UNIVERSITY OF LJUBLJANA
FACULTY OF ECONOMICS

MASTER'S THESIS

DEVELOPMENT OF THE STOŽICE SHOPPING CENTRE IN A PROJECT FINANCE SCHEME

Ljubljana, June 7th, 2018 IVAN BARIŠIĆ

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LIST OF ABBREVIATIONS

CAPEX – Capital expenditures

CAPM – Capital asset pricing model

DCF – Discounted cash flow

DSCR – Debt service cover ratio

EU – European Union

GLA – Gross leasable area

HML – "High [book-to-market ratio] minus low"

ICSC – International Council of Shopping Centres

NATO – North Atlantic Treaty Organization

NLA – Net leasable area

NOI – Net operating income

P&L – Profit & loss statement

PPP – Public-private partnership

SMB – "Small [market capitalization] minus big"

SPV – Special purpose vehicle

UN – Unated Nations

WACC – Weighted average cost of capital

INTRODUCTION

Športni Park Stožice is the heart of sport in Ljubljana and Slovenia, where mass sport and top sport develop, but also the largest commercial entertainment venue in Slovenia. This hybrid (multi-purpose or multi-use) sports complex, located in Bežigrad, district on the north of the city centre, right next to the highway bypass, includes a soccer stadium, a multipurpose arena, and a large underground shopping centre, which is covered by a public sports park. Underground parking garage is also part of the development. The shopping centre, a development project in a distress situation, is presented in this thesis, from a real estate development perspective in a project finance scheme.

This entire development is the result of the public-private partnership (PPP) between the city of Ljubljana and a development company, that eventually, after the completion and successful opening of both the stadium and the arena in August 2010, went in a financial distress, unable to complete the development.

Designed by Sadar + Vuga architects, Športni Park Stožice has a total site area of 182,752 m^2, including more in detail, a soccer stadium for 16,000 spectators with a gross building area (GBA) of 24,614 m^2, a multipurpose arena for 12,000 spectators with a GBA of 14,164 m^2, an underground parking garage with around 4,000 parking places, and a shopping centre with a GBA of 80,197 m^2, and net leasable area (NLA) of 53,353 m^2. The public sports park – recreational park landscape, located on top of the shopping centre, has a total floor area of 143,973 m^2. This very challenging NLA/GBA ratio of 0.67 is a trigger for a holistic approach in the future both architectural and interior design, and expecialy tenant layout analysis and definition.

Due to the concentration of various spontaneous and programmed activities, as well as sports and entertainment events attracting people of all ages and interests both during the daytime and in the evenings, Športni Park Stožice – soccer stadium and multipurpose arena, since 2010 becomes one of the major focal points of Ljubljana's urban life, with the crater of the football stadium and the shell of the sports hall on the park's plateau as two tuned icons of the new Ljubljana. At the same time, the shopping centre, still unfinished, represents a valuable opportunity, that blended with the existing facilities, is able to become an important shopping, but also lifestyle destination point in Ljubljana, Slovenia, and moreover in a wider catchment area.

At first sight, on one hand, current GDP growth, and increasing number of tourist visits (and number of overnight accommodations) in Ljubljana, would recommend the completion of the development in the near future. On the other hand, Slovenia has one of the highest shopping centre gross leasable area (GLA) per 1,000 capita in Europe. As Ljubljana retail market is close to saturation, every new development need to follow a focus differentiation

strategy. Copying the existing formats and contents, is not an option on a such mature market.

In order to establish is there a room for another development of this size in the near future in Ljubljana, this thesis is following a methodologically structured approach, that is an industry standard for a feasibility study – highest and best use analysis.

The two main topics – research subjects of this master's thesis are real estate development and project finance. At first two different processes, but when blended, able to mitigate project risks and outcomes – success in an optimal way. In this thesis they are presented as complementary processes – "two sides of the same coin".

Real estate (or property) development process represents the improvement of raw land or property, and is a highly creative process in which physical ingredients such as land and buildings are effectively combined with financial and marketing resources. At the end is created an environment in which people live, work, and play (Peca, 2008). As such, real estate development it is also a risky activity: development binds large amounts of financial capital into a fixed asset while it is not granted that the proceedings (benefits) will be higher than the investment (costs). The financial success depends both on uncertain investment costs and uncertain revenues (net operating income) and in order to be successful, up-front analysis and detailed planning are the keys to success.

Project finance is the structured financing of a specific economic entity – the SPV, or special purpose vehicle, also known as the project company. This project company is created by sponsors using equity or mezzanine debt and for which the lender considers cash flows as being the primary source of loan reimbursement, due to the fact that assets represent only collateral. It is basically a function of the project's ability to repay the debt contracted and remunerate capital invested at a rate that is in line with the degree of risk inherent in the venture concerned. Project finance allows for a higher level of risk compared to corporate finance. Project risks are allocated equitably between all parties involved in the development, with the objective of assigning risks to the contractual counterparties best able to control and manage them. Accordingly, project finance support a debt-to-equity ratio that could not otherwise be attained. This has a major impact on the return for sponsors involved in financing the development project. Creating a project company makes it possible to isolate the sponsors almost completely from events involving the project, and this is often a decisive point, since corporate financing could instead have negative consequences on riskiness (and therefore cost of capital) for the project sponsor – investor, if the project does not make a profit or fails completely (Gatti, 2011).

The fundamental research question is to define if Stožice shopping centre is a viable project and how to properly finance this development. Finding the right answer to this question is very challenging, due to the fact that our framework allow us to make assumptions and proposals – scenarios, based on collected data, and then using analytical tools coming to

financial implications, which need an interpretation. This interpretation of the financial implications will give the answer on the above mentioned research question. Carrying out a feasibility analysis is therefore one of the most critical steps in the decision-making process.

The basic purpose of this thesis is in assessing the feasibility and long term financial viability of the foreseen development strategy – scenarios for Stožice shopping centre, following a structured approach, as outlined below:

a. Present the real estate industry, and the development process.
b. Explore risks in the development process, and the role of flexibility and uncertainty.
c. Present the theory of project finance and investment valuation in the real estate development context.
d. Conduct an analysis of the economic and demographic situation of the catchment area.
e. Investigate market conditions and their potential impact on the development.
f. Propose development strategies based on megatrends and specificity of the site.
g. Perform detail financial analysis, with scenario and sensitivity analysis.
h. Make recommendations interpreting the financial implications.

Sources for writing this thesis were secondary data – relevant domestic and foreign literature, professional publications, information from specialized statistical databases and websites. Numerous scientific-research methods have been used, most important of which are inductive and deductive methods, analytical methods, synthesis methods, classification methods, descriptive methods, compilation methods, comparative methods. The Case study methodology were conducted for the specific development project of Stožice shopping centre.

The thesis is structured in the following way. After a short introduction, in Chapter 1 are presented the real estate industry, the development process, the role of risk, uncertainty and flexibility, and fundamentals of project finance and investment valuation in the real estate development context. In Chapter 2 is discussed the economic and demographic overview of Slovenia, while the project overview is part of the Chapter 3. Two Chapters for deep understanding of the Slovenia's retail market, and possible development strategies for Stožice shopping centre are Chapters 4 and 5. Financial implications are presented in Chapter 6. The final Chapter concludes this thesis and discusses possible recommendations for highest and best use of the development project of Stožice shopping centre.

1 REAL ESTATE DEVELOPMENT PROCESS

1.1 Real estate industry

Unlike many mass production industries, in real estate industry, each project is unique and the development process is a creature of the political process when society has a new opportunity to negotiate, debate and reconsider the basic issues of an enterprise economy – who pays, who benefits, who risks, and who has standing to participate in the decision process (Graaskamp, 1981). The main goal of a real estate developer is to create value (Peca, 2009).

The growing intricacy and sophistication of the real estate industry has led to the need for a deeper understanding of a variety of disciplines – public policy, physical planning, municipal regulation, market research, the legal framework, site appraisal, economic evaluation, financial arrangements, contractual procedures, building design, construction techniques and marketing strategy dimensions of a development scheme, together with a much more professional approach towards the management of projects in terms of time, quality, cost and asset value. For that reason real estate is a thoroughly multidisciplinary field (Ratcliffe, Stubbs & Shepherd, 2009).

To facilitate the study and understanding of property development, several models of the development process have been devised since the mid-1950s. These have been grouped as follows (Healey, 1991):

a. Equilibrium models – assume that development activity is structured by economic signals about effective demand, as reflected in rents, yields, etc. These models have their source in the neo-classic tradition in economics.

b. Event sequence models – focus on the management of stages in the development process. These models have been developed from an estate management preoccupation with managing the development process.

c. Agency models – focus on actors in the development process and their relationships. These models have been developed primarily by academics seeking to describe the development process from a behavioural or institutional point of view.

d. Structure models – focus on the forces which organize the relationships of the development process and which drive its dynamics. These models are grounded in the urban political economy.

Real estate is one of the oldest and most popular asset classes. Bonds and shares as part of the financial industry can be associated with income producing properties and development projects in the real estate industry. Taking into account the aspect of risk determined by

uncertainty and volatility – income producing properties can be associated with bonds (low volatility, predictable cash flow), while development projects can be associated with shares (higher volatility compared to bonds, cash flow with higher degree of uncertainty). Moreover, developers are like venture capitalist (investing in start-ups), versus investitors in income producing properties that are similar to privat equity investors.

There are five main product types in the real esate industry: residential, office, commercial, industrial, and land, with very different markets for each product type by region and by location relative to employment centres, transit shops, or other location factors, like building design and site density – each combination represents a different building type, cost structure, and end-user profile. For this reason choices made in development must be balanced between market demans and project economics (Peiser & Hamilton, 2012).

Another clasification of real estate typologies is presented below (Morri, 2017):

a. Residential (single home, multi family)

b. Commercial:

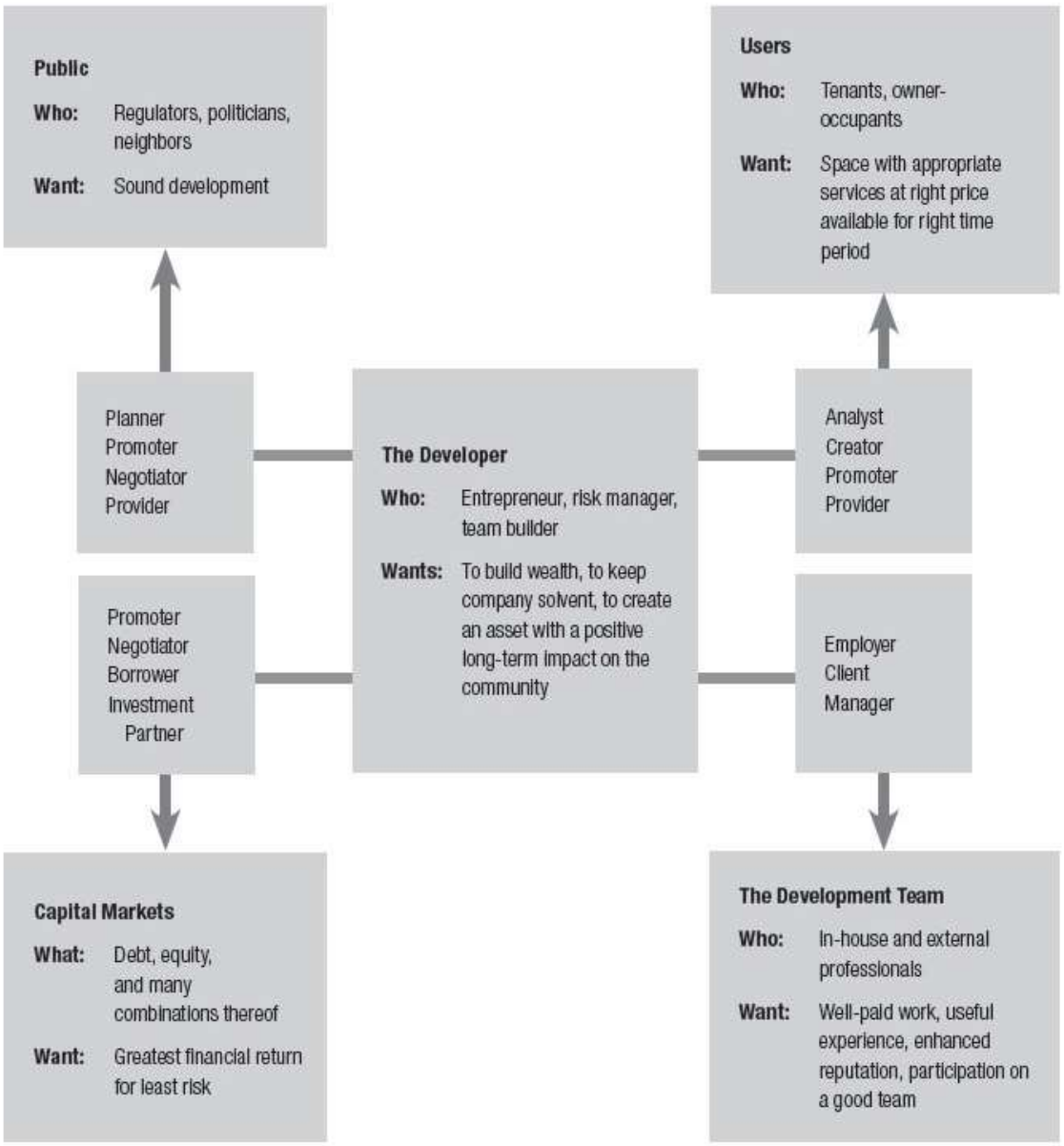
- User specific (heavy industrial, production plants, special use, secondary location)
- Fungible property (office, logistic, light industrial, rental apartments)
- Trade related property (retail, hotel, leisure, farm land)

c. Land (land without zoning, land with building permits, brownfield)

The development market has defined its role as the means through which demand and supply imbalances, generated in the user and investor markets in property, are reconciled in the long run. In the development market, new property interests are created and old property interests extinguished, as a dominant force that shape the industry (Guy & Hunneberry, 2002).

The developer, as the leading economic actor in the real estate industry, takes on the important economic function of resource allocation, to create new space and investment interests in property. The developer is the agent who, operating within an imperfect price mechanism, carries heavy responsibility for the optimal use of scarce land resources though development activity (Guy & Hunneberry, 2002). Figure 1 shows developer's many roles and interactions.

Figure 1: The developer's many roles and interactions

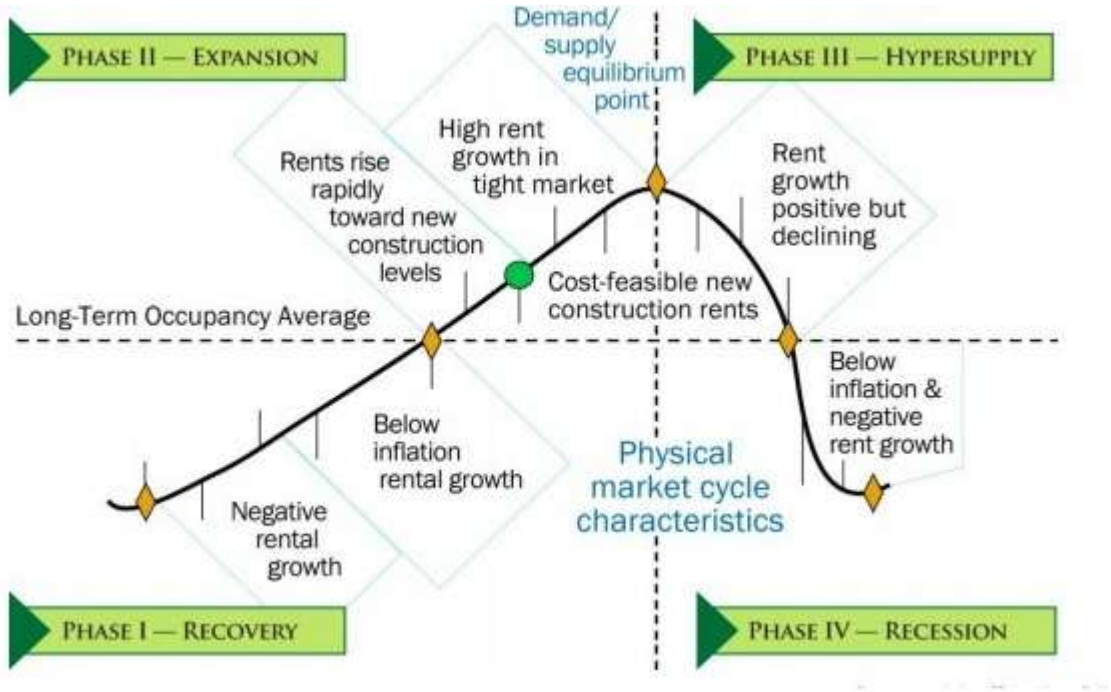


Source: Miles, Berens, Eppli & Weiss (2007).

1.1.1 Real estate cycles

In real estate development "timing is everything", because real estate is highly sensitive to changes in interest rates and macroeconomic circumstances (for example employment and migration) – when money is scarce, lenders tend to prefer their no-real estate customers, because they fear the development risks, they are not able to mitigate (Peiser & Hamilton, 2012). Figure 2 shows the physical real estate cycle characteristcs, with phases I to IV.

Figure 2: Physical real estate cycle characteristcs



Source: Peiser & Hamilton (2012).

This four phases have the following characteristics (Peiser & Hamilton, 2012):

a. Phase I – Recovery at the bottom of a cycle, the marketplace is in a state of oversupply from previous new construction or negative demand growth. At his bottom point, occupancy is at its trough, and as excess space is absorbed, vacany rates fall and rental rates stabilize (and occasionally even begin to increase). Eventually, the market reaches its long-term occupancy average where rental growth is equal to inflation.

b. Phase II – Expansion, demand growth continues at increasing levels, creating a need for additional space. As vacancy rates fall, rents begin to rise rapidly, pushing rents to cost-feasible levels. At this stage, demand is still rising faster than supply, and there is a lag in the provision of new space. The most important signal of this phase – demand and supply are in equilibrium at the peak occupancy point of the cycle.

c. Phase III – Hypersupply commences after the peak/equilibrium point when supply is growing faster then demand. When more space is delivered then is demanded, rental growth slows and eventually construction slows or stops, and once the long-term occupancy average is passed, the market falls into Phase IV.

d. Phase IV – Recession begins as the market moves past long-term occupancy average with high supply growth and low or negative demand growth. The extent of the down cycle is determined by the difference between supply and demand growth. The cycle

reaches bottom as new construction and completions slow or as demand begins to grow faster, then new supply added to the marketplace.

