recent years. To support further development, project finance (PF) plays a significant role as an adequate financing structure for such projects. **Idea:** Existing knowledge highlights the importance of different factors for the sustainability of SM operation in the long run, describes their impact on project success, or offers potential solutions to a specific business problem. On the other hand, a question may be raised regarding the creditor's ability to assess the quality of different investor decisions when deciding to finance a concrete project. **Data:** Research is based on the review of papers published in relevant international journals, while the presented case study is a real-life example from banks' business practice. Relative significance of different factors from the creditors' perspective was established and confirmed by means of a survey among bank professionals. **Tools**: Research findings are derived from a case study and simple empirical research conducted among bank professionals in Serbia. **Findings:** Results show that the most important elements of the project strategy which creditors consider relevant for project success in the long run are location and tenant mix. **Contribution:** Research results contribute to a better understanding between investors and creditors and may shorten the time needed for the credit approval process.

**Key words:** Project strategy, Project finance, Shopping mall attributes, Shopping mall location, Tenant mix

**JEL Classification**: G21, G32

## 1. Introduction

Shopping malls (SM) attract increasing public attention because they are not only a shopping venue, but also an important aspect of the lifestyle of a city's residents. Apart from a purely consumer aspect, shopping in malls has a social component since a SM is considered an important and convenient venue for different forms of social interaction (Kunc et al., 2022).To ensure return visits of customers, SMs should meet their needs and expectations (Anselmsson, 2016).

Serbian retail market is characterized by an increasing number of SMs of various formats. This positive trend is expected to continue as the investors are attracted by a high occupancy rates and opportunity to position themselves in the market with positive outlook (CW-CBS, 2020). Real estate development requires huge capital and SMs are no exception. To support further development of SMs, project finance (PF) plays a significant role as an adequate financing structure for real estate projects (Gatti, 2013).

PF is a funding method in which the lender looks primarily to the revenues generated by a single project as the source of repayment and as loan collateral (BIS, 2020). PF is non-recourse financing that is entirely dependent on project performances. The main characteristics of PF in Serbia, such as lender exposure to single project, special purpose vehicle structure, importance of investor reputation, and lender aversion to speculative projects are outlined in Spasenic et al. (2019).

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Extensive literature deals with factors influencing the attractiveness of SMs and consequently the number of buyers attracted (Gomes & Paula, 2016). Existing studies provide certain guidelines for investors on how to create sustainable business in the long run. According to our best knowledge, there is no research on key success factors from the perspective of creditors financing SM development. Also, existing studies do not investigate if the creditors evaluate all or some of the elaborated success factors.

In this context, the main contribution of the present study is the expansion of the existing literature on the topic from the new perspective. The study intends to shed light on key success factors of SM projects from the perspective of creditors in Serbia. The following research question will be answered to bridge the identified research gap:

What key success factors of SM projects are analysed by creditors during the credit approval process?

This study represents a pioneering research on this topic. The starting point of our study is the existing literature with the focus on the factors influencing SM ability to attract as many visitors as possible to be profitable. Those factors are examined from the perspective of the SM investor or the SM management. Having in mind that those factors influence SM attractiveness and financial performance in a positive manner, we assume that the same factors are of utmost importance for creditors. Finally, research findings are derived from a case study and simple empirical research conducted among banks in Serbia.

Following the introduction, the second part provides a theoretical background and literature review. The third part of the paper outlines a case study, while the fourth part presents the research design and research results. The final, fifth part of the paper includes the concluding considerations and recommendations for further research.

## 2. Theoretical Background And Literature Review

In this section we will elaborate on the most relevant SM success factors in existing literature. Literature review by Gomes & Paula (2016) shows that architecture, mall internal orientation, parking, quality of products and services and tenant mix are the most important attributes of successful SMs. According to Pantano & Dennis (2017), the main drivers of SM success are merchandise, store atmosphere, service quality, accessibility, and layout store format. Some more recent research confirms those findings (Idoko et al., 2019).