1.1.2 Retail development

Ranging from the construction of a single store on a small parcel to the development of a superregional shopping centre retail development is an evolving business; in particular, with the challenges of internet retailing – with this connected changing customer behaviour and identity crisis among retailers and the developments, they occupy (Peiser & Hamilton, 2012).

Today's word for shopping centre is lifestyle centre, defined by the International Council of Shopping Centres (ICSC) as a "specialized centre" that has "upscale national-chain specialty stores with dining and entertainment in an outdoor setting". The ICSC further describes them as a multi-purpose leisure-time destination, including restaurants, entertainment, and design ambiance and amenities such as fountains and street furniture that are conducive to casual browsing.

On the other hand, shopping centres are traditionally classified as following (Peiser & Hamilton, 2012):

a. Convenience centres – typically anchored by personal/convenience store, such as minimarket, in smaller formats, typically ranging up to 2,800 m^2.
b. Neighborhood centres – built around supermarkets, they provide convenience goods (foods, drugs) and personal services for day-to-day needs, in formats typically ranging from 5,600 to 9,300 m^2.
c. Community centres – larger then neighborhood centres, provide a wider range of soft-good lines (for example apparel) and hard lines (for example, hardwere, and apliances), in formats typically ranging up to 23,200 m^2.
d. Super community centres – identical in purpose to community centres, but larger in size, ranging up to 46,500 m^2, and more varied in merchandise collections.
e. Regional centres – these centres provide general merchandise, apparel, furniture, and home furnishings indepth and variety, as well as a range of services and recreational facilities, in formats typically ranging from 23,200 to more than 83,600 m^2, including one or two full-line department stores.
f. Super regional centres – identical in purpose to regional centres, but larger in size, ranging up to 140,000 m^2, they are typically designed around three or more full-line department store.

After this classification, what need to be underline is the fact that, the shopping center categories above, are no longer adequate to classify today's shopping centres – virtually all directional change in shopping center use and classification can be traced to the introduction of big-box or category-killer retailing (Peiser & Hamilton, 2012).

In addition to the above listed classification, lifestyle centres need also to be presented as shoping centres tenanted with the upscale apparel, as well as restaurants, specialty food stores, and entertainment (community spaces, music vunues, ecc.). They generally do not have a traditional department store anchor (Brett & Schmitz, 2009).

Retail properties derive much of their value from the landlord's ability to lease to a mix of tenants that attract shoppers. In the process of developing retail properties, developers have a mandatory activity – to complete a catchment area analysis. This study uses the population, age, and income of potential customers in the catchment area as an indicator of demand for goods and services. Retail properties are subject to many changing trends, new concepts in retailing, fashions, and the like. When an investment in large retail properties is considered, understanding the nature of the business and importance of various tenants is important. A common distinction is made between anchor tenants and in-line, or shop, tenants. It is important to emphasize that anchor tenants usually include very large department stores or other retailers that achieve very high sales volumes and generate a considerable amount of customer traffic, and becase they lease a very large amount of space, anchors receive large rent discounts and demand many special lease features. In-line tenants, on the other hand, tend to be smaller retailers that hope to generate retail sales as a result of participating in the high shopping traffic, part of which is produced by the anchor tenants. By combining primary, complimentary, and cross-shopping activity between anchor and in-line tenants, the property owner hopes to create a retail environment that tends to produce high total retail sales for all tenants (Brueggeman & Fisher, 2011).

In considering catchment areas and possible locations for a retail development, the developer need first to consider four key issues (Keeping & Shiers, 2004):

a. Accessibility: does the topography allow for new development; are adequate public transport links available to the shopper; is "pedestrian flow", or "footfall" past the intended shop sufficient to generate trade; what is the relationship between the intended location, other centres and the shopping public?

b. Competition: which are the direct competitors to the potential shop(s) and what share of trade might they take from it (them)?

c. Prosperity: what is the current level of provision of retail use generally; what are the levels of income and retail expenditure in the area; is there a good proportion of multiple shops; how many refurbished shops are there locally?

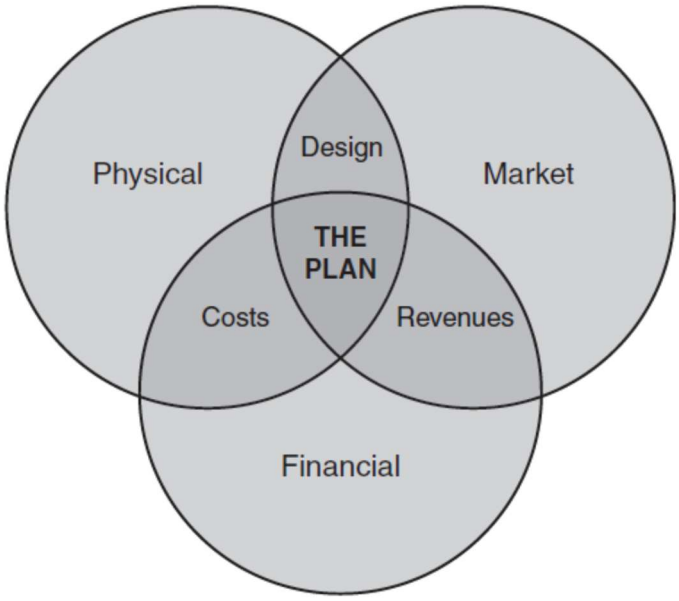
d. Potential: what are the population and employment trends locally; what is the attitude of the town planners to future retail development; are there any schemes in the development pipeline

1.2 Steps in the development process

The real estate development process is a production process that creates the built environment. Real estate development is highly cyclical and volatile. The old adage of "location, location, location" oversimplifies the factors that make a successful development: both the design quality of the product and the timing of delivery are now recognised as being equally important to development success as the right location (Tiesdell & Adams, 2011).

Figure 3 shows how a developer brings together a variety of resources to create a development plan – „For example, when a developer takes the universe of physical things and combines it with the universe of the market, the developer has the design of the project. When the developer takes the universe of physical things and combines it with the financial tools, the developer has the costs of the project. When the developer takes market information and resources and combines it with the financial resources, the developer has the revenues for the project. When all three things are combined – physical, market, financial – then the developer has created the development plan" (Peca, 2009).

Figure 3: The development process



Source: Peca (2009).

Development begins with a vision; an idea coupled with the skills, imagination, and resources necessary to bring the vision to complition. The process of developmen is long, challenging and complex. It is hard to make a single checklist format, but he following provides an excellent, if brief, outline of the development process (Collier, Collier & Halperin, 2008):

a. Concept: Product identification and establishment of development criteria

After identifing the seed capital, assembling an internal team for site acquisition, financial analysis, marketing, and negotiation, representing the optimal approach at first. Market area identification and location possibilities are also present in this stage as mandatory steps.

b. Marketing and feasibility study

Following the concept defininiton, site analysis (preliminary environmental study, suitability for desired purpose; identifying potential obstacles and opposition) and preliminary pro forma (use of market knowledge to estimate cost, potential income and expenses, possible operating profit and project final sales value; estimating value added by development process; ascertaining available financing) comming as mandatory acctivities, part of the marketing and feasibility study.

c. Site control and inspection

Land acquisition (optioning the land, securing control), obtaining environmental phase I report and soil borings analysis of site, preliminary contacts with possible debt and equity sources**,** assemble of the external team (achitect, engineer, land planner, landscape architect, surveyor, legal team; line up possible general contractors; sign contracts with major professionals; detail levels of responsibility; clarify areas of involvement), representing the first part of this crucial sequence of steps.

Design process management (site, structures, and specifications), formulating the marketing and leasing plan, selection of the property manager, sign contingent contract, estimating and preliminary bidding process (ongoing interaction with potential contractors with respect to cost estimates, design suggestions, and specifications), together with regulatory approval process (zoning versus site plan approval), representing the second sequence of milestones, that need to be followed.

d. Obtain final construction documents and site plan

Often in paralel with obtaining the final construction documents and site plan, the development process is a combination of acctivities that ends with making the go/no-go decision – starting with release of final construction documents to possible contractors, raise equity capital, finalize the deal structure, form of ownership entity, debt capital, the construction loan (send out project loan packages, receive term sheets, submit loan application, expedite required third-party reports, obtain commitment letter), receive preliminary bids, value engineering, and final bids, negotiate contractor contract and project schedule, risk/reward analysis (review pro forma and assumptions therein, assess available debt and equity capital, review general contractor contract), and ends, like already mentioned, with making the go/no-go decision.

e. Obtain building permit

f. Sign construction contract

After signing the construction contract, the developer close on land option, close the construction loan, file notice of commencement, give notice to proceed to contractor break ground, begin oversight of construction process, exercise quality control, manage marketing and leasing program, fine-tune interior design issues, make field visits and progress reports, approve construction drawings and change orders, and work on the punch lists, certificate of occupancy, substantial completion, as-built survey, and lease up.

g. Occupancy and grand opening

Stabilization, convertion of the construction loan to short-term permanent loan, and depending on exit strategy (flip vs. hold), either begin or intensify marketing for sale, or circulate updated permanent loan packages, are the final acctivitiers.

h. Start or intensify search for new development opportunity

Important to take always into consideration is the fact that many of these steps will overlap or run concurrently, and it is very hard to identify „the most important steps", although some steps are really fundamental, and represents major milestones of the development process (highlighted in the text above).

1.3 Risks in the development process

Fundamentaly risk has two aspects: occurrence and consequences. Real estate development is subject to factors that have a high risk of variance (rents, cap rates, and sale values are rarely static). The stakes and potential consequences are huge because of the large capital sums involved (Havard, 2014).

There are three basic strategies the SPV (project company) can put in place to mitigate the impact of a risk (Gatti, 2011):

a. Retain the risk
b. Transfer the risk by allocating it to one of the key counterparties
c. Transfer the risk to professional agents whose core business is risk management (insurers)

Eight categories of risks for a real estate project (or any business, for that matter), can be identified, as following (Peca, 2009):

a. Business risk – address the concern that the project will be unsuccessful given the choice of property type, project programming and design, location, and market. The typical mitigation of this risk is completion of a marketability study that shows demand for the proposed project.

b. Management risk – the risk of whether the project team are able to execute the business plan or feasibility study. The mitigation for this risk is to have experienced people in the project team, such as an experienced project manager, financial advisor, contractor and experienced architects and engineers.

c. Financial risk – is limited if the development budget and operating pro forma assumptions have been reasonably accurate. The fundamental issue with budgets and pro forma is that they are based on estimates, which may be wrong. So the financial risk addresses what measures have been taken to mitigate the possibility of budgets and pro forma being wrong. The mitigation for this risk is to make a sensitivity and scenario analysis, commonly known as a base and worst case analysis.

d. Interest rate risk – is the risk that interest rates will rise during the development period. In case interest rates rise, interest costs may exceed the budgeted amount. Should interest rates rise during the leasing or sale time, rising interest rates not only would become a burden on operations but may also curtail or at least slow down the leasing or sale effort. The mitigation for this risk is to obtain fixed-interest-rate loans (which would only and possibly occur for a permanent mortgage) or use various interest rate financial derivative products, such as interest rate swaps.

e. Liquidity risk – is the risk that there will be lack of cash, when needed. There are four times in a development project when there could arise issues about necessary cash. The first is up to the point when obtaining a construction loan, otherwise known as short-term solvency. The second time with high liquidity risk is getting the construction loan. The challenge in every development project is being able to close on the first draw of a construction loan when there is a need to pay different consultants. The third time of liquidity risk is obtaining permanent financing to repay construction loan when construction loan matures. Last, liquidity risk arises during operations when may arise a shortfall. A mitigation in all of these cases is preplanning cash needs well in advance of the actual need by getting forward commitments or otherwise arranging the loan facilities well in advance of the need.

f. Legislative risk – addresses changes in laws or regulations that could affect the project. Legislative risk arises twice during development: first, up until the point of receiving all entitlement approvals, and second, during operations of the project. Law and regulation changes during operations can affect the project, say, if they involve health and safety matters.The mitigation for this risk is to maintain an active monitoring process at the municipality.

g. Inflation risk – is the risk of changes in the rate of inflation that affect the budgeted and operating costs of the project. Like the mitigation for financial risk, the right answer is establishing a variety of contracts to fix various budgeted and operating costs, and develop a sensitivity and scenario analysis to determine a range of financial outcomes.

h. Environmental risk – is the risk of current and future site contamination, as well as the risk associated with changes in the environment – the project as built will change the surrounding community. The effect on the community is often addressed by having up-front (before the go/no-go decision) an environmental impact study performed, perhaps in conjunction with the marketability study.

In project financing, the lenders are fundamentally interested in the revenue earning capability of the project and therefore, the risk review needs to look at all risks that threaten that revenue. Lenders tend to be the most risk averse, justified by the fact that they have the least to gain from a successful project and the most to lose from an unsuccessful project. (Morrison, 2012).

1.4 The role of flexibility and uncertainty

Risks are immanent or inherent to real estate developments. They are permanent or characteristic attributes. There is no development project without risks – without uncertainty.

Taking this into consideration, the developer need to have a toolkit to deal with risks and uncertainty, and among the most important are the up-front analysis, mapping and planning actions for avoiding or reducing the impact of there risks.

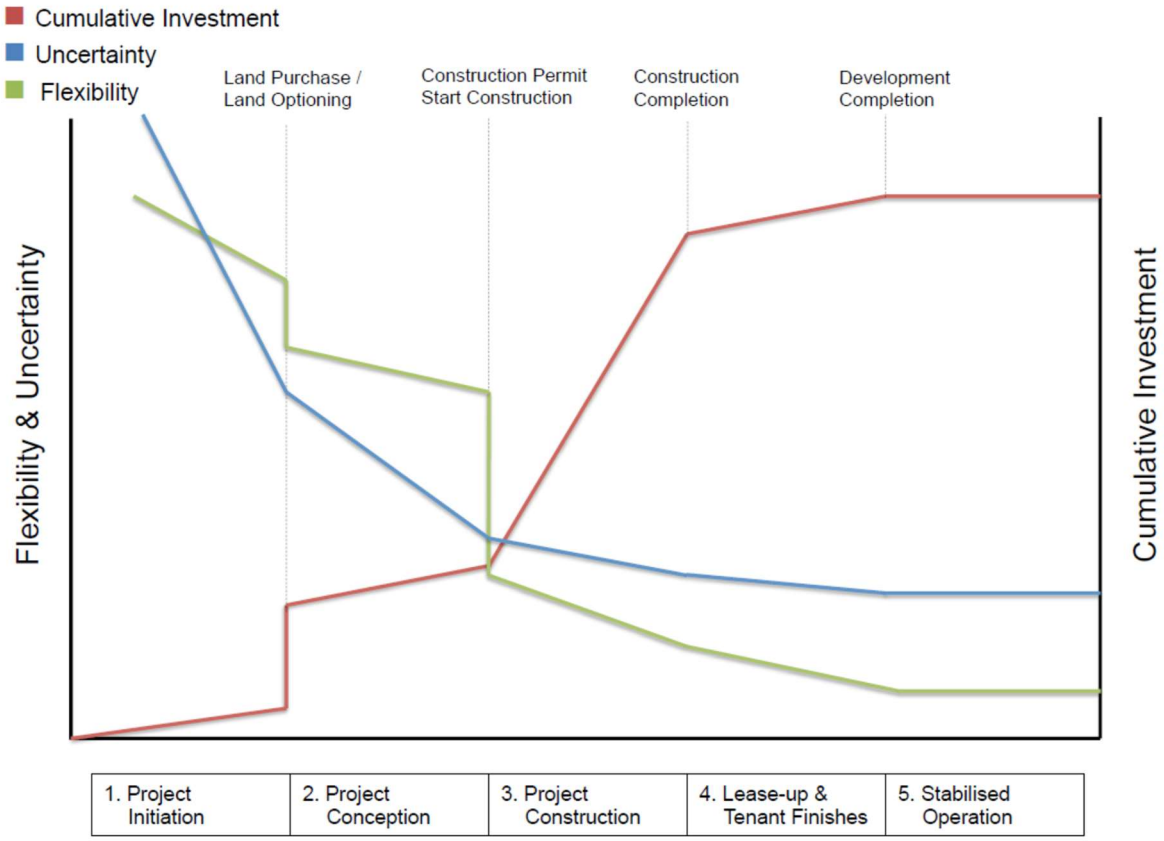
The next step in this analysis is the identification of flexibility – or in corporate finance – real options:

a. The option to delay an investment opportunity;
b. The option to grow;
c. The option to abandon an investment opportunity;

Flexibility is the capability easily to change the capacity or function of a system. Flexibility exists in a system because of prior planning and design decisions. Flexibility and uncertainty do not remain constant over the duration of a project.

There are three aspects that give rise to the value of the flexibility or optionality of a project. First there is the uncertainty itself: the risks and opportunities that may occur determine whether an option is exercised and thereby generates extra value for the project. Second, there is the range of decision choices or options available to the developers Third, there is the timing of exercising the option: it makes a difference when an option might be exercised, and we must address this issue carefully and realistically (Geltner & Neufville, 2012).

Figure 4: Flexibility, Uncertainty and Cumulative Investment in the Development Process

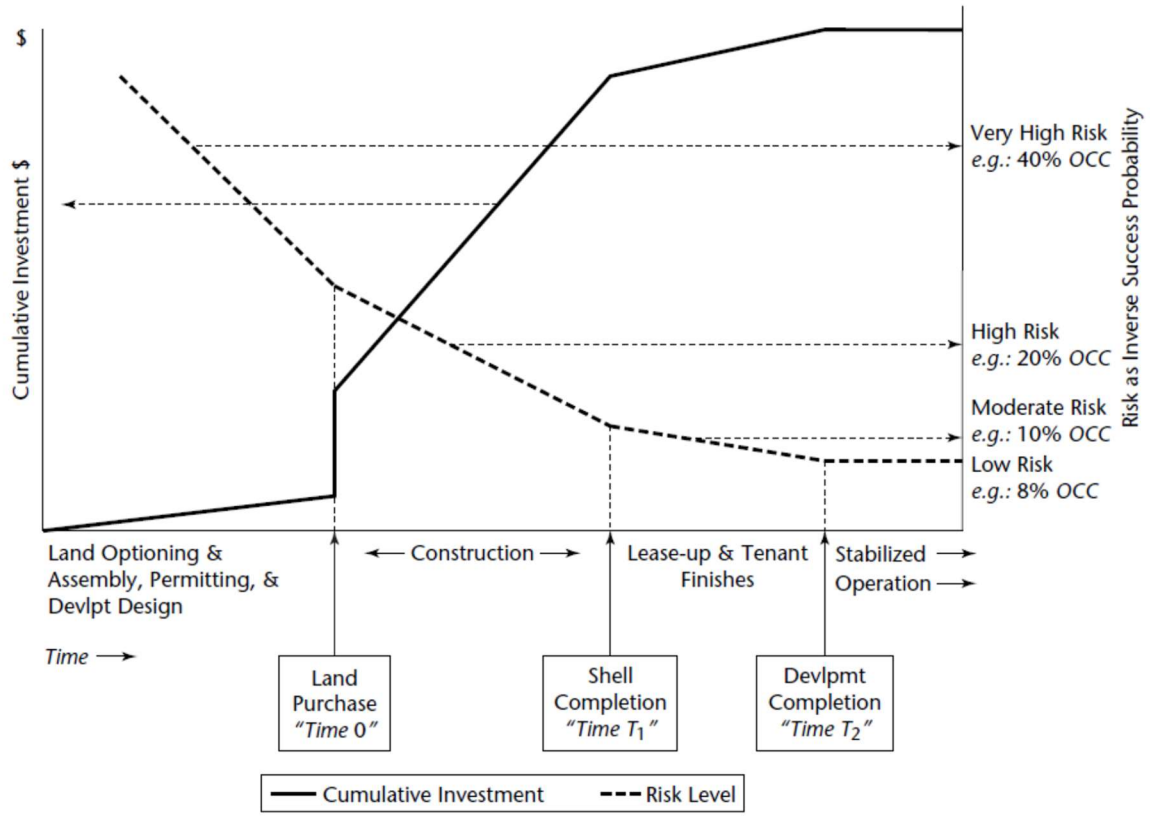


Source: Peter (2012).