Initial research focused on the choice of location for SM development (for example, Reilly, 1931). Levy & Weitz (2007) argue that retailers may be able to develop a sustainable competitive advantage through location strategy. When choosing the location, a large number of factors need to be analysed and considered, including, but not limited to the type of the SM, accessibility, physical barriers, competition, customer purchasing power and commuting time (Wu et al., 2019). However, Gahinet & Cliquet (2018) state that the choice of location is important for frequentation, but it is not sufficient to generate customer loyalty.

Nebati & Ekmekci (2020) found that tenant mix is the most important factor for SM performances. Calvo-Porral & Levy-Mangin (2018) and Dias (2020) also confirm the importance of adequate tenant mix for attracting customers. According to Paul (2017) consumers prefer to shop in large malls because of the availability of the latest, well-known brands and discounted prices, which implies that service quality is not a primary factor. In addition, Hamzah (2015), Zhang et al. (2020) and Xu et al. (2022) state that an optimal tenant mix positively contributes to gross rental income and retail sales income. Lv & Wang (2020) proposed a nonlinear optimization model for tenant mix layout but stated that their model is not intended to replace the decisions of the SM management. Contrary to traditional portfolio theories, Ambrose et al. (2018) found that the likelihood of mortgage default increased as tenant diversification increased. Hence, creditors should favour real estate projects with a less diversified tenant portfolio.

The quality of SM service is an additional important element. According to Sit et al. (2003), SM services comprise personal and communal services. Personal services refer to knowledge, hospitality and dedication of the staff working in the SM (Teller & Elms, 2010; Singh & Sahay, 2012), while communal services refer to the availability of different infrastructure amenities such as elevators, escalators, disability ramps, toilets and adequate signs facilitating visitor orientation (Teller & Elms, 2010). Both types of services represent an "augmented product" that supports merchandising (core product) and also add value to the total shopping experience (Sit et al, 2003).

Entertainment offered by SMs is increasingly gaining in importance. As argued by Sit et al. (2003), entertainment can be defined as a set of amenities offered by malls comprising three attributes essential to the SM image: specialty entertainment, special event entertainment, and food. The specialty entertainment is permanently available (e.g., movie theatres or children's playrooms), while the special event entertainment is offered occasionally (fashion shows, concerts, promotions, etc.).

Against the background of universal digitalisation which inevitably affects purchasing habits of the population, researchers' attention is increasingly focused on online purchase and its impact on different, conventional forms of shopping in physical facilities (Hagberg et al., 2017; Pantano & Priporas, 2016). By combining all the above-mentioned elements, the investor should ensure SM attractiveness despite the negative influence of digitalisation on this form of purchase.

## 3. Case Study

The purpose of this case study is to identify and quantify the influence of success factors on SM financial performance. Based on the project description given in Table 1, we have prepared pro-forma financials and discussed some of the possible implications.