As illustrated in Figure 4 flexibility and uncertainty decrease during the life time of a project. This does not mean that they met our planned values, but as the project is evolving, flexibility and uncertainty reduces. Uncertainty can thereby be reduced by analysis and commitments of prospective buyers/tenants, while flexibility decreases when key stakeholders make their decisions. At the same time more and more capital is invested into the project as illustrated by the red line in Figure 3. The key point is that, only when uncertainty is reduced by a fair degree, developers are willing to commit large amounts of capital (Peter, 2012).

This idea is deriving from Geltner, Miller, Clayton & Eichholtz (2006) and is shown in Figure 5 – the dashed line referenced to the right-hand axis represents the degree of risk faced by investors at each point in time, viewed as the probability of financial or economic failure of the project.

Figure 5: Development Project Phases: Typical Cumulative Capital Investment Profile and Investment Risk Regimes



Source: Geltner & de Neufville (2012).

1.5 The theory of project finance and investment valuation

Project finance involves the creation of a legally independent project company financed with nonrecourse debt (and equity from one or more corporate entities known as sponsoring firms) for the purpose of financing investment in a single – purpose capital asset, usually with limited life (Lins, 2016). Project finance arrangment is an instrument for financing development projects, under which the return is associate with the project's ability to generate cash flows to remunerate investors. The various forms of capital used in project finance can be arranged along a continuum ranging from two extremes of (pure) debt and (pure) equity (Morri & Mazza, 2015).

The following five points are, in essence, the distinctive features of a project finance deal (Gatti, 2012):

a. The debtor is a project company set up on an ad hoc basis that is financially and legally independent from the sponsors.

b. Lenders have only limited recourse (or in some cases no recourse at all) to the sponsors after the project is completed. The sponsors' involvement in the deal is, in fact, limited in terms of time (generally during the setup to start-up period), amount (they can be called on for equity injections if certain economic-financial tests prove unsatisfactory), and quality (managing the system efficiently and ensuring certain performance levels). This means that risks associated with the deal must be assessed in a different way than risks concerning companies already in operation.

c. Project risks are allocated equitably between all parties involved in the transaction, with the objective of assigning risks to the contractual counterparties best able to control and manage them.

d. Cash flows generated by the SPV must be sufficient to cover payments for operating costs and to service the debt in terms of capital repayment and interest. Because the priority use of cash flow is to fund operating costs and to service the debt, only residual funds after the latter are covered can be used to pay dividends to sponsors.

e. Collateral is given by the sponsors to lenders as security for receipts and assets tied up in managing the project.

Project finance differs from corporate finance, where loans (Yescombe, 2014):

a. are primarily lent against a company's balance sheet and financial projections extrapolated from its past cash flow and profit record;

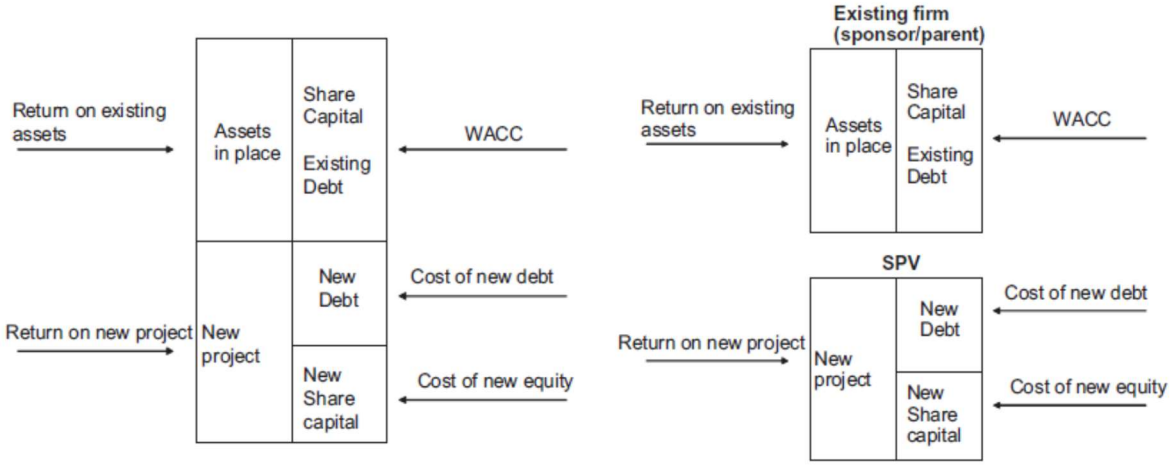
b. has access to the whole cash flow from the spread of the borrower's business as security, instead of the limited cash flow from a specific project – thus even if an individual project fails, corporate lenders can still reasonably expect to be repaid;

c. assume that the company will remain in business for an indefinite period and so can keep renewing (rolling over) its loans, which therefore do not need to be lent on a long-term basis;

d. may also be secured on the company's physical assets –its offices, factories, etc., so that if the debt is not repaid these assets can be sold off to help recover the debt.

In a project finance scheme lenders have to be confident that they will be repaid, especially taking account of the additional risk that is comming from the high level of debt inherent in a project finance transaction. For that reason they need to have a high degree of confidence that the project can be completed on time and on budget, is technically capable of operating as designed, and that there will be enough net cash flow from the project's operation to cover their debt service adequately. The difference between the two financing strategies is shown in Figure 6.

Figure 6: Comparison of corporate financing and project financing strategies



Source: Gatti (2012).

For investors to engage in a new investment project, the project has to be financially viable. Invested capital must show the potential to generate an economic return to investors at least equal to that available from other similarly risky investments, i.e. the return on investment needs to be equal or higher (Bennet, 2003).

1.5.1 Investment valuation

The valuation models developed for financial assets are applicable for real assets as well - the value of real estate property is estimated by the present value of the expected cash flows on the property.

Real estate and financial assets share several common characteristic, but also significant differences (Damodaran, 2012):

a. Common characteristic of real estate and financial assets:

- The value is determined by the cash flows they generate, the uncertainty associated with these cash flows and the expected growth in the cash flows.
- The higher the level and growth in the cash flows and the lower the risk associated with the cash flows, the greater is the value of the asset.

b. Differences between real estate and financial assets:

- Differences in liquidity across the two markets and in the types of investors in each market.
- The nature of the cash flows generated by financial and real estate investments – real estate investments often have finite lives and have to be valued accordingly.

This last bullet is very important, and need to be highlighted, as following:

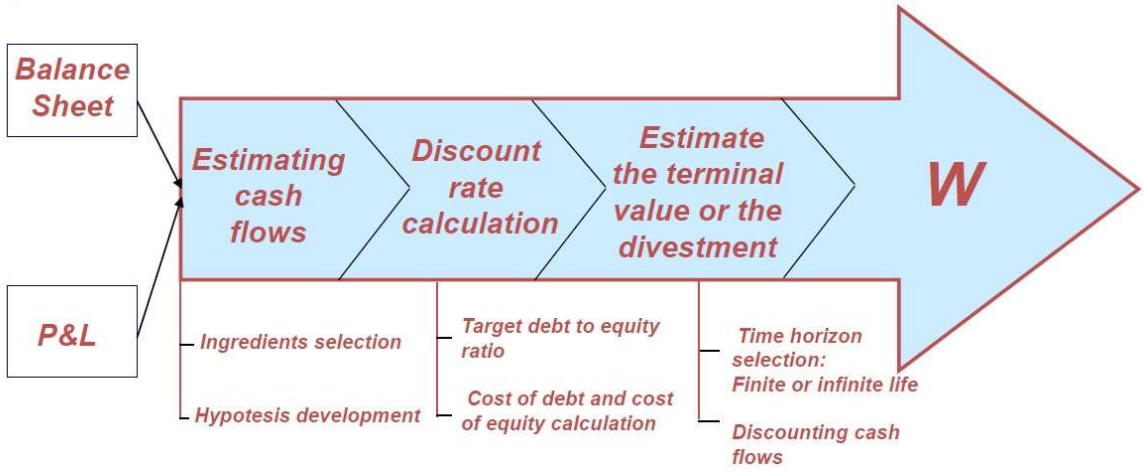
c. The terminal value of a stock, five or ten years hence, is generally much higher than the current value because of the expected growth in the cash flows and because these cash flows are expected to continue forever – perpetuity[1].

d. The terminal value of a building may be lower than the current value because the usage of the building might depreciate its value, but still, the land component will have an infinite life and, in some cases, may be the overwhelming component of the terminal value.

Discounted cash flow (DCF) analysis accounts for the stream of revenues and expenses over time, discounting them to the present. It is a common way to evaluate the present value of a real estate investment held over time. In this way, different real estate investment opportunities can be fairly compared, resulting in more informed decision making by investors (Nelson, 2014).

In DCF analysis basic valuation issues are: time horizon, cash flows (cash inflow, cash outflow, growth rate, terminal value) and discount rate. Steps in the financial valuation are shown in Figure 7.

Figure 7: Steps in the financial valuation



Source: Chiavazza (2017).

Time horizon must be coherent with the investment plan. Depending on the investment, time horizon will change, depending on the macro environment, type of investment, investment riskiness, and projected life cycle of the investment.

[1] In Finance, it is a constant stream of identical cash flows with no end.

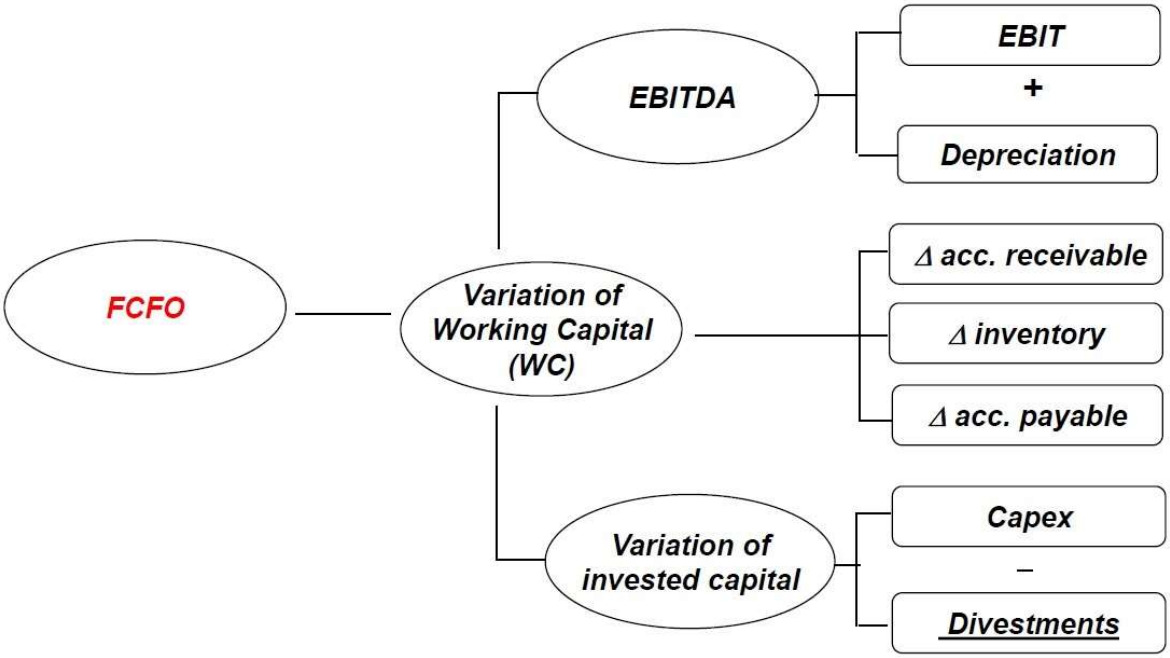
In order to determine the amount of cash that an investment produces or absorbs we have to consider each item of the profit and loss statement (P&L) and balance sheet statements and to understand its most important features – is it monetary, and is it cash?

Cash flows have to meet the following requirements:

a. They have to be monetary: no depreciation
b. They have to be differential: compare the company with and without the investment (i.e. sunk costs and side effects)
c. They have to be net of taxes: tax payments and tax effects on capital gain & losses have to be considered
d. They have to be gross of financial charges: financial expenses only affect the cost of capital

The free cach flow to operation (FCFO) calculation is shown on Figure 8.

Figure 8: FCFO calculation



Source: Chiavazza (2017).

The terminal – residual value or divestment (exit value in DCF valuation) is the net amount which an entity expects to obtain for an asset at the end of the period of analysis after deducting the expected costs of disposal. In other words, the residual value is the assumed sale of the property at the end of the analysis (Nachem, 2007).

In DCF valuation models, a key input is the estimate of terminal value – the value of the asset being valued at the end of the investment time horizon. The terminal – residual value or divestment is the net amount which an entity expects to obtain for an asset at the end of

the period of analysis after deducting the expected costs of disposal. In other words, the residual value is the assumed sale of the property at the end of the analysis (Nachem, 2007).

There are three fundamental approaches that can be used to estimate the terminal value (Damodaran, 2012):

a. The current value of the property can be assumed to increase at the expected inflation rate to arrive at a terminal value. The danger of this approach is that it starts of with the assumption that the current value of the asset is reasonable and then tries to assess the true value of the asset.

b. Infinite growth model – assuming that the cash flows in the terminal year (the last year of the investment horizon) will continue to grow at a constant rate forever after that. As equation (1) shows, if this assumption is made, the terminal value of the asset is:

$$Terminal\ Value\ of\ Equity/Asset_n = \frac{Expected\ CF_{n+1}}{r-g} \quad (1)$$

   - r is the discount rate (cost of equity if it is the terminal value of equity and cost of capital if it is the terminal value of the asset)
   - CF_{n+1} is the cash flow (cash flow to equity if terminal value is for equity and to firm if terminal value is total terminal value)

   The assumption of perpetual cash flows can be compensate with projecting more cash aside each year to ensure that the property life can be extended – cash flow from depreciation can be reinvested back into the building in the form of maintenance capital expenditures (CAPEX).

c. Capitalization rate (cap rate) – close variation on the infinite growth model. As equation (2) shows, the cap rate is the rate by which operating income is divided to get the value of the property.

$$Property\ value = \frac{Operating\ income\ after\ taxes}{Capitalization\ rate} \quad (2)$$

As discount rate (the project's cost of capital), it is used the weighted avverage cost of capital (WACC), taken from the Capital asset pricing model (CAPM[2]), the central model in financial economics that quantifies the notion of "equivalent risk" and thereby provides the relation between risk and return. CAPM uses a single factor (proportional market risk) to

[2] The CAPM was first developed independently by Lintner and Sharpe – J. Lintner "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets,"*Review of Economics and Statistics* 47 (1965): 13–37; and W. Sharpe, "Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk," *Journal of Finance* 19 (1964): 425–442.

explain pricing and asset returns (performance) – investor returns are the mirror image of a project's (or firm's) cost of capital (Berk & DeMarzo, 2017). We assume that the cost of equity (k_e) can be estimated using the standard CAPM.

$$k_e = r_f + (r_m - r_f)\, x\, ß \tag{3}$$

As equation (3) shows, the excess return for the stock market is measured by the expression ($r_m - r_f$) in which r_m is the return for a general stock exchange index calculated over a long period and r_f is the risk-free rate for government securities, while ß (beta) is the sensitivity of the expected excess asset returns to the expected excess market returns – extent to which returns on the stock and the market move together (Gatti, 2012). In a competitive market, the expected risk premium varies in direct proportion to beta (Brealey, Meyers & Allen, 2016). The cost of debt (k_d) can be calculated as the weighted average of the effective cost of the various loan facilities used by the company on which interest is explicitly charged.

$$WACC = k_e\, x\, \frac{E}{E+D} + k_d\, x\, (1-t)\, x\, \frac{D}{E+D} \tag{4}$$

Given the weight of debt (D) and equity (E) in the company's liabilities, a new investment project concerning the company's core business will cost it a weighted average of the cost of debt and cost of equity (or WACC), where t is te corporate income tax, as shown in equation (4).

What the CAPM shows is that the expected return for a particular asset depends on three things (Ross, Westerfield & Jordan, 2003):

a. The pure time value of money. As measured by the risk-free rate, ($r_m - r_f$) , this is the reward for merely waiting for your money, without taking any risk.

b. The reward for bearing systematic risk. As measured by the market risk premium, E(r_m) $- r_f$, this component is the reward the market offers for bearing an average amount of systematic risk in addition to waiting.

c. The amount of systematic risk. As measured by ß$_i$, this is the amount of systematic risk present in a particular asset or portfolio, relative to that in an average asset. The CAPM model is slowly being superseeded by Fama-French three, four and five factor models, taking into account that the assumptions of the CAPM itself, are not completely realistic, and the results that we obtain following this approach are not reliable, and thus worthwhile, to the final extent.

On one hand, alongside this opservations, when examinating the CAPM, it should always be understood that the types of approximations that we used to estimate the cost of capital using CAPM are no different from other approximations throughout the capital budgeting process. In particular, the revenue and other cash flow projections, in the process of financial

analyisis of a development project (or valuing a stock, or a capital investment in a new product) are likely to be far more speculative than any we have made in estimating the cost of capital, using CAPM. For that reason, the imperfections of the CAPM may not be critical in the context of capital budgeting and corporate finance, where errors in estimating project cash flows are likely to have a far greater impact than relatively small discrepancies in the cost of capital (Berk & DeMarzo, 2017).

On the other hand, the Fama-French three factor model provides a highly useful tool for understanding portfolio performance, measuring the impact of active management, portfolio construction and estimating future returns. Fama-French found that investors are concerned about three separate risk factors rather than just one. Moreover, they found that in the real world, investors care about lots of different risks, but the risks that have systematic prices attached to them and that in combination do the best job of explaining performance and pricing are market, size and value (Fama & French, 2011).

Fama and French propose a three-factor model to capture the patterns in U.S. average returns associated with size and value versus growth.

$$Ri(t) - RF(t) = ai + bi[RM(t) - RF(t)] + siSMB(t) + hiHML(t) + ei(t) \qquad (5)$$

In this regression, as equation (5) shows, Ri(t) is the return on asset i for month t, RF(t) is the riskfree rate, RM(t) is the market return, SMB(t) is the difference between the returns on diversified portfolios of small stocks and big stocks, and HML(t) is the difference between the returns on diversified portfolios of high book-to-market (value) stocks and low book-to-market (growth) stocks (Fama & French, 2011). SMB capture the size premium, as measured by market capitalization, while HML capture the value premium, as measured by the book-price (BP) ratio.

The five-factor model directed at capturing the size, value, profitability, and investment patterns in average stock returns performs better than the three-factor model of Fama and French. The main problem of the five-factor model is its failure to capture the low average returns on small stocks whose returns behave like those of firms that invest a lot despite low profitability. The model's performance is not sensitive to the way its factors are defined. With the addition of profitability and investment factors, the value factor of the Fama & French three-factor model becomes redundant for describing average returns (Fama & French, 2014).

According to practitioners in the real estate industry the WACC often consists of 60 % to 70 % of debt capital and 30 % to 40 % equity capital. The cost of debt capital is thereby determined by interest rates while the cost of equity capital is determined by the required return of the investor. Moreover, in the current market environment with very low interest

rates, we can observe the high influence of decreasing cap rates due to a reduced WACC on the value of real estate assets. Since cost of capital is decreasing, cap rates are decreasing as well and the value of real estate increases from a valuation standpoint (Morri, 2017).

As equation (6) shows, yield can be calculated by dividing rent by the property value. Yields are starting points to estimate cap rates for property valuation, as shown equation (7) – Value = f (revenues & risk). Equation (8) defines te cap rate.

$$Yield = \frac{Rent}{Value} \tag{6}$$

$$Asset\ value = \frac{Revenues}{Cap\ rate} \tag{7}$$

$$Cap\ rate\ = \frac{NOI}{Asset\ value} \tag{8}$$

The are different types of yields, and cap rates (Morri, 2017):

a. Gross Yield: before operating costs
b. Net Yield: net of operating costs
c. Entry Yield: at acquisition date
d. Exit Yield: at selling date
e. Reversionary yield: return calculated when rent revers to the current market rent (ERV)

f. Cap Rate (over all capitalization rate - all-risk yield): represents the interest rate or yield at which the annual net income (rent or NOI) is capitalized to ascertain its capital value at a given date.
g. Initial Yield (going-in cap rate): initial net income at the date of transaction or valuation expressed as a % of the sale price or valuation.
h. Reversionary yield: the anticipated yield, which the initial yield will rise to once the rent reaches the ERV (estimated rental value).
i. Going-out cap rate (also called exit yield): the capitalization rate used to convert income into an indication of the anticipated value of the property (Exit value) at the end of the holding period or property resale value.

The cap rate is used used to make assumptions about market expectations of risk (requested yield), growth and depreciation. Their relation is expressed as follows:

a. The higher the expected risk, the higher the cap rate
b. The higher the expected income growth, the lower the cap rate
c. The higher the expected depreciation, the higher the cap rate

1.5.2 Highest and best use analysis

The determination of the highest and best use involves consideration of the following (RICS Valuation – Global Standards 2017):

a. To establish whether a use is physically possible, regard will be had to what would be considered reasonable by participants.

b. To reflect the requirement to be legally permissible, any legal restrictions on the use of the asset, eg, town planning/zoning designations, need to be taken into account as well as the likelihood that these restrictions will change.

c. The requirement that the use be financially feasible takes into account whether an alternative use that is physically possible and legally permissible will generate sufficient return to a typical participant, after taking into account the costs of conversion to that use, over and above the return on the existing use.

In other words the highest and best use of an asset is the use of an asset that maximises its productivity and that is possible, legally permissible and financially feasible. The definition indicates two types of highest and best use – highest and best use of land or a site as though vacant, and highest and best use of a property as improved.

Highest and best use of the asset is reflected in the market value, as a basis of value that is internationally recognised and has a long-established definition: „the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion." It describes an exchange between parties that are unconnected and are operating freely in the marketplace and represents the figure that would appear in a hypothetical contract of sale, or equivalent legal document, at the valuation date, reflecting all those factors that would be taken into account in framing their bids by market participants at large (RICS Valuation – Global Standards 2017).

2 ECONOMIC AND DEMOGRAPHIC OVERVIEW OF SLOVENIA

2.1 General information

Slovenia, officially named Republic of Slovenia, is a nation state situated in Central and Southeastern Europe. It is a parliamentary republic and a member of the United Nations

(UN), Europian Union (EU), and North Atlantic Treaty Organization (NATO). The capital and largest city is Ljubljana.

Slovenia covers 20,273 km^2 and is bordered by Italy to the west, Austria to the north, Hungary to the northeast, Croatia to the south and southeast, and the Adriatic Sea to the southwest, as illustrated in Figure 9. It is located at the crossroads of main European cultural and trade routes, touching the Alps and bordering the Mediterranean. Slovenia's Adriatic coastline stretches approximately 47 kilometres from Italy to Croatia.

Figure 9: Map of Slovenia

Source: Geology.com (2017).

Slovenia is a parliamentary democracy republic with a multi-party system. The head of state is the president, who is elected for five years and has mainly a representative role. The executive and administrative authority in Slovenia is held by the Government of Slovenia, headed by the Prime Minister and the council of ministers or cabinet, according to the results of the parliamentary election, and composition of the National Assembly (Borak & Borak, 2004). Slovenia is subdivided into 211 municipalities, eleven of which have the status of urban municipalities. The municipalities are the only bodies of local autonomy in Slovenia. Each municipality is headed by a mayor, elected every four years by popular vote, and a municipal council. There is no official intermediate unit between the municipalities and the Republic of Slovenia, the 12 statistical regions have no administrative function. Ljubljana is located in Osrednjeslovenska (Central Slovenia) region. (Government Communication Office, Republic of Slovenia, 2017).

Slovenia is located in moderate temperate latitudes. The climate is, depending of a region, a mixture of alpine, Mediterranean and continental type of climate and is also influenced by the variety of relief.

Slovenia lays on the intersection of the important Pan-European transport corridors V (the fastest link between the North Adriatic, and Central and Eastern Europe) and X (linking Central Europe with the Balkans) in the country. Slovenia has a very high highway and motorway density compared to the European Union average. The road freight and passenger transport constitutes the largest part of transport in Slovenia at 80 %. Personal cars are much more popular than public road passenger transport, which has significantly declined. The existing Slovenian railways are out of date and cannot compete with the motorway network. All international transit trains in Slovenia drive through the Ljubljana Railway Hub. The Ljubljana Jože Pučnik Airport is the biggest and practically the only operational international airport in the country (Government Communication Office, Republic of Slovenia, 2000).

2.2 Demographics

Slovenia has a population of 2.06 million. From 2008 to 2017 the population increased by app. 2 %. In the last years population grows at constant annual rate of 0.1 %. The contribution to growth comes from excess of live births over deaths and excess of immigration to Slovenia then emigration from it. At the end of 2015 residents of Slovenia were on average 42.7 years old, almost 7 years older than at the end of 1991. The share of people aged 65+ was 18 %. The age-dependency ratio has been rising rapidly in recent years owing to the declining number of working-age people and a rising number of older people. Projections show that the number of older people will continue to increase for three decades. The decline in the working-age population means a decline in potential labour force and the increase in the age-dependency ratio represent a growing problem in terms of public financing. In 2016 there was already almost a quarter more elderly than children in Slovenia. The number of older people (over 65 years) exceeded the number of children for the first time in 2004, and it is rising much faster (2.5 % annually) than the number of children (1 % annually) (IMAD, 2017).

A quarter of total Slovenia's population in 2015 lived in seven largest settlements (Ljubljana, Maribor, Celje, Kranj, Koper, Velenje and Novo Mesto). One in four lived in the Osrednjeslovenska statistical region. The capital and largest city Ljubljana has the population of 278,853 (SURS, 2017h).

Life expectancy at birth continues to grow and was in Slovenia in 2014 83.5 years for girls and 77.6 years for boys, from that a girl can expect 59.6 healthy life years and a boy 57.8 healthy life years. Connected to healthy life years is also frequency of prescribing drugs that is rapidly increasing after expectancy of healthy life years (SURS, 2017a).

2.3 Economic indicators

Slovenia has a developed economy. It was in the beginning of 2007 the first new EU member to introduce the euro as its currency, replacing the tolar. Being a member of the EU and Schengen zone, Slovenia benefits from free move of people and goods and free trade in one the world's largest markets. Since 2010, it has been member of the Organization for Economic Co-operation and Development. There is a big difference in prosperity between the various regions. The economically most prosperous regions are the Osrednjeslovenska region with the capital Ljubljana and the western Slovenian regions, including Goriška and Coastal–Karst. The poorest regions are the Mura, the Central Sava and the Littoral–Inner Carniola (SURS, 2017). In July 2017 inflation at the annual level stood at 1.0 % (SURS, 2017c) and the prognosis for the future is that the inflation will remain low and stable.

After a considerable decline in macroeconomic indicators since the onset of the global crisis in 2007, the macroeconomic situation has improved in recent years. In 2016 GDP increased for the third year in a row, in 2016 Slovenia was still one of the few EU countries with GDP in real terms below the pre-crisis level, but GDP growth in 2017 increased over 4 % and BDP have reached the pre-crisis level in 2017. Alongside exports, domestic consumption has been gradually increasing, although it is still below the pre-crisis level. Economic growth was positively influenced by final consumption, which in 2016 increased by 3.8 %, of which private final consumption increased by 4.2 %. Private consumption is increasing also in 2017. Slovenia's gross domestic product in 2015 was €38,570 million (€18,693 per capita). In 2015 the GDP per capita in Slovenia was the highest in the Osrednjeslovenska statistical region (€26,418). The GDP in 2016 was €40,418 million (€19,576 per capita) (SURS, 2017d).

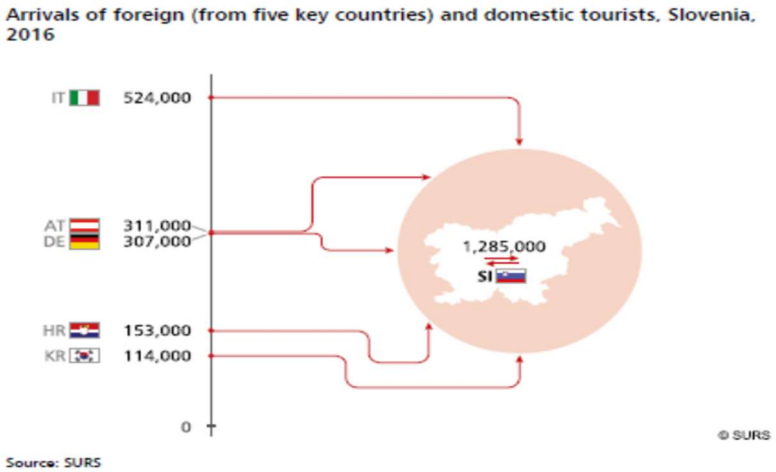
Slovenian gross domestic product per capita in purchasing power standards (PPS) stood at 83 % of the EU-28 average in 2016. In Slovenia actual individual consumption (AIC) per capita in purchasing power standards, as a measure of material well-being of households, was 75 % of the EU-28 average in 2016 (100) (SURS, 2017e).

Almost two-thirds of people are employed in services, and over one-third in industry and construction. Slovenia benefits from a well-educated workforce, well-developed infrastructure, and its location at the crossroads of major trade routes. High level of openness makes Slovenia extremely sensitive to economic conditions in its main trading partners and changes in its international price competitiveness. The main industries are motor vehicles, electric and electronic equipment, machinery, pharmaceuticals, and fuels (The World Factbook, CIA).

Slovenia has a lot of natural and cultural touristic attractions and is becoming more and more attractive and visited tourist location and tourism is growing in importance for Slovenian economy. Most famous attractions are lakes Bled and Bohinj, Julian and Kamnik–Savinja Alps, alpine river Soča, Postojna Cave and the UNESCO-listed Škocjan Caves, Venetian

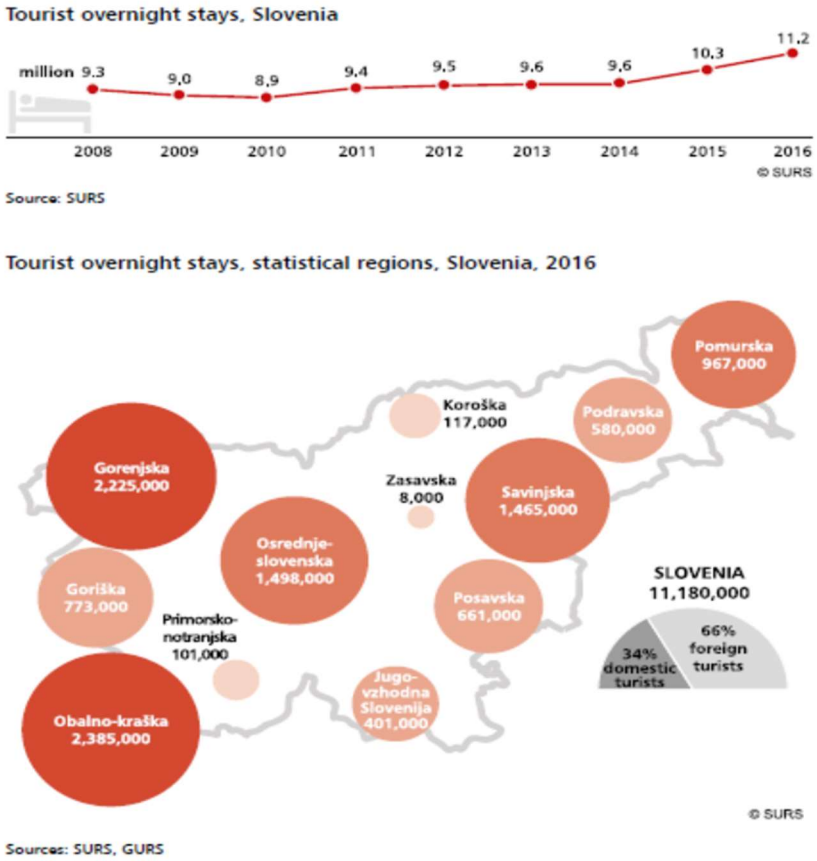
Gothic Mediterranean Sea town of Piran and city of Ljubljana with castle and closed – for the traffic and renovated old city centre with many buildings from baroque and secession and from most famous Slovenian architect Jože Plečnik. In 2016 Slovenia was declared the world's first green and most sustainable country and Ljubljana was declared as European Green Capital 2016. In 2016 over 4.3 million tourist arrivals (domestic and foreign tourists) were recorded in accommodation establishments in Slovenia. There were 1,3 million domestic tourist arrivals and 3 million foreign tourist arrivals in 2016. Foreign tourists who visited Slovenia in 2016 came predominately from the following countries: Italy (17 %), Austria and Germany (10 % each), Croatia (5 %) and the Republic of Korea (4 %). Most overnight stays in 2016 were recorded in Obalno-kraška region (2.4 million), followed by Gorenjska region (just over 2,2 million) and Osrednjeslovenska region (almost 1.5 million), where the share of foreign overnight stays is the largest and it counted 94 % of all stays in 2016, most of the stays in the region were in Ljubljana, where 12 % of all overnight stays in Slovenia were recorded. In 2014 total tourism expenditure (of residents of Slovenia and foreign visitors) was estimated at around €3.5 billion. Expenditure of foreign visitors (€2.4 billion) represented 69 % of total expenditure and expenditure of Slovenian residents €1.1 billion or 31 % of total expenditure. The country's good reputation is the most important factor for foreign tourists deciding to visit Slovenia. Recommendations from relatives and friends (26 %) and personal experience (25 %) were the most important factors for foreign tourists deciding to visit Slovenia in 2015 (SURS, 2017b).

Figure 10: Arrivals of foreign (from five key countries) and domestic tourists for 2016 in Slovenia



Source: SURS (2017b).

Figure 11: Arrivals overnight stays from 2008 to 2016 and tourist overnight stays by statistical regions for 2016



Source: SURS (2017b).

Average monthly earnings per person for August 2017 amounted to €1,613 gross or €1,051 net, which shows a nominal increase of 2.7 % as compared to earnings for August 2016. Sectors with the highest wages include electricity, gas, steam and air conditioning supply, financial and insurance activities, information and communication. Sectors with the lowest wages are accommodation and food service activities, construction, administrative and support service activities, wholesale and retail trade, transportation and storage. Average net earnings for August 2017 were the highest in the Osrednjeslovenska statistical region; they amounted to €1,137, which was 8,1 % more than the national average (SURS, 2017f).

With the economic recovery, the unemployment rate has been declining since 2013, when maximum annual unemployment rate of 10.1 % was reached. In the second quarter of 2017 unemployment rate stood at 6.4 % and is expected to lower to 4 % - 5 % in the near future (SURS, 2017d).

2.4 Taxation

Overview of standard tax rates in Slovenia is in the Table 1:

Table 1: Overview of standard tax rates in Slovenia

Corporate Income Tax	19 % Tax relief: 100 % of the amount invested in R&D up to 40 % of the amount invested in equipment and intangible long-term assets
Profit Repatriation Tax	0 % on dividends paid abroad for EU members; 15 % for other countries unless otherwise stated in a bilateral agreement
Capital Gains Tax	0 – 25 % (depending on a holding period)
VAT (Value Added Tax)	22 % - standard rate; 9.5 % - reduced rate
Property Tax	0 %
Immovable Property Transfer Tax	2 %
Social Security Contributions	16.1 % paid by employer; 22.1 % paid by employee
Personal Income Taxes	progressive tax rates: 16 %, 27 %, 34 %, 39 % and 50 %
Maximum annual depreciation rates for real properties	3 % for building projects, including investment real properties 6 % for parts of building facilities and parts of investment real properties

Source: Ministry of Finance, Republic of Slovenia (2017).