**Table 1:** Project description

| Item | Description |
|---|---|
| Investor | The investor and founder of the project company is an EU company which is a professional real estate developer. At initiation project company assets consist exclusively of a land lot used for object construction. |
| Location and existing competition | The SM is in Central Serbia. The city has a population of approximately 100,000 inhabitants including the urban core of 60,000 and suburban municipalities of 40,000 inhabitants. The existing offer includes a single SM in the central city street, which cannot be considered a modern facility due to its size and assortment of shops limited to local sellers, without globally recognised brands. Lack of modern SMs in the area indicates a good market position. Compared to the malls in big cities, the estimated market potential spreads over a larger geographical area (up to 30 km), due to the lower population density and lower competition in secondary towns. |
| Project metrics | The SM is of a simple, symmetrical square shape, with the total gross construction area of 5,500 m$^2$ and net leasable area of 4,895 m$^2$. All tenants are to be located at the same level, on the ground floor, with 108 exterior parking lots available to consumers. Projected annual operating expenses are 95,000 EUR. The SM building is the main immovable collateral for the creditor. |
| Tenant mix | The tenant mix comprises Maxi (anchor tenant), DM drogerie (pharmacy), Deichmann, Takko fashion, LC Waikiki, Koton (fashion retailers), Planeta sport, Intersport (sportswear retailers) and two cafés. The investor preleased 90% of the net leasable area. |
| Credit request | The investor applies to the bank seeking PF for construction of the SM. The projected budget is 5,050,000 EUR. The equity finance is 1,000,000 EUR invested up front into the acquisition of the land plot while the SM construction is to be financed from a long-term investment loan. The loan amount is 4,050,000 EUR split between the balloon portion of 2,250,000 EUR and amortizing portion of 1,800,000 EUR. The fixed interest rate is 4% annually while the loan tenure is 10 years. For balloon portion only interest is payable during the loan tenure. Consequently, after 10 years the investment loan outstanding will be equal to the balloon of 2,250,000 EUR. Loan repayment plan is prepared using MS Excel. |
| Rental and service charge income | The weighted average monthly rent and service charge are 8.30 EUR/m2 and 1.50 EUR/m2 respectively. The expected occupancy rate is 90%. Consequently, the annualized rental income is 438,788 EUR (i.e., $8.30 \cdot 4{,}895 \cdot 0.90 \cdot 12$) and the annualized service charge income is 79,299 EUR (i.e., $1.50 \cdot 4{,}895 \cdot 0.90 \cdot 12$). the rental income and service charge income remain flat during the forecasted period. |
| Other quantitative inputs | The SM is depreciated linearly with annual depreciation rate of 2.5% resulting in 101,250 EUR annual depreciation cost (i.e., $4{,}050{,}000 \cdot 0.025$). the collateral market value (CMV) under assumption as if completed is 6,000,000 EUR and remains unchanged during the forecasted period. Zero inventories, trade receivables, trade payables, and dividend payments. The project is naturally hedged against foreign currency risk – both rental income and bank loan are indexed in EUR and payments are monthly. |
| Ratios | Loan to Value ratio (LTV) = Outstanding loan amount / Collateral value<br>Debt service coverage ratio (DSCR) = (Net profit + Interest expenses + Depreciation) / (Interest expenses + Principal repayment). |

The project profitability and liquidity are forecasted in Table 2, while the pro forma balance sheet is presented in Table 3. Financial forecasts are the basis for creditor assessment of project liquidity by comparing nominal amounts in each project year to identify liquidity gaps and liquidity buffers.

**Table 2:** Project profitability and liquidity forecast

In EUR

| No. | Description | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|---|
| 1 | Rental income | 438,788 | 438,788 | 438,788 | 438,788 | 438,788 |
| 2 | Service charge income | 79,299 | 79,299 | 79,299 | 9,299 | 79,299 |
| 3 | Operating expenses | (95,000) | (95,000) | (95,000) | (95,000) | (95,000) |
| 4 | Depreciation | (101,250) | (101,250) | (101,250) | (101,250) | (101,250) |
| 5 | Earnings before interest and taxes (1+2-3-4) | 321,837 | 321,837 | 321,837 | 321,837 | 321,837 |
| 6 | Interest expenses | (159,281) | (153,193) | (146,858) | (140,265) | (133,403) |
| 7 | Earnings before taxes (5-6) | 162,556 | 168,643 | 174,979 | 181,572 | 188,434 |
| 8 | Tax (7·15%) | (24,383) | (25,297) | (26,247) | (27,236) | (28,265) |
| **9** | **Net profit** (7-8) | **138,173** | **143,347** | **148,732** | **154,336** | **160,169** |
| **10** | **Net profit margin** [9/(1+2)] | **27%** | **28%** | **29%** | **30%** | **31%** |
| 11 | Cash available for principal repayment (9+4) | 239,423 | 244,597 | 249,982 | 255,586 | 261,419 |
| 12 | Principal repayment | (149,409) | (155,496) | (161,831) | (168,424) | (175,286) |
| **13** | **Net cash flow (11-12)** | **90,014** | **89,101** | **88,151** | **87,162** | **86,132** |
| **14** | **DSCR** [(9+6+4)/(12+6)] | **1.29x** | **1.29x** | **1.29x** | **1.28x** | **1.28x** |
| **15** | **LTV** (loan outstanding / CMV) | **0.65** | **0.62** | **0.60** | **0.57** | **0.54** |

**Table 3:** Pro forma balance sheet

| Assets | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Land | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| SM | 4,050,000 | 4,050,000 | 4,050,000 | 4,050,000 | 4,050,000 |
| Accumulated depreciation | (101,250) | (202,500) | (303,750) | (405,000) | (506,250) |
| Cash | 90,014 | 179,115 | 267,265 | 354,427 | 440,559 |
| **Total** | **5,038,764** | **5,026,615** | **5,013,515** | **4,999,427** | **4,984,309** |

| Equity and liabilities | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Equity | 1,138,173 | 1,281,520 | 1,430,251 | 1,584,587 | 1,744,756 |
| Bank loan | 3,900,591 | 3,745,095 | 3,583,264 | 3,414,839 | 3,239,553 |
| **Total** | **5,038,764** | **5,026,615** | **5,013,515** | **4,999,427** | **4,984,309** |

According to project description and its projected performances, it is possible to analyse the project dependency on key success factors. The main conclusions are:

1. The project location strongly influences the future demand and SM size. Apart from the size of the population driving the demand, the location determines customers' purchasing power which depends on the average income per capita and the structure of consumption. This is confirmed in Serbia since the biggest SMs are in Belgrade as a prime location with above average purchasing power (Statistical Office of the Republic of Serbia, 2021). The SM size directly determines the project cost that may impact the loan amount depending on equity contribution.
2. The location strongly influences the tenant mix. SMs located in areas where inhabitants have below-average income should have a mix of tenants whose average prices match the purchasing power of the local population. For instance, Inditex as one of the most attractive clothing brands in the world is present in only two cities in Serbia, while Deichmann and LC Waikiki as more price affordable retailers are present in 23 and 17 cities, respectively (CW-CBS, 2020).
3. The location and tenant mix strongly influence the rent (Hamzah 2015.; Zhang et al., 2020; Xu et al. 2022). An average rent in prime SMs in Serbia is significantly above the average rent in small SMs and retail parks. In 2020 average rent in prime SMs was 20-28 EUR/m$^2$ compared to 9-12 EUR/m$^2$ average rent in retail parks (Data Investment, 2020; CW-CBS, 2020).
4. The location influences project costs and operating expenses. The acquisition cost of land plot needed for SM construction, cost of construction permit, communal fees and taxes and other costs associated with project development may vary among different municipalities. Also, there are some operating expenses that are location dependent. For example, labour costs or property tax may significantly vary between municipalities (Republic Geodetic Authority, 2021).

5. The location influences the market value and the marketability of collateral. A collateral can increase the security of repayment and reduce the need to monitor the borrower and the associated costs (IMF, 2020). A high quality collateral *(i)* has stable value, *(ii)* is liquid, and *(iii)* can be easily enforced. The first and the second characteristics are location dependent (Republic Geodetic Authority, 2021) while the third depends on collateral legal aspects (Schuijling et al., 2019).
6. Pro forma financials indicate that creditors are unable to quantify the impact of various success factors that contribute to SM attractiveness. For instance, the quality of SM service, entertainment offered, quality of labour and some other factors from Section 2 remain out of the detailed analysis.
7. The SM performances are not strongly dependent on working capital management. This is particularly the case if rent agreements with tenants are covered by bank guarantees.
8. The DSCR above 1.20x confirms satisfactory liquidity of the project (Naumenkova et al., 2020) providing >20% nominal liquidity buffer for loan repayment in each year.
9. LTV is commonly used as indicator of financial leverage and credit risk of the transaction (Bian & Lin, 2018; Lin 2014). In the case of default, a higher LTV means that collateral is less likely to cover the outstanding loan balance at a foreclosure sale. Decreasing LTV shows improving collateral position, but LTV is strongly dependent on the assumption that CMV remains flat during the forecasted period.

The discussion presented above may be incomplete and biased since it displays only a quantitative output of credit risk analysis while a credit application and a credit risk assessment may contain additional qualitative judgments. With the aim to empirically investigate the importance of the identified success factors for creditors when making the final credit decision, we conducted a research presented in the following section.