All taxes and duties are collected by the Financial Administration of the Republic of Slovenia (FURS).

2.5 Comparison table of Slovenia and neighbouring countries

Because of the small size of Slovenia and capital city Ljubljana being positioned in the central part of the country and easily, within few hours of drive, accessible from all neighbouring countries, that all represent potential gravitational area for Stožice. All neighbouring countries (Italy, Austria, Croatia, Hungary) are members of the EU, and with exception of Croatia also members of the Schengen area. Slovenia, Italy and Austria are also members of the Euro zone. Italy, Austria and Croatia are also in the list of top 5 countries where foreign tourists who visited Slovenia in 2016 came from and together represented 32 % of all tourist arrivals.

Table 2: Comparison table of Slovenia and neighbouring countries

	Slovenia	**Croatia**	**Italy**	**Austria**	**Hungary**
Basic Information					
Political system	Multi-parliamentary republic	Multi-parliamentary republic	Multi-parliamentary republic	Multi-parliamentary republic	Multi-parliamentary republic
Political Review					

President	Borut Pahor	Kolinda Grabar - Kitarović	Sergio Mattarella	Alexander Van der Bellen	János Áder
Prime Minister	Miro Cerar	Andrej Plenković	Paolo Gentiloni	Christian Kern	Viktor Orbán
Economic System and Economic Indicators					
Currency	Euro (EUR)	Kuna (Kn)	Euro (EUR)	Euro (EUR)	Forint (HUF)
Corporate income tax	19 %	18 %	24 %	25 %	9 %
Value-added tax	22 %	25 %	22 %	20 %	27 %
GDP, 2016 (€ bn)	40	46	1,673	349	114
GDP per capita, 2016 (€)	19,268	11,031	27,363	40,196	11,588
Economic Growth, 2016 (GDP, annual growth in %)	2.5	2.9	1.0	1.5	2.0
Final consumption, 2016 (annual growth, %)	2.9	3.3	1.3	1.5	4.2
PPS, 2016 (EU-28=100)	83	59	96	126	67
AIC, 2016 (EU-28=100)	75	59	97	118	63
Inflation rate 2016 (%)	0.5	0.2	0.6	1.6	1.8
Moody's sovereign rating	Baa1	Ba2	Baa2	Aa1	Baa3
Geographical and demographic data					
Area	20,273 km²	56,594 km²	301,338 km²	83,879 km²	93,030 km²
Population (million)	2.1	4.2	61.2	8.7	9.8
The capital	Ljubljana	Zagreb	Rome	Vienna	Budapest
Main religion	Catholic	Catholic	Catholic	Catholic	Catholic

Sources: *FocusEconomics (2017); Government of the republic of Slovenia (2017); Croatia.eu (2017); Italian National Institute of Statistics (2017); Italian National Tourist Board (2017); Statistics Austria (2017); Austria Info (2017); Hungarian Central Statistical Office (2017); Hungarian Tourism Agency (2017); Damodaran online (2017).*

3 PROJECT OVERVIEW

3.1 Project overview

As already mentioned in the introduction, designed by Sadar + Vuga architects, Športni Park Stožice is a hybrid of four projects:

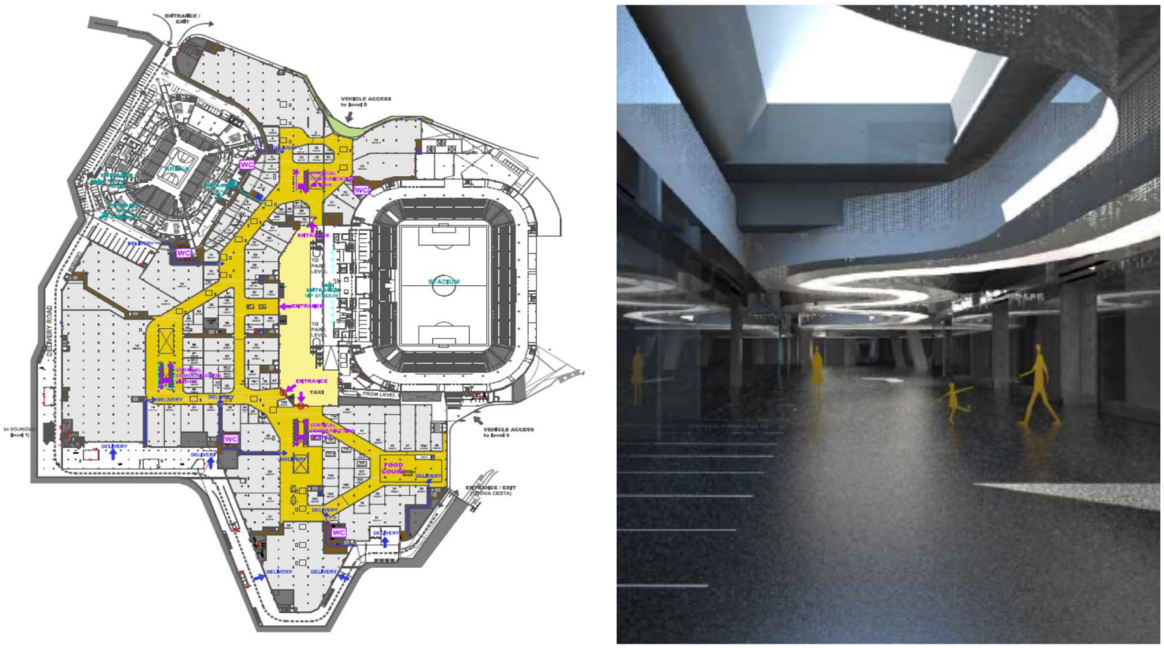
a. 16,000-seat soccer stadium
b. 12,000-seat multipurpose arena
c. large underground shopping centre (connecting the stadium and the arena)
- GBA: 80,197 m^2
- NLA: 53,353 m^2

d. public sports park (located on top of it)

Located underneath the Sports Park is a large retail area like depicted in Figure 12. Its main urban space is an open atrium, which also connects to the park above. This large sunken plaza is protected from the wind and provides intimacy for specific events, while also being wide enough to offer views of the surrounding mountains.

The shops are lit by skylights oriented towards the north, which distribute diffused light and frame the views from the shopping centre out to the park and the sports facilities. The shopping centre generates activity in the park even when no events are taking place in the stadium or in the multipurpose arena.

Figure 12: Level 3 (-6 m) of the development project



Source: Sadar + Vuga architects (2016).

Športni Park Stožice combines many different programs within a small area, creating a complex space that may attract many different visitors at the same time. It is therefore crucial that it also provides security, effective orientation and uncomplicated circulation. Bringing the different amenities together helps to avoid the usual problem created by large, isolated sports facilities – becoming a grey zone within the city, only used when events are scheduled.

3.2 Location analysis

The property is located in the central part of Slovenia in the city of Ljubljana. Macro- and microlocation of the development project are depicted in Figures 13 and 14. Ljubljana is today the administrative, economic, cultural, transport and scientific centre of Slovenia. Ljubljana is located at the crossroads of Slovenia's most important road routes. Motorway access from any of the neighbouring countries is very easy. Road connections:

- from Villach, Austria: E651
- from Klagenfurt, Austria: E652/E61
- from Graz, Austria: E57/E59
- from Trieste, Italy: E61/E70
- from Zagreb, Croatia: E70
- from Budapest, Hungary: E57/E71

Figure 13: Macrolocation of the development project

Source: Sadar + Vuga architects (2007).

Figure 14: Microlocation of the development project

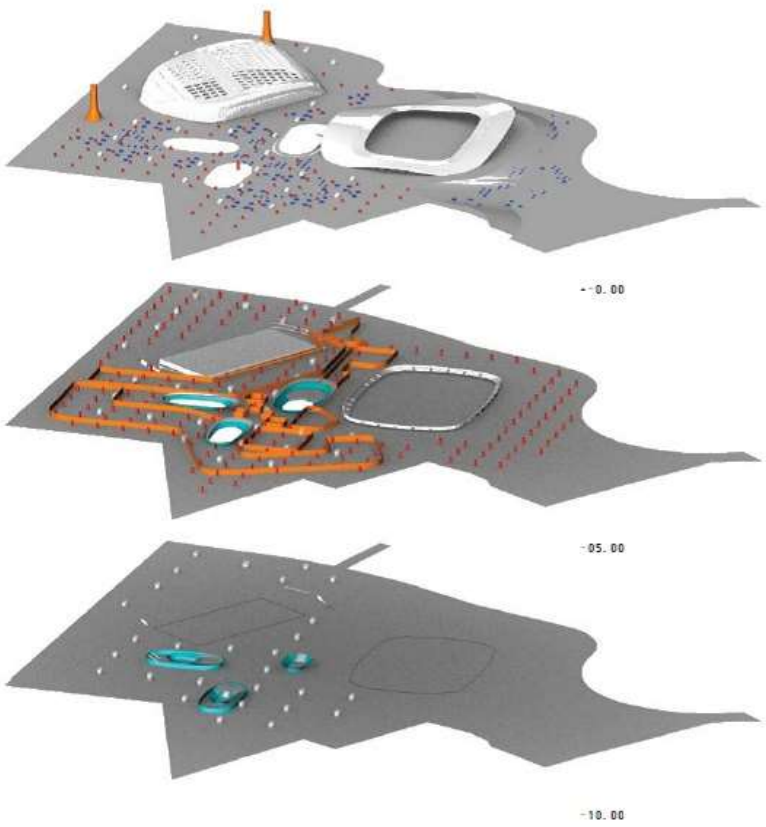
Source: Sadar + Vuga architects (2007).

3.3 Zoning

Športni Park Stožice is an open public space, dedicated to sports and leisure activities like depicted in Figure 15. It creates a new public floor, which is level with the surrounding landscape, but situated 12 meters above the ground of the former gravel pit that constitutes its site. Through its connection with the existing urban pedestrian street system – such as the popular Trail of Remembrance and Comradeship to the south – the sports park becomes a new element in the system of green space in Ljubljana, thus serving the city as a whole.

The sports facilities include an open basketball court, soccer field, skateboarding park, children's playground, cycling and running tracks, and large undefined green areas reserved for sports or leisure activities. Several pavilions in the park serve to define its landscape. These house the sports-related facilities, such as changing rooms and gyms, as well as bars and restaurants, and serve as entry points to the retail centre and the underground parking space. The 150,000 m^2 leisure park platform on the roof of the shopping centre comprises specific micro-environments, which accommodates the pressure of the crowds before major sporting events while still offering visitors a pleasurable and comfortable space to linger or to visit independently from events in the arena or stadium.

Figure 15: Different levels (0 – park, -5 – retail centre and -10 m – underground parking space) of the development project



Source: Sadar + Vuga architects (2007).

4 SPECIFIC MARKET OVERVIEW

4.1 Retail market overview

After several consecutive years with negative trends for retailing in Slovenia there was a turn after 2014. Economic recovery with decline in unemployment levels and increased disposable incomes in the years afterwards resulted in positive growth rates for retailing. Nevertheless, Slovenian consumer still remain price sensitive (Research Monitor, 2017a).

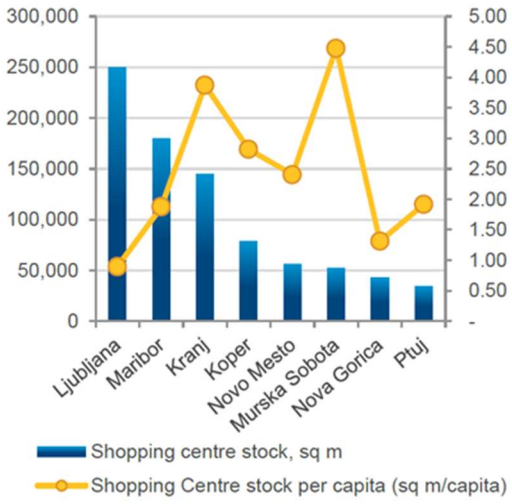
"Slovenia has one of the most consolidated retail landscapes, with an overwhelming presence of modern grocery retailers" (Research Monitor, 2017a). National brand owners and global brand owners continue investing in "modernizing their grocery and non-grocery outlets in order to offer end consumers a more pleasant shopping experience" (Research Monitor, 2017a).

As observed in global trends, also in Slovenia there was an increase in non-store retailing in 2016, especially in internet shopping. As per data of Research Monitor the estimated internet penetration rate in Slovenia reached 70 % in 2016, to which especially non-grocery retailers were quick to adapt. Internet retailing has significant future growth potential (Research Monitor, 2017a).

Shopping malls expansion continues in Slovenia, just in the capital there are in addition to Stožice already two other big shopping malls in the pipeline for the near future - on 59,000 m^2 Emonika in the city centre, on 32,000 m^2 Spar centre in Šiška (Colliers International, 2017).

Slovenia is among the countries with the highest retail GLA per population in the region with 380 m^2/1,000 population in 2017 as per research of Cushman & Wakefield (2017). Higher density in the region of Central and Eastern Europe has only Estonia with 657 m^2/1,000 population, Slovenia is being followed by other Baltic countries and Croatia with GLA of 312.8 m^2/1,000 population. Italy is on the other hand among the five countries with the lowest GLA in Western Europe with 232.3 m^2/1,000 population. This opens a question, if there is any space for more shopping malls in Slovenia. Consumers are becoming more demanding to get the best ratio between quality and price, therefore it is important to carefully consider the global trends in shopping, technological developments and enabling a real shopping experience in order to attract them to some new location.

Figure 16: Shopping centre & retail parks stock in Slovenian cities



Source: Colliers International (2017).

In case of Stožice it is important to develop the project into a regional shopping mall by leveraging its position next to the highway, which can attract also many commuters from wider area and the complex of multifunctional sports park, which can connect well with the concept of active lifestyle.

4.2 Catchment area analysis

To get a better understanding about the existing shopping malls, an analysis of the biggest existing shopping malls is been made, which can be considered for one day shopping trip in area of up to 400 km from Ljubljana, including shopping malls in Slovenia and neighbouring countries.

In the research 39 shopping malls were included with over 2,000 shops all together, half of those from Slovenia, half of Slovenian ones from Ljubljana.

Table 3: Shopping malls in Slovenia, Croatia, Hungary, Austria and Italy included in the research, taken into consideration for one day shopping trip destination from Ljubljana

Austria	Klagenfurt	City Arkaden Klagenfurt	**Slovenia**	Kranj	Lancia – Kranj
		Südpark Shopping Center			Mercator center
		IKEA			Planet TUŠ
	Villach	Atrio			Supernova
	Graz	Shopping City Seiersberg		Maribor	Qlandia – Maribor
		Citypark			Planet TUŠ
		Kastner & Öhler			Mercator center
		IKEA			Europark
Hungary	Nagykanizsa	Kanizsa Plaza		Celje	Planet TUŠ

		Kanizsa Centrum			City Center
	Szombathely	Family Center Szombathely		Novo mesto	Qlandia - Novo mesto
		Savaria Plaza			Planet TUŠ
	Zalaegerszeg	Zala Plaza		Koper	Park Center (Supernova)
Croatia	Zagreb	City center One west			Planet TUŠ
		Arena center		Ljubljana	BTC City
Italy	Trieste	Torri d'Europa			City Park
	Palmanova	Palmanova Outlet Village			Supernova
	Villesse	Tiare shopping (+IKEA)			Mercator Center Ljubljana
	Udine	Città Fiera			Center Vič
	Venezia	Noventa di Piave Designer Outlet			

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

Shops were categorized in 5 different areas: Apparel and Footwear, Food and Supermarkets, Cosmetics and Health, Restaurant and Entertainment and the rest as Miscellaneous, which was further divided in subcategories.

Apparel and Footwear is by far the largest category in all shopping malls with more than half of all shops.

Table 4: Number of shop in five different main categories and subcategories for "Miscellaneous" category in Slovenia, neighbour countries and in the capital

	Italy	Hun	Austria	Cro	Slo	Ljubljana	All
Apparel and Footwear	358	50	196	158	380	**141**	**1142**
Miscellaneous	93	31	79	51	236	**58**	**490**
Accessories / Jewellery / Watches / Glasses / Bags	19	9	37	18	45	**13**	**128**
Home	29	2	4	5	26	**8**	**66**
Bookshop / Office / Newsstand / Kiosk / Lottery	1	7	8	0	32	**6**	**48**
Telecommunication	12	1	2	9	23	**4**	**47**
Electronics	7	2	3	14	15	**6**	**41**
Other services	3	1	1	0	21	**4**	**26**
Toys / Games / Baby shops / Playground	4	4	6	2	9	**2**	**25**
Others	10	0	3	1	9	**2**	**23**
Fun and leisure	5	2	2	1	9	**3**	**19**
Travel	1	0	7	0	10	**1**	**18**
Pets	0	0	0	1	13	**3**	**14**
Gifts	0	1	5	0	6	**2**	**12**
Flower shop	0	2	0	0	6	**0**	**8**
Bank	0	0	0	0	8	**1**	**8**
Information / Tickets / Photo / Print	0	0	1	0	3	**2**	**4**

Fabrics	2	0	0	0	1	1	3
Restaurants / Entertainment	89	17	0	37	81	9	224
Cosmetics / Health	55	12	40	16	57	18	180
Food / Supermarkets / Other grocery stores	8	8	22	6	29	10	73
Grand Total	603	118	337	268	783	236	2109

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

For each shopping mall information on shops present in the malls was gathered. Among the most frequent shops are Tom Tailor in Apparel and Deichmann in Footwear category, dm from cosmetics shops and Spar as the most frequent grocery store.

Table 5: Number of 10 most frequent shops in the researched area

	Italy	Hungary	Austria	Croatia	Slovenia	Ljubljana	All
Tom Tailor	1	0	5	2	10	4	18
Deichmann	3	0	5	2	6	2	16
Calzedonia	2	0	4	2	8	3	16
H&M	2	1	5	1	6	2	15
S.Oliver	0	0	2	2	10	4	14
New Yorker	1	1	3	1	8	2	14
Intimissimi	2	0	4	2	6	3	14
dm	0	2	3	2	7	2	14
Interspar / Spar	0	1	2	2	8	2	13
C&A	1	1	4	2	5	2	13

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

In Apparel and Footwear category sportswear continues its growth in terms of market value (Research Monitor, 2017b) with an increase of 7 % for the third year in a row, whereby global apparel and footwear market had only 4 % growth, totalling to €1.4 trillion market value in 2016. The interest of consumers in health and fitness is rapidly growing.

Although performance sportswear with total market value of €66 billion in 2016 still had a lead, sports-inspired category, which consumers are incorporating more and more in their everyday life, experienced the biggest growth (Research Monitor, 2017b). Considering sports is also an important existing content in the Stožice project, closer look at most popular brands and their shops in this category was taken. For the research of shops of most popular sports and active lifestyle brands three different rankings were used. One is based on the research of most popular world brands based on revenues, second is European research based on survey carried out in Germany and third is online ranking based on the votes. Among most popular on all lists are Nike, Adidas and Under Armour, among which especially Adidas has already a big presence in Slovenia.

Table 6: Shops of brands, connected to active lifestyle, their frequency in shopping malls in the researched area with the popularity of the brands as per different rankings

Shop / Brand	All	Slovenia	Ljubljana	Popular Brand Ranking
Adidas	5	4	2	3
Nike	4	1	1	3
LACOSTE	2	1	1	2
Converse	1	0	0	2
Puma	1	0	0	2
Columbia	1	0	0	2
Reebok	1	0	0	2
TIMBERLAND	7	2	1	1
Champion	5	3	1	1
Espirit	5	0	0	1
Marc O'Polo	2	1	1	1
Kappa	2	0	0	1
QUICKSILVER	1	1	1	1
New Balance	1	0	0	1
Benetton	1	0	0	1
Diadora	1	0	0	1
Vans	1	0	0	1
The North Face	1	0	0	1
HELLY HANSEN	1	1	1	0
Superga	1	0	0	0

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

In the Table 6 are shown in green the shops/brands, which at the same time appeared in at least one of the rankings and are more frequent in the researched area. In orange are the shops/brands, which either are less popular as per ranking or less frequent in the researched area. We can see that among the brands, which found its place in all mentioned rankings, Adidas shops prevail with four own shops in Slovenia, two of those are in Ljubljana. Nike, which is along with Adidas, among two most popular brands in all rankings taken into this research, has less own shops in Slovenia, however the brand can be found in different sports shops, like Hervis and Intersport, which are as per research the most frequent sports shop in Slovenia, each with 6 shops in the biggest Slovenian shopping malls. In the wider region Timberland shops are most popular with 6 shops in the researched area. In Slovenia Adidas shops are followed by Champion shops (3 shops) and Timberland (2 shops).

4.3 Household consumption

Although Slovenian household market is growing, the aging population with lower number of children per home limits opportunities in child-related segments. The average number of

children per household in Slovenia is among the lowest in the region. Nevertheless couples with children account for the largest population of consumer expenditure in Slovenia and this is expected to continue (Research Monitor, 2017c).

Slovenia has a relatively low number of persons per household. The most typical are households with one or two persons, living in local homes with three or more rooms with enough space in their homes, which is favourable for marketers of various household goods, expecting this trend will continue in the future (Research Monitor, 2017c). Single-person households are expected to grow more in the future, along with single-parent households, which will be an important driver of consumption (Research Monitor, 2017c).

As per Research Monitor share of heads over 60 will reach nearly half of all households by 2030, Slovenia will be the 9th oldest country in the world, which will drive demand for healthcare, wellness products, relaxation, medical and household services adjusted for the elderly (Research Monitor, 2017d).

Consequences of these trends are on one hand a growing market for providers of products and services targeting singletons, especially non-essential expenditure categories that single households can afford, due to a lack of family-based fiscal commitments. On other hand elderly single-person homes and single-parent families can provide more opportunities for budget and basic goods.

By 2030 more than 50 % of population is expected to live in urban areas (Research Monitor, 2017d). The region of Osrednjeslovenska already represents the largest share of total consumer expenditures in the country and is expected to be amongst Slovenia’s fastest-growing consumer markets through to 2030. Although the Slovenian population is expected to increase just slightly over next 15 years (by 0.9 %), Ljubljana population is expected to increase by 3.1 % to 2030, being larger than next eight cities combined (Research Monitor, 2017d).

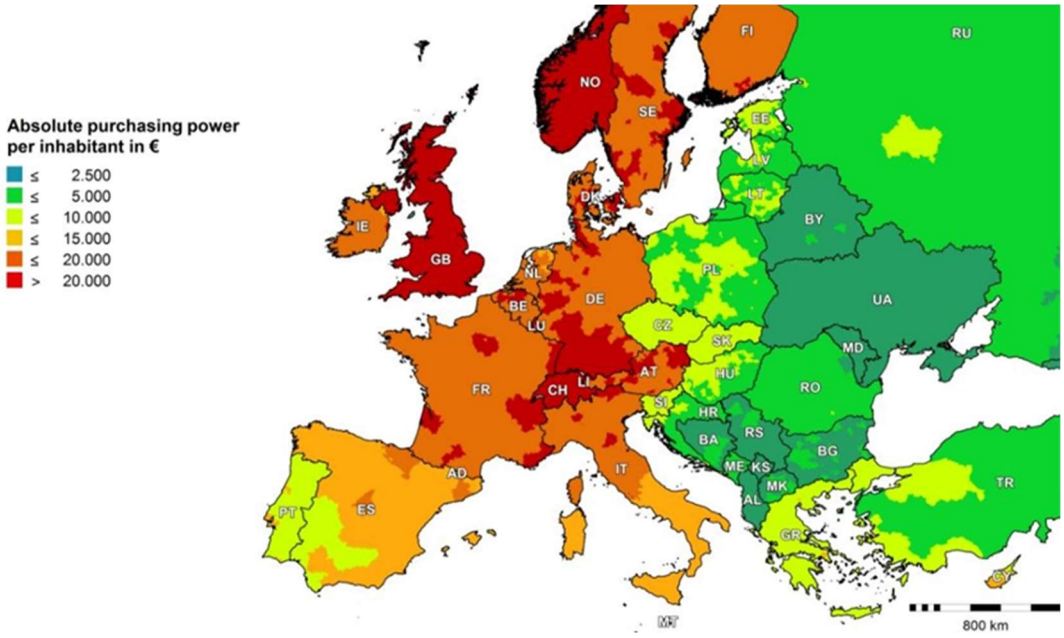
As per Research Monitor (2017e) Slovenian households’ capacity for discretionary spending remains amongst the highest in the region. Slovenia's share of non-discretionary spending is expected to remain more or less the same through to 2030.

As a result of the long-term rise in Slovenia's per capita gross income, brand and quality have gained weight in consumer buying decision, although price is still an important factor. Main area of spending for young adults are communications, clothing and footwear, while middle youth are rather an important market for family-related categories like household goods and services, transport and education (Research Monitor, 2017e).

The second lowest income class (class D) is as per Research Monitor the largest in the country, however the lowest-income class (class E) and the top-income class (class A) were the fastest-growing between 2010 and 2015 and are expected to expend with the fastest rate through to 2030, consequently there will be more opportunities for companies serving the income classes on the bottom and at the top (Research Monitor, 2017e).

Slovenia is still lagging behind the European average in its purchasing power by 25 %. As per latest data of GFK (2017) its purchasing power per inhabitant per year was in 2016/2017 €10,284 (European average for 2017 €13,937, Austria €22,597, Italy €17,119, Croatia €6,416, Hungary €6,204). It was rather stagnating in the last few years after the decline during the economic crisis regardless the positive economic growth in the last years, therefore the consumption of luxury goods is still limited in Slovenia.

Figure 17: Purchasing power Europe 2016

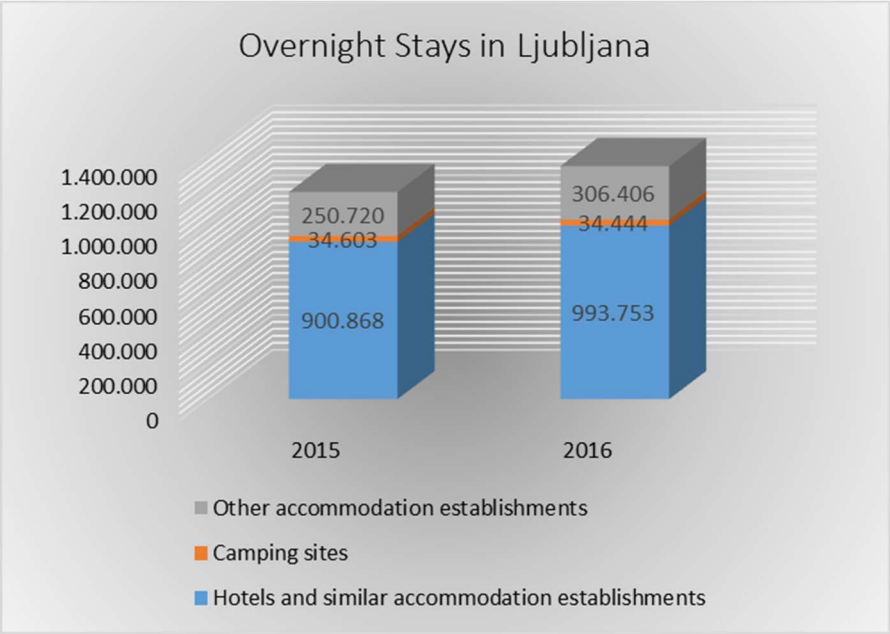


Source: RegioData Research (2017).

4.4 Tourism and its potential impact on retail

As described already before in the recent years tourism in Slovenia is thriving, especially in the capital city of Ljubljana. Ljubljana continues attracting more and more tourists, which should also be considered as possible target group for the new shopping mall. As per data of Ljubljana Tourism overnight stays in Ljubljana increased by 10 % in 2017.

Table 7: Number of overnight stays in Ljubljana in 2015 and 2016 as per tourist accommodation establishment



Source: SURS (2017g).

Table 8: Arrivals and overnight stays in Ljubljana in August 2017

	Arrivals	Overnight stays	Overnight stay in days
Total	122,538	222,520	1.8
Domestic	2,416	5,059	2.1
International arrivals	120,122	217,461	1.8
Index 2017/16	107,71	110,20	

Source: Statistical data of Ljubljana Tourism (2017).

Shopping by international tourists is as per Research Monitor (2017f) already one of the activities, which brings the highest value from tourism and it's expected to grow till 2020 and after that experience a slight decline. Apart from that in line with active and healthy lifestyle medical tourism and spas are expected to reach higher values in the next years.

Table 9: Forecast for tourism in Slovenia: value 2017-2022

EUR million	2017	2018	2019	2020	2021	2022
Attractions	171.3	169.8	167.8	163.6	162.0	160.7
- Culture, Heritage and Museums	14.9	14.9	14.8	14.7	14.9	15.0
- Casinos	153.0	151.7	149.8	145.6	143.8	142.4
- National Parks	0.8	0.8	0.8	0.8	0.8	0.8
- Theme Parks	1.2	1.2	1.2	1.2	1.2	1.2
- Other Attractions	1.3	1.3	1.3	1.3	1.3	1.4
- Attractions Offline	166.9	164.1	161.1	156.6	154.7	153.2
- Attractions Online	4.4	5.7	6.7	7.0	7.4	7.6
Medical Tourism	22.5	22.7	23.0	23.1	23.2	23.4
Shopping by International Tourists	532.0	536.8	544.0	550.0	506.2	511.2
Spas	81.0	83.1	84.7	85.6	87.2	88.9
Activities	806.7	812.5	819.6	822.3	778.6	784.1

Source: Euromonitor International from official statistics, trade associations, trade press, company research, trade interviews, trade sources

Source: Research Monitor (2017f).

As per survey conducted by Ljubljana Tourism in the period between August 2015 and October 2016, which included a sample of 934 foreign visitors in Ljubljana (New research among foreign visitors in Ljubljana, 2016), the tourists spent on average 3.3 days in Ljubljana and came mainly for sightseeing, one third looking also for some culinary experience and more than a fourth to shop, smaller portion for cultural or business events.

Respondents spent on average €149 for transportation and €132 for accommodation for the entire stay. As per their estimation their average expenses for the day prior to the survey were €51, majority of which was for food and drinks. On average they spent €28 for shopping. Estimated yearly consumption of tourists in Ljubljana based on this research is €33 million for food and drinks and €12 million for shopping.

Spanish and British tourists came out of the survey as the biggest spenders, especially Spanish tourists came mainly for gastronomic experience and shopping, which are less important factors for British tourists, similar German tourists spend on average less and are more interested in more active program with smaller expenses.

When asked about places visited in Ljubljana or the ones in plan, apart from biggest touristic attractions for sightseeing (the Castle, the old city centre, Prešern square, the Dragon Bridge, the Triple Bridge) they mentioned also other parts of the city, among them Šiška, Bežigrad and Ježica.

4.5 Daily migrations and their potential impact on retail

As mentioned earlier Slovenia is well connected with highways, which have an important role connecting Ljubljana with the biggest cities in Slovenia and neighbouring countries. This is an important factor for Stožice project as footfall from migrants and consumers within 400 km, considered as one-day shopping trip acceptable distance, can be generated.

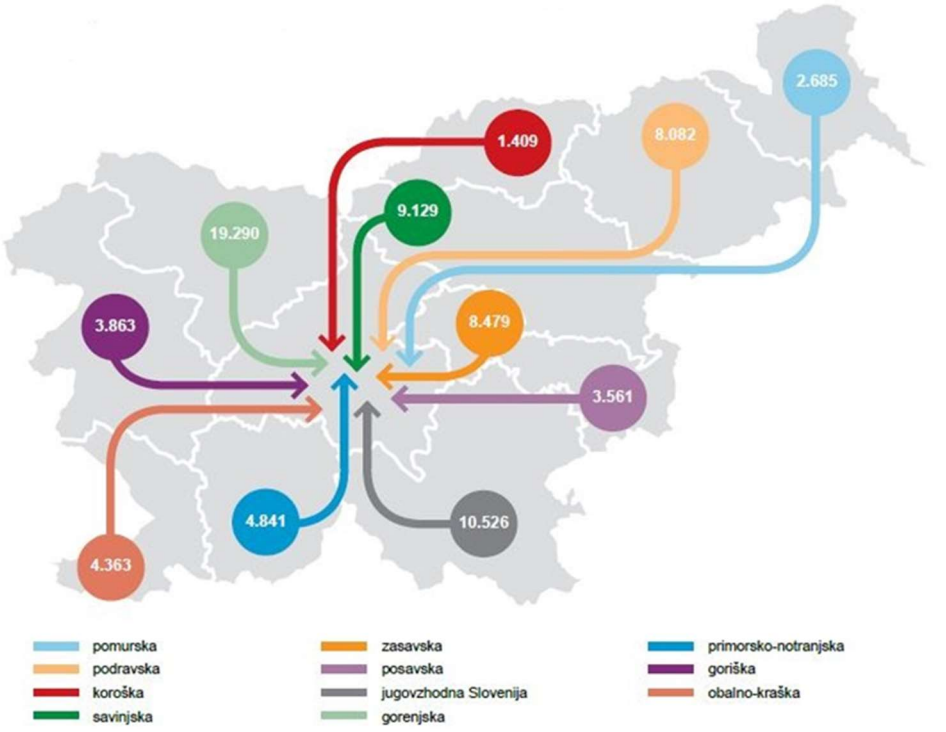
Figure 18: Map with the cities considered in the analysis of the shopping malls for one-day shopping trip with the distance and driving times from Ljubljana

Source: Barišić, I., Gajšek, N., Goršin, K., Likar, B., Rihtaršič, J. & Šimrak, K. (2017).

Stožice has an important strategic position next to the northern bypass of Ljubljana Ring Road, which is with average daily traffic of more than 60,000 vehicles one of the busiest roads in Slovenia (DARS, 2016).

Work force migration between the regions is high with the highest daily migration from Gorenjska region.

Figure 19: Numbers of daily work force migration from different regions



Source: SURS (2017h).

The location of the development project – Stožice shopping centre can be reached with public transport within half an hour from the city centre. There are five different lines with the stops close to Stožice. There are P+R possibilities (park and ride or park and take a ride on a bus), combination of private and public transport, with the buses running between 5 AM and 11 PM.

5 DEVELOPMENT STRATEGY

Ljubljana has above average shopping centre density (437 m^2/1000 population) among CEE capital cities, nevertheless, it is expected to have the strongest average annual growth in consumer spending (4.6 %) in the next five years (Cushman & Wakefield, 2017). The growth gives an opportunity for a small scale projects and retail parks but for bigger development projects as Stožice centre is it necessary to attract population from a wider region. As most recent research indicates to develop Stožice centre as a regional shopping destination the following global retail trends should be addressed (Cushman & Wakefield, 2017; Envision2020Report, 2015; Delloite, 2017; PricewaterhouseCoopers, 2012; Allianz, 2017):

a. Shopping mall should be developed as a multifunctional social space with increased dining, leisure, entertainment offerings and public services.

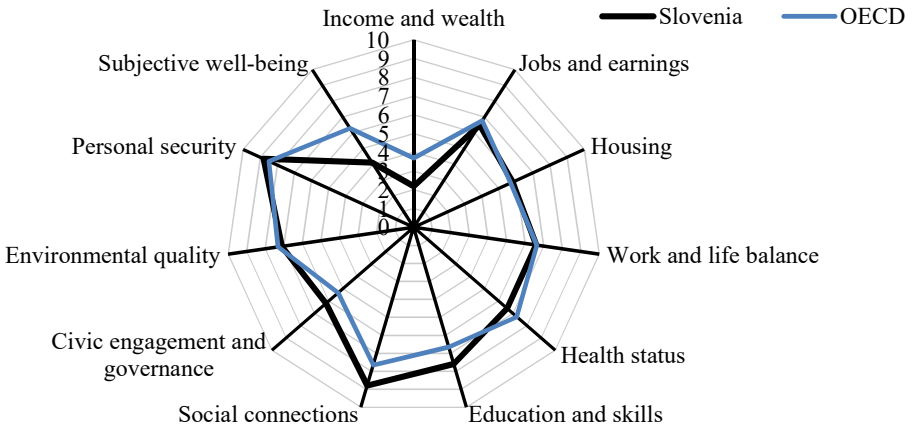
b. The importance of food and beverage offer in shopping centre is being increased.
c. The future lies in a large scale regional shopping centre with emphasis on non-retail operators.
d. It should support omnichannel or multifunctional retailing, which supports growing online purchasing and delivery within one hour.
e. New shopping centre formats are expected to be developed with increasing size of units, having a varied mix of brands without specific anchoring but with additional themes such as activities for children's leisure.
f. The retail environment of the future will see retailers increasingly opening smaller stores, online shopping.
g. Introduction of other property use classes to incorporate residential and office spaces conveniences and new experiences supported by technology development gives the need for modern shopping centres to embrace the new digital tools such as "click and collect", designated parking for such customers, fee WIFI, charging stations, augmented reality.