## 4. Creditors' attitudes towards critical success factors of shopping mall projects in serbia

### **4.1** Survey design

The survey is conducted using an online questionnaire in a tabular form sent to bank employees. The listed factors are based on literature review and conclusions from the presented case study. Banks and respondents were selected as follows:

1. Based on an Internet search of web pages of top ten banks by their size we eliminated the banks which do not offer PF as a separate banking product,

2. Based on an analysis of balance sheets and notes to financial statements of SMs of various formats we identified banks which financed this type of projects.

The instructions for filling in the questionnaire were as follows: Analyse the SMPF application. Assign each of the given factors a grade 0 to 5. These grades indicate the extent to which the given factors are analysed in the loan application process for SMPF or in refinancing of the existing loan. The scale for assessment of individual factors was the following:
**0** – Not analysed at all, i.e., the factor is not considered relevant in the loan approval process and PF decision-making.
**5** – Analysed in detail, i.e., the factor is considered highly relevant in the loan approval process and PF decision-making.

A total of 25 responses were received from five different banks. As presented in Table 4, these banks account for more than 50% of the market share. The survey included 10 relationship managers, 11 credit risk managers and 4 credit restructuring managers. The received responses reflect the professional opinions of participants and do not necessarily reflect the bank's credit policy in PF.

**Table 4:** List of five banks whose employees participated in the survey

| Bank | Total Balance Sheet assets, net (in 000 RSD) | % market share |
|---|---:|---|
| Banca Intesa a.d. Beograd | 761,325,471.00 | 15.43% |
| OTP Banka Srbija a.d. Novi Sad | 640,035,884.00 | 12.97% |
| Unicredit Bank Srbija a.d. Beograd | 530,289,664.00 | 10.75% |
| Komercijalna banka a.d. Beograd | 484,044,572.00 | 9.81% |
| Erste Bank a.d. Novi Sad | 309,639,239.00 | 6.27% |
| Others | 2,209,864,368.00 | 44.77% |
| Total | 4,935,199,198.00 | 100% |

### **4.2** Results

Based on the received responses, we calculated the average grade for each of the analysed factors and ranked them accordingly. In addition, median, minimum, and maximum grades are calculated. The results are presented in Table 5.

**Table 5**: Relative significance of factors for the assessment of credit potential of PF of SM construction.

| No | Factors potentially determining SM success | Average grade | Mode | Median | Min | Max |
|---|---|---|---|---|---|---|
| 1 | SM location | 4.92 | 5 | 5 | 4 | 5 |
| 2 | Anchor tenant | 4.80 | 5 | 5 | 4 | 5 |
| 3 | Pre-agreed rent in preleasing | 4.76 | 5 | 5 | 4 | 5 |
| 4 | Preleasing contract (firm/soft contract; security for rent payment, penalties in case of contract termination and notice period) | 4.72 | 5 | 5 | 4 | 5 |
| 5 | Catchment area | 4.68 | 5 | 5 | 4 | 5 |
| 6 | Competition | 4.64 | 5 | 5 | 3 | 5 |
| 7 | Investor's reputation and experience | 4.56 | 5 | 5 | 4 | 5 |
| 8 | Tenants and their financial status | 4.48 | 5 | 5 | 3 | 5 |
| 9 | Size (construction measures) of the SM and whether it matches potential demand | 4.44 | 5 | 5 | 3 | 5 |
| 10 | Tenant mix (brands, price range) and whether it matches potential demand | 4.40 | 5 | 5 | 2 | 5 |
| 11 | Purchasing power of potential visitors of the SM | 3.96 | 4 | 4 | 2 | 5 |
| 12 | Availability of entertainment amenities (playrooms, movie theatres, etc.) | 3.28 | 3 | 3 | 0 | 5 |
| 13 | Availability of food and beverages (restaurants, cafeterias etc.) | 3.16 | 2 | 3 | 0 | 5 |
| 14 | SM security for visitors | 3.12 | 4 | 4 | 0 | 5 |
| 15 | SM interior (layout, lighting, ease of moving inside the SM, escalators, elevators) | 3.08 | 2 | 3 | 0 | 5 |
| 16 | Preferences of potential consumers (tastes, habits, expectations) | 3.04 | 3 | 3 | 0 | 5 |
| 17 | Exterior (architecture) of the SM | 2.72 | 2 | 3 | 1 | 5 |
| 18 | Shopping trends (development of online sale and its impact on traditional sale channels) | 2.68 | 3 | 3 | 0 | 4 |
| 19 | SM accessibility for persons with disabilities | 2.04 | 3 | 2 | 0 | 5 |
| 20 | Quality of the future service (hospitality and expertise of the sale staff, availability of information etc.) | 1.48 | 0 | 2 | 0 | 3 |