As one of the key trends, The Retail Service Spotlight Report indicates that the number of visits and the time spent in non-traditional retail centres which offer a positive experience, is approximately double compared to number of visits and time spend in traditional retail centres. Mixing non-retail offerings with retail is positively accepted by the shoppers. The same report indicates the shoppers who use a mall with strong non-retail offer also spend three times more per visit as they would in a traditional shopping mall (Colliers International & Global Data, 2017).

In this development strategy, high emphasis was put on holistic approach to health and aging of population, both considered as important global trends impacting our future (Allianz, 2010).

One of the major identified challenges for the region to face in the future is **ageing of population** and **increased ratio of health issues**. Furthermore, Slovenia today performs well in some measures of well-being in the Better Life Index (OECD, 2014). Slovenia ranks above OECD average in social connections, education and skills as well as civic engagement and governance. On the other hand, Slovenia falls significantly behind in subjective well-being, income and wealth and health index. In general, young people in the WHO European Region enjoy better health and development than ever before but are failing to achieve their full health potential.

Figure 20: Better life index set: 10-best



Source: OECD (2014).

Furthermore, **health** is the main consideration for EU citizens, when it comes to sport or physical activity, followed by a wide range of other factors (European Commission, 2014). Health is therefore the key driver in decision-making and is very much interconnected to sports when it comes to involvement in physical activity. Improving health is also the most common reason for engaging in sport or physical activity within EU28 countries with 62 % respondents claiming so and with 24 % of respondents also mentioning weight control. The other commonly cited reasons for engaging in sport or physical activity are to improve fitness (40 %), to relax (36 %), and to have fun (30 %). Health considerations also heavily influence the decisions of Slovenes (76 % of respondents) to engage in sport or physical activity (European Commission, 2014). Among physically active population on days they do or perform physical activity the highest percentage of Slovenes (34 %) spends from 61 to 90 min on physical activity (European Commission, 2014).

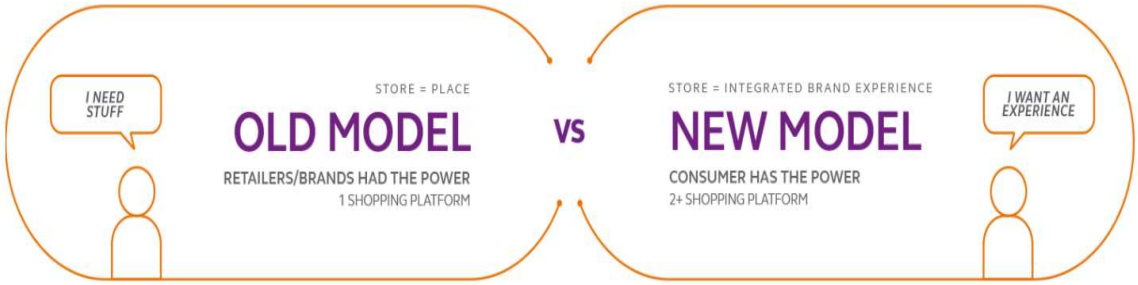
As an additional upside to the health and sport awareness existing infrastructure of Stožice centre is designed to be a magnet for local and regional sports visitors. Along with unique regional attraction of the football stadium and multi-functional Arena, the biggest outdoor playground is expected to be developed according to development plan for Stožice site.

Another important trend identified by the project research is the fact that Slovenia has also become the first country in the world to be declared as a "**green destination**". Its capital city Ljubljana is also on the list of the world's top 100 sustainable destinations. Within green destination philosophy, Ljubljana is following the green environment scheme, local authenticity and higher quality of life. It is thus no surprise that 2016 was another year with record high results in tourism (SURS, 2017).

With above key global, regional and lastly, local trends in mind, the common denominator, which has been defined based on all trends across and also the red thread of our proposed development strategy is therefore an **ACTIVE LIFESTYLE approach.**

As overview of trends indicates consumers today are looking for experiences while shopping and their focus is turning away from acquiring only material goods towards their overall well-being.

Figure 21: Business *model of the Mall of the Future*



Source: CallisonRTKL (2017).

With the before mentioned trends in mind there is a need to focus on a new business model to offer consumers experience they are forseeing based on sporting note, active and healthy lifestyle of population and innovative solutions integrated in the model.

Taking into account the above mentioned two scenarios are presented – scenario A and B. In both scenarios, the shopping centre is broadly targeting consumers with an active lifestyle from a wider region, including tourists, local population and during workdays also commuters to Ljubljana (with P+R offer). However, the two scenarios differ in the emphasis they give to a particular segment of the broader target group.

a. **Scenario A:** ***Stožice shopping centre being developed as a destination centre with a focus on health, well-being and active lifestyle.***

Key arguments for Scenario A: in connection to ageing trend for the region, the number of seniors (over 65 years) is rapidly growing (IMAD, 2017) along with the health index of Slovenia significantly falling behind the average of the OECD countries. Furthermore, the highest monthly income is with the age group from 55 to 64 years (€1,897), followed by the two groups aged from 45 to 55 with €1,658 and age group from 35 to 44 with €1,633. From the education point of view those with a higher education have twice the monthly income compared to those with lower education levels (SURS, 2014). On the other hand, the Eurobarometer Sport and physical activity report also shows the number one reason for Slovenes to be active is to improve health (European Commission, 2014).

Based on SURS and European commission (2014) research, the target group for scenario A, are people in the age group of 35 and above, with above average educational level and income and tendency to be active, sporty and health centred.

With Scenario A active lifestyle acts as a red thread of the development strategy, where the emphasis of the offer is more on a middle aged part of population and early seniors with higher income, remaining active in sports and in its concern for the health and healthy lifestyle.

b. Scenario B: *Stožice shopping centre being developed as a destination centre with a focus on sports, social activities and restaurants*.

Key arguments for Scenario B: as per research of EU28 member states on "how often do you exercise or play sport", the most active age group is from 15 to 24 years old, followed by age range from 25 to 39 (European Commission, 2014). On the gender side, the difference between male and female is very small (male 36 % vs. female 30 %). From education point of view, most active are 20+ of age range and with the household composition of 4+ members in the household. By the socio-professional category the most active are students (61 %), followed by managers/higher level professionals (51 %) and self-employed (38 %). Based on the global trends and European Commission research the stronger emphasis in scenario B is given to the age group between 15 to 39 years, predominantly students and families with younger children.
With Scenario B, active lifestyle acts as a red thread of the development strategy, where more emphasis is placed on a younger part of population with projected lower income, involved in sports and healthy lifestyle.

c. What is the difference? (Scenario A verusus Scenario B)

The main distinction between the target groups for scenario A and B is the age range and the available income for shopping and leisure activities. Furthermore, the Scenario A emphasizes medical, health and cosmetics needs of middle aged population and early seniors. Whereas in the Scenario B focus is more on physically and socially most active groups, as for example students and families with young children. In general, the target group of the Scenario B is younger and with lower available income therefore, it will need to attract a higher number of visitors. In the following chapter we will propose activities and their allocation to optimally meet the needs of both target groups.

5.1 Highest and best use recommendation

Based on the real estate review and the analysis of the obtained documentation, Stožice centre NLA is allocated according to the highest and best purpose of use into primary, secondary and tertiary area as shown in Table 10. The four criteria, which define allocation proposal in Table 10, have been considered in order to achieve the highest and best use:

a. legal admissibility
b. physical opportunity
c. financial viability
d. maximum profitability

Additionally, when allocating individual activities to primary, secondary or tertiary area, estimated feasible monthly rent was taken into account.

Table 10: Allocation proposal of net leasable area (same key allocation for Scenario A and Scenario B)

Allocation proposal	Content type
Primary area allocation	Apparel, fashion shops / outlets
	Medical centre & health and cosmetics
	Food court - bars & restaurants
Secondary area allocation	Well-being and SPA activities
	Supermarket
	Electronic devices
	Mobility
Tertiary area allocation	Playgrounds & sports (underground)
	Social clubs & entertainment
	Special attractions

Source: CallisonRTKL (2017).

With above in mind and considering it is expected that the expenditures in health and long-term care will grow strongly, the trend on healthy lifestyle, natural food and sustainability is becoming stronger. **Scenario A** represents a wholesome approach to the development of a shopping centre, keeping in mind a key global trends for the future, locally, regionally and globally. Scenario A represents a destination shopping centre with a focus on medical & health activities and fashion shops/outlets in an environment that promotes vibrant atmosphere. A detailed proposal of Scenario A offer and dedicated space for it is shown in Table 11.

Table 11: Space allocation for Scenario A (health, well-being and active lifestyle)

No.	Content type	*% of NLA*	SQM
1.	Apparel, fashion shops / outlets	*20,0%*	10.671
2.	Medical centre & health and cosmetics	*20,0%*	10.671
3.	Food court - bars & restaurants	*10,0%*	5.335
4.	Well-being and SPA activities	*10,0%*	5.335
5.	Supermarket	*7,5%*	4.001
6.	Electronic devices	*5,0%*	2.668
7.	Mobility	*5,0%*	2.668
8.	Playgrounds & sports (underground)	*10,0%*	5.335
10.	Social clubs & entertainment	*7,5%*	4.001
11.	Special attractions	*5,0%*	2.668
I.	**Non-retail**	***62,5%***	**33.346**
II.	**Retail**	***37,5%***	**20.007**
	Total	***100,0%***	**53.353**

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

Considering best alternative to Scenario A, Scenario B was developed in line with focus on social activities, interaction and with the purpose to design a space, where people would socialize and connect, again part of the global trends and local needs which are so far unmet in the area of social interactions. **Scenario B** in this way represents a wholesome approach to the development of a shopping centre, keeping in mind key global trends and with a focus on connecting people. Therefore Scenario B represents a destination shopping centre with a focus on playgrounds & sports (underground) and social clubs & entertainment (student population, youth, families with younger children, etc.). A detailed proposal of Scenario B offer and dedicated space for it is shown in Table 12.

Table 12: Space allocation for Scenario B (social activities and restaurants)

No.	Content type	*% of NLA*	SQM
1.	Apparel, fashion shops / outlets	*15,0%*	8.003
2.	Medical centre & health and cosmetics	*7,5%*	4.001
3.	Food court - bars & restaurants	*10,0%*	5.335
4.	Well-being and SPA activities	*5,0%*	2.668
5.	Supermarket	*7,5%*	4.001
6.	Electronic devices	*5,0%*	2.668
7.	Mobility	*5,0%*	2.668
8.	Playgrounds & sports (underground)	*20,0%*	10.671
10.	Social clubs & entertainment	*20,0%*	10.671
11.	Special attractions	*5,0%*	2.668
I.	**Non-retail**	***67,5%***	**36.013**
II.	**Retail**	***32,5%***	**17.340**
	Total	***100,0%***	**53.353**

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

5.2 SWOT analysis of Scenario A versus B

The following SWOT analysis shows strengths, weaknesses, opportunities and threats that are common to both scenarios and further are given also those, which refer only for individual scenario. Some of the addressed issue are stemming from the current global situation (e.g. growing economy, megatrends), while others are more regionally and locally specific (e.g. infrastructure, vicinity of student campus…).

Table 13: SWOT analysis for Scenario A and B

Table: SWOT analysis of Senario A vs. B

for A & B	only for A	only for B	for A & B	only for A	only for B
Strengths			**Weaknesses**		
Good road connections - strategic position next to the northern bypass of Ljubljana Ring	High medical & health focus (public health system in the process of slow decline - lack of financing)	In the neighborhood of faculties, students villages, and urban settlements - city districts	Development project in a distress situation		Lower purchasing power of the target segment (students, and new generation population with lower wages / higher unemployment rate, ecc.) - unpredictability of the revenue stream
Synergy with other parts of the development: - public sports park - the public garage - the football stadium and arena			High investment costs		
Big size of the plot			A very challenging NLA / GBA ratio = 0.67		
Undeveloped segment of destination shopping centres in Ljubljana			Uncertain constructio		
Opportunities			**Threats**		
GDP growth			Slow administration and building permits processes	Apparel, fashion shops / outlets - high completition of similar stores in Ljubljana (differentiation challenges)	
Purchasing power growth			High competition in the shopping mall segment in Ljubljana		
Growth in the retail segment			Lack of interested developers / investors		
Megatrends in favour of: - active lifestyle - transformation of shopping centres into multifunctional social spaces - growing importance of food and beverage offering			Accessibility to financing lines for real estate developments		
Increasing number of tourist visits, number of overnight accomodations in Ljubljana					

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

5.3 Tenant layout analysis

Unique green ground level of the Stožice centre with the total flor area of 150,000 m^2 offers diverse possibilities for recreation and social activities.

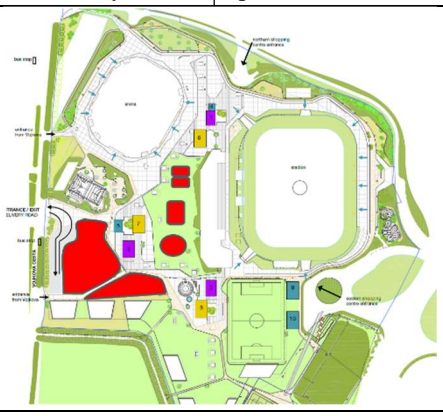
Commercial pavilions on Level 1 (3x300 m^2) would be serving as bars and coffee restaurants, which could have extended tables to open area around in case of sunny weather. These pavilions would at the same time serve as an Info points for shoppers and tourists as well as ticket sales points for the stadium and arena events.

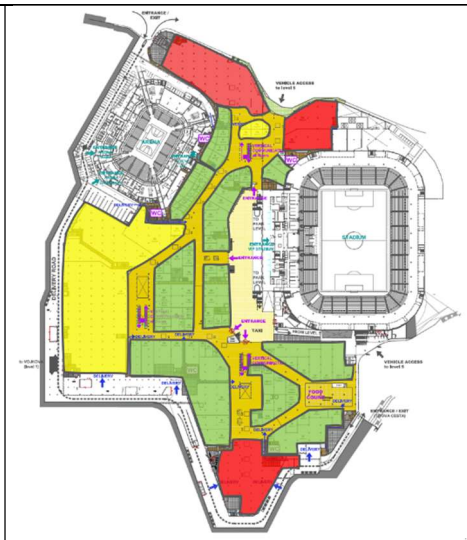
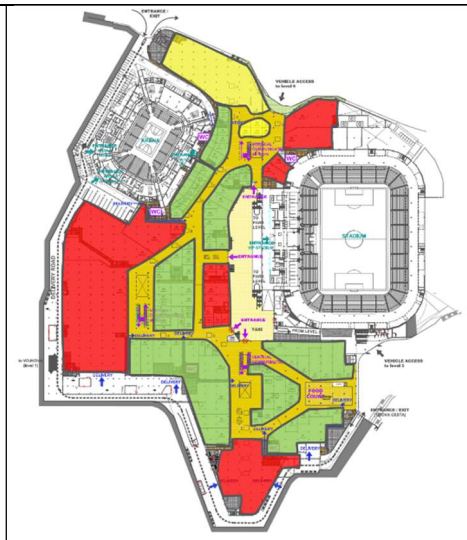
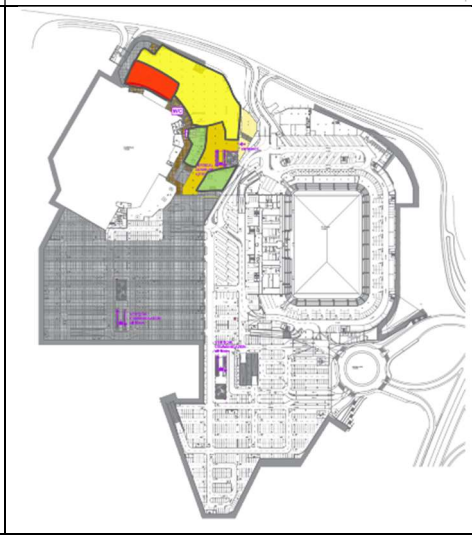
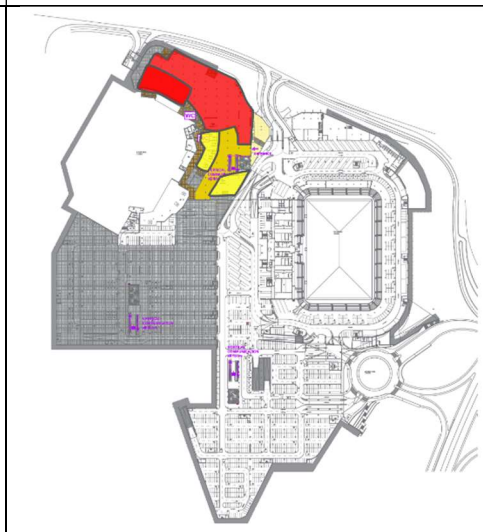
The existing sport facilities (open basketball court, soccer field, skateboarding park, children's playground, cycling and running tracks), would be complemented with other attractions such as mini golf, bike park, climbing and sliding adventure park, rope climbing area and two beach volley courts.

The role of the Park is also connecting interface between the Stožice centre and the surrounding neighbourhoods. At the same time the Park level enriches the social offer of the city of Ljubljana for its inhabitants as well as for commuters and tourists. As such the Park level would be the same for both A and B scenarios.

The needs of the two different target groups addressed by Scenario A and B are reflected also in the area allocated for activities. For **Scenario A**, the larger part (30 %) of the NLA is dedicated to health-related activities such as medical centre and nutrition, whereas for **Scenario B** 40 % of the NLA is dedicated to sports and social activities. This distribution has a direct impact on the overall ratio between primary (dark green), secondary (yellow) and tertiary (red) area as defined in Table 10 and visually indicated by colours in Table 14.

Table 14: Layout proposal of Stožice centre for Scenario A and Scenario B

Level	**Scenario A:** health, well-being and active lifestyle	**Scenario B:** sports, social activities and restaurants
Level 1: PARK The green roof of the Stožice centre is designed as the biggest playground in the region thus becoming also a city tourist attraction.		

Level 3: SHOPPING		
Level 5: SPORT & SHOPPING		

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

5.4 Systemic arrangement of the most optimal tenants

Analysis and proposal on list of the most optimal tenants comes from the following sources:

a. global trends as described in chapter 5
b. local trends as described in chapter 5
c. research of structure and tenants in shopping malls in the range area of 400 km as described in chapter 4.2

The Table 15 is a representation of examples of tenants, which could be used for Stožice project.