Based on the results obtained, we may derive the following conclusions:

1. From the creditors' viewpoint, the most important factors which determine SM success and which are analysed in detail in the loan approval process are the location of the SM and characteristics of the largest tenant.

2. Following are the factors directly associated with the *(i)* choice of location – catchment area, competition, purchasing power of potential visitors and *(ii)* tenant mix – level of agreed rent, preleasing contracts, and tenants' financial status.

3. Factors with more tangible influence on SM financial performances (e.g., rent level, occupancy rate, purchasing power of prospective customers, etc.) are perceived to be more important than soft factors (e.g., customers' preferences or quality of future services).

4. Moving from the top ranked factors to the lower ranked ones, dispersion of obtained answers increases. This might indicate that creditors have different tools and methodologies to analyse the impact of certain factors on SM performances.

5. Some respondents confirm that certain factors are not analysed at all. The reason might be that the contribution of those factors to SM performance is very complicated to quantify for creditors (e.g., SM security for visitors, SM interior, preferences of potential customers, etc.). Also, a detailed analysis of those factors might be time-consuming and requires additional resources (e.g., market analysis reports or technical reports prepared by third parties) making the credit approval process more complicated and imposing additional costs for both the creditor and the borrower.

The importance of the location and catchment area is confirmed by Wu et al. (2019). Further, Gould et al. (2002) show that a greater presence of anchors in a mall directly increases sales, and consequently the rents of non-anchor stores in a mall. The tenant mix and anchor tenant as contributing factors to retail rents are confirmed by more recent research such as Xu et al. (2022) and Calvo-Porral & Levy-Mangin (2018). The research results are in line with other studies reviewed in the second section of this paper. Due to a lack of literature covering this topic from the creditors' perspective, some of the research results should be challenged in future research.

## Conclusion

The research findings of this study show that the most important elements of an SM project typically analysed by creditors are the choice of location, tenant mix and rent level. Other elements, which undoubtedly impact SM performance remain outside a detailed creditor's analysis. This study confirms that investors and creditors are interested in similar factors, but the creditors do not consider them as equally important.

Therefore, this study expands the existing literature related to the pull factors of SMs that are examined from a new perspective. Research results contribute to a better understanding between investors and creditors and may shorten the time needed for the credit approval process. When requesting project financing, investors should provide detailed information about project characteristics that are of greatest importance for creditors.

This study reveals that creditors omit certain factors that may significantly influence SM financial performances. For instance, the development of online sale and its impact on traditional sale channels does not attract much attention during the credit approval process. We believe that this factor deserves more attention in the era of the 4th industrial revolution, especially since the financing of SM development requires a long-term financial commitment by creditors.

This study is not without limitations. It is based on the experience of banks operating in the Serbian market and responses of only 25 professionals. Therefore, the conclusions are cautionary. This limitation is partially mitigated by the fact that local banks operate in compliance with the group-wide credit policy, especially in case of more complex financial structures such as PF. However, it remains an open question to what extent the Group's credit policy is relativized to adjust to the local markets.

These limitations leave room for future research which should focus on comparing PF practices of banks operating in the neighbouring countries. Additional efforts should be invested in exploring creditors' familiarity with different trends that gain importance against the background of the 4th industrial revolution. Conventional approaches to PF become unsustainable in the long run, which calls for the development of a new methodology for PF credit risk assessment in the era of digitalisation, e-business and online sale.

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