Table 15: Examples of tenants, for Scenario A and Scenario B

No.	Content type	Examples
1.	Special attractions	Nike's store in New York
2.	Playgrounds & sports (underground)	Theme park - Edutainment
3.	Social clubs & entertainment	Zieferbaltt, Alton Lane
4.	Medical centre & health and cosmetics	Carrefour, Spar
5.	Well-being and SPA activities	Mayo Clinic, outpatient clinic
6.	Food court - bars & restaurants	Dancing studio, Globe beauty
7.	Supermarket	Eataly concept, Green markt concept
8.	Electronic devices	Apple, Mediaworld
10.	Mobility	Virtual, Augmented reality
11.	Apparel, fashion shops / outlets	106 Sports Club, Keller sports

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

5.5 Analysis of potential risks

Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events or to maximize the realization of opportunities. We included in our identification of risks information from Slovenian market, future forecasts of aging population, health index of Slovenia, education and income level of potential consumers and innovative disruptive technologies in shopping centres based in surroundings of Shopping centre Stožice.

Table 16: Potential risks Shopping centre Stožice

Risk	Description of Risk	Impact on project Stožice
Competition	Diverse shopping centres in surroundings have negative impact on vacancy rate and in same time offer the identical or similar merchandise and compete on the basis of price, quality, or speed to market.	Critical vacancy rate above 20 %, project foreseen 15 % in the first year. Future forecast of new shopping centres Emonika and Šiška as also expansion of BTC City.
Consumer risk	For today's connected consumer, the shopping 'experience' can be endless. Shopping experiences that are meaningful, memorable, shareable, and personalized maintain traffic and bring consumers in shopping centres, as today about half of consumers actually enter shopping centre.	Consumer expectations on field of experience can change in time, and active lifestyle strategy must be upgraded.
Brand and reputation	Retailers run the risk that one innocuous post/video/comment from any angle (Board, customer, associate, management) could trigger negative effect on brand reputation which impacts sales or customer perceptions.	In case of inefficient management, not integrating in social community around shopping centre and be present on social media, we can expect negative impact on Shopping centre Stožice brand.

Technology disruption and change	Significant risk exists in the management of rapidly changing IT infrastructure due to the growing importance of technology and strategic shift in speed of technology change.	Shopping centre Stožice can miss out and not be attractive for: • teenage and millennium generation • consumers from technical fields age above +35 • high demanding sport enthusiasts
Pricing	Customers' expectations on pricing are changing. Retailers often go all out featuring the 'lowest prices' or 'Best bargains.' While the discounting pulls in new customers, it also erodes margins. Smart retailers focus less on deep discounts and more on customer experience.	Too much focus only on price and not give consumers pleasure, experience and well-being, because we try to attract consumers in Scenario A (with above average income), where priority is not mostly price, and in Scenario B group as students and families with focus on physical and social activities.

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

5.6 Plan proposal for managing exposure to identified risks

Strategies to manage risks (uncertainties with negative consequences) typically include avoiding the risk, reducing the negative effect or probability of the risk. In case of Stožice shopping centre development project we propose next approaches.

Risk of competition should be managed with a business model based on active lifestyle strategy with a strong promotional approach including benefit that Ljubljana is declared as a "green destination" and this can be in line with health, well-being destination and attracts different consumers than shopping centres in the region.

Exposure to consumer risk can be managed with a higher flexibility in ways to meet changing expectations of consumers in future on fields of:

a. sports activities
b. medical treatments
c. aging consumer's population

Proposal to minimize negative effect on **brand and reputation** of Stožice shopping centre is to have proactive focus on:

a. monitoring consumer sentiment
b. communication with consumer on social medias and
c. integration of employees in building and living active lifestyle strategy

Risk of technology disruption and change could be managed or used as advantage and blue ocean in case to be first to integrate in Shopping centre Stožice innovative experience for consumers by leveraging new technologies.

Pricing risk is not in case of Stožice shopping centre focused mostly on price, but should be managed and challenged as a consumer platform for:

a. product recommendations
b. personalized discounts
c. consumers loyalty

5.7 Rent level analysis

Based on the allocation of NLA to different activities, the estimation of cash flow from rents was calculated. Rent analysis shown in Tables 17 and 18 indicates a higher profitability of the **Scenario A**. In Scenario A 50 % of the area is dedicated to activities with the highest estimated rents per m^2 (primary area - green). Furthermore, in the scenario A the NLA dedicated to activities with the middle range of rents represents 27.5 % (secondary area - yellow) and NLA estimated as tertiary represents 22.5 %. In the **Scenario B** the emphasis is on sports and socializing, for which is allocated 45 % of the complete NLA (tertiary area – red). For apparel, medical and nutrition activities 32.5 % of the complete NLA is dedicated (primary area – green) and 22.5 % is dedicated to SPA and shopping (secondary area – yellow.)

Table 17: Rent analysis for Scenario A

No.	Content type	*% of NLA*	SQM	*Fixed rents (€/sqm)*	Fixed rents (€/month)
1.	Apparel, fashion shops / outlets	*20,0%*	10.671	*15,0*	160.059
2.	Medical centre & health and cosmetics	*20,0%*	10.671	*8,0*	85.365
3.	Food court - bars & restaurants	*10,0%*	5.335	*13,0*	69.359
4.	Well-being and SPA activities	*10,0%*	5.335	*8,0*	42.682
5.	Supermarket	*7,5%*	4.001	*9,0*	36.013
6.	Electronic devices	*5,0%*	2.668	*12,0*	32.012
7.	Mobility	*5,0%*	2.668	*11,5*	30.678
8.	Playgrounds & sports (underground)	*10,0%*	5.335	*5,0*	26.677
10.	Social clubs & entertainment	*7,5%*	4.001	*5,0*	20.007
11.	Special attractions	*5,0%*	2.668	*5,0*	13.338

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

Table 18: Rent analysis for Scenario B

No.	Content type	*% of NLA*	SQM	*Fixed rents (€/sqm)*	Fixed rents (€/month)
1.	Apparel, fashion shops / outlets	*15,0%*	8.003	*15,0*	120.044
2.	Medical centre & health and cosmetics	*7,5%*	4.001	*8,0*	32.012
3.	Food court - bars & restaurants	*10,0%*	5.335	*13,0*	69.359
4.	Well-being and SPA activities	*5,0%*	2.668	*8,0*	21.341
5.	Supermarket	*7,5%*	4.001	*9,0*	36.013
6.	Electronic devices	*5,0%*	2.668	*12,0*	32.012
7.	Mobility	*5,0%*	2.668	*11,5*	30.678
8.	Playgrounds & sports (underground)	*20,0%*	10.671	*5,0*	53.353
10.	Social clubs & entertainment	*20,0%*	10.671	*5,0*	53.353
11.	Special attractions	*5,0%*	2.668	*5,0*	13.338

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

6 FINANCIAL IMPLICATIONS

6.1 Basic input data for evaluation

6.1.1 Discount rate and capitalization rate

The capitalization rate is determined as gross going out cap rate – 7 % (assuming to sell the asset in the 10th year). Capitalization rate is been defined on the basis of the capitalization rate of property of similar properties, according to current market conditions and related risks and trends.

The discount rate is determined as a weighted average cost of capital (WACC) at 6.1 % with the following financial structure:

a. debt/equity ratio: 60/40 (basic scenario)
b. cost of debt: 4.3 % (average interest rates on long-term loans to companies)
c. cost of equity: 10 % (risk-free rate + equity premiums)
d. corporate tax rate: 17 %

6.1.2 Depreciation, inflation and taxes

The asset depreciation is estimated to be 2.5 % of the total investment cost in accordance with accounting policies. Inflation general consensus over the next decade is 2 %. Corporate tax rate is equal to 17 %. When calculating, the value added tax (VAT) rate has not been taken into account.

6.2 Revenue projections

Revenues are calculated as fixed rents (by multiplying the monthly rent by the net leasable area (NLA) and the number of months in the year) with additional turnover rents.

In the Scenario A average fixed rent is projected as €9.7/m^2/month with an additional turnover rent for retail tenants (initial average turnover is estimated at €1,500/m^2/year with a growth rate of 2.5 %; initial turnover rent is estimated at 4 % with a growth rate of 2.5 %). Different rents were used in the calculation depending on the quality and size of the leased space presented in Table 19.

Table 19: Space allocation and rent level in Scenario A

No.	Content type	*% of NLA*	SQM	*Fixed rents (€/sqm)*	Fixed rents (€/month)
1.	Apparel, fashion shops / outlets	*20,0%*	10.671	*15,0*	160.059
2.	Medical centre & health and cosmetics	*20,0%*	10.671	*8,0*	85.365
3.	Food court - bars & restaurants	*10,0%*	5.335	*13,0*	69.359
4.	Well-being and SPA activities	*10,0%*	5.335	*8,0*	42.682
5.	Supermarket	*7,5%*	4.001	*9,0*	36.013
6.	Electronic devices	*5,0%*	2.668	*12,0*	32.012
7.	Mobility	*5,0%*	2.668	*11,5*	30.678
8.	Playgrounds & sports (underground)	*10,0%*	5.335	*5,0*	26.677
10.	Social clubs & entertainment	*7,5%*	4.001	*5,0*	20.007
11.	Special attractions	*5,0%*	2.668	*5,0*	13.338
I.	**Non-retail**	***62,5%***	**33.346**	*7,7*	**257.428**
II.	**Retail**	***37,5%***	**20.007**	*12,9*	**258.762**
	Total	***100,0%***	**53.353**	***9,7***	**516.190**

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

In the Scenario B average fixed rent is projected as €7.9/m^2/month with an additional turnover rent for retail tenants (initial average turnover is estimated at €1,500/m^2/year with a growth rate of 2.5 %; initial turnover rent is estimated at 4 % with a growth rate of 2.5 %). Different rents were used in the calculation depending on the quality and size of the leased space presented in Table 20.

Also other iterations were made, in order to make a sensitive model able to forsee, on a quantitative level, the optimal space allocation and rent level projections, before the whole financial analysis have been performed. Together with the investigation of the market conditions and their potential impact on the development, and proposals of the development strategies based on megatrends and specificity of the site, this is a mandatory step in the preliminary testing of the feasibility and financial viability of the foreseen development strategy – scenarios for Stožice shopping centre.

Table 20: Space allocation and rent level in Scenario B

No.	Content type	*% of NLA*	SQM	*Fixed rents (€/sqm)*	Fixed rents (€/month)
1.	Apparel, fashion shops / outlets	*15,0%*	8.003	*15,0*	120.044
2.	Medical centre & health and cosmetics	*7,5%*	4.001	*8,0*	32.012
3.	Food court - bars & restaurants	*10,0%*	5.335	*13,0*	69.359
4.	Well-being and SPA activities	*5,0%*	2.668	*8,0*	21.341
5.	Supermarket	*7,5%*	4.001	*9,0*	36.013
6.	Electronic devices	*5,0%*	2.668	*12,0*	32.012
7.	Mobility	*5,0%*	2.668	*11,5*	30.678
8.	Playgrounds & sports (underground)	*20,0%*	10.671	*5,0*	53.353
10.	Social clubs & entertainment	*20,0%*	10.671	*5,0*	53.353
11.	Special attractions	*5,0%*	2.668	*5,0*	13.338
I.	**Non-retail**	***67,5%***	**36.013**	***6,7***	**242.756**
II.	**Retail**	***32,5%***	**17.340**	***12,6***	**218.747**
	Total	***100,0%***	**53.353**	***8,7***	**461.503**

Source: Barišić, Gajšek, Goršin, Likar, Rihtaršič & Šimrak (2017).

Vacancy rate has been foreseen in both scenarios as 15 % in the first year, 10 % in the second year, 7.5 % in the third year and subsequently, from fourth year onwards, to a 5 % level.

6.3 Projection of operating expenses

In the projection of operating expenses we included letting fees (compensation to the broker) as one monthly rent in the first year of operation, collection loss/letting void (reservations for the void period and unpaid receivables) as 1.0 % of the net revenues, and expenses not covered by the service charge costs (sinking fund) – for the extraordinary maintenance it can be assumed that there will be an annual outlay equal to 0.3 % of the reconstruction cost (estimated at €900/m^2).

Service charge costs (utility costs and asset management) were not taken into account because they did not affect the cash flow of the landlord since the tenants paying them separately.

Insurance premiums covers all premiums for the insurance of buildings, equipment and vehicles. Insurance is estimated at 0.10 % of the reconstruction cost (estimated at €900/m^2).

Interest expenses covers the total interest charges on any obligations related to the property. Detailed projection of revenues and operating expenses is shown in the Tables 21 and 22.

a. Scenario A:

Table 21: Revenues and operating expenses in Scenario A

REVENUES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Turnover rents	0	1.200.443	1.286.439	1.378.596	1.477.356	1.583.190	1.696.606	1.818.146	1.948.394	2.087.972	2.237.549
Fixed rents	0	6.194.283	6.318.169	6.444.532	6.573.423	6.704.891	6.838.989	6.975.769	7.115.284	7.257.590	7.402.742
Potential Gross rent revenues	**0**	**7.394.726**	**7.604.608**	**7.823.129**	**8.050.779**	**8.288.081**	**8.535.595**	**8.793.915**	**9.063.678**	**9.345.562**	**9.640.291**
Vacancy	100%	15%	10%	7,5%	5%	5%	5%	5%	5%	5%	5%
Net revenues	**0**	**6.285.517**	**6.844.147**	**7.236.394**	**7.648.240**	**7.873.677**	**8.108.815**	**8.354.219**	**8.610.494**	**8.878.284**	**9.158.276**
OPERATING COSTS											
Letting fees	0	523.793	10.685	-	-	-	-	-	-	-	-
Collection loss / letting void	0	62.855	68.441	72.364	76.482	78.737	81.088	83.542	86.105	88.783	91.583
Insurance	0	48.018	48.978	49.958	50.957	51.976	53.015	54.076	55.157	56.260	57.386
Marketing expenses	0	0	0	0	0	0	0	0	0	0	0
Extraordinary maintenance	0	144.053	146.934	149.873	152.870	155.928	159.046	162.227	165.472	168.781	172.157
Total operating costs	**0**	**778.719**	**275.039**	**272.194**	**280.309**	**286.640**	**293.150**	**299.845**	**306.734**	**313.824**	**321.125**
Net Operating Income (NOI)	**0**	**5.506.798**	**6.569.108**	**6.964.200**	**7.367.930**	**7.587.037**	**7.815.665**	**8.054.374**	**8.303.760**	**8.564.459**	**8.837.151**

b. Scenario B:

Table 22: Revenues and operating expenses in Scenario B

REVENUES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Turnover rents	0	1.040.384	1.114.914	1.194.784	1.280.375	1.372.098	1.470.391	1.575.727	1.688.608	1.809.575	1.939.209
Fixed rents	0	5.538.041	5.648.802	5.761.778	5.877.014	5.994.554	6.114.445	6.236.734	6.361.469	6.488.698	6.618.472
Potential Gross rent revenues	**0**	**6.578.425**	**6.763.716**	**6.956.562**	**7.157.389**	**7.366.652**	**7.584.837**	**7.812.461**	**8.050.077**	**8.298.274**	**8.557.681**
Vacancy	100%	15%	10%	7,5%	5%	5%	5%	5%	5%	5%	5%
Net revenues	**0**	**5.591.661**	**6.087.345**	**6.434.820**	**6.799.519**	**6.998.319**	**7.205.595**	**7.421.838**	**7.647.573**	**7.883.360**	**8.129.797**
OPERATING COSTS											
Letting fees	0	465.972	9.506	-	-	-	-	-	-	-	-
Collection loss / letting void	0	55.917	60.873	64.348	67.995	69.983	72.056	74.218	76.476	78.834	81.298
Insurance	0	48.018	48.978	49.958	50.957	51.976	53.015	54.076	55.157	56.260	57.386
Marketing expenses	0	0	0	0	0	0	0	0	0	0	0
Extraordinary maintenance	0	144.053	146.934	149.873	152.870	155.928	159.046	162.227	165.472	168.781	172.157
Total operating costs	**0**	**713.959**	**266.292**	**264.179**	**271.822**	**277.887**	**284.118**	**290.521**	**297.105**	**303.875**	**310.840**
Net Operating Income (NOI)	**0**	**4.877.702**	**5.821.053**	**6.170.641**	**6.527.697**	**6.720.432**	**6.921.477**	**7.131.316**	**7.350.468**	**7.579.485**	**7.818.957**

6.4 Cost of investment

In both scenarios we have predicted that the property in question will be developed in a shopping centre. Detailed description of all the investment costs in shown in Table 23.

Table 23: Construction costs calculation

Constuction costs calculation			
Description	**GBA (m2)**	**€/m2**	**Total costs**
Civil works	80.197	683	54.806.630
Electrical instalation	80.197	143	11.452.132
HVAC	80.197	133	10.634.122
FF&A	80.197	61	4.908.056
Total			€ 81.800.940

The construction period is estimated to be 1 year with 3 months for the construction permits. Total cost of investment includes construction costs, design, supervision and other fees, contributions and contingency (reservations for unforeseen costs - projected on amount of 5 % of total cost of investment). The total cost of investment is shown in the Table 24.

Table 24: Total cost of investment calculation

Investment costs summary	
Total construction costs	€ 81.800.940
Design, supervision and other fees	€ 7.698.912
Contingency	€ 1.924.728
Contingency	€ 4.811.820
Development costs	€ 96.236.400
Development costs per GBA	€ 1.200
Development costs per NLA	€ 1.804
Gross bulding area (GBA)	80.197 m2
Net leasable area (NLA)	53.353 m2
NLA / GBA (net / gross) ratio	**0,67**

Like shown in the Table 24 a very challenging NLA / GBA ratio is present, this is one of the given figures of this development project and needs to be managed properly, taken as an opportunity to turn public spaces (shopping pathway of 14,652 m^2 versus NLA of 53,353 m^2) into a very attractive and dynamic space in "the heart" of the shopping centre.

6.5 Financing structure

The projected financial structure of the SPV is determined as 60 % debt and 40 % equity, with the cost of debt of at 4.3 % and the cost of equity at 10 %. The financing line is projected as a 10 years balloon loan (2.8 % yearly amortization, balance at end) from the local bank at current market conditions (i.e. 60 % loan to value and a 4.3 % interest rate). Two additional sub-scenario with debt/equity ratio of 70/30 and 80/20 are also projected (and all other parameters *ceteris paribus*). Financing lines and their summary are shown in Tables 25-27 for Scenario A, and in Tables 28-30 for B. Table 31 shows the financing line summary.

a. Scenario A:

Table 25: Financing line of Scenario A (debt/equity ratio: 60/40)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial debt		57.741.840	56.125.068	54.508.297	52.891.525	51.274.754	49.657.982	48.041.211	46.424.439	44.807.668	43.190.896
New financing	57.741.840										
Debt amortization		1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772
Debt final reimboursement											41.574.125
Final debt	57.741.840	56.125.068	54.508.297	52.891.525	51.274.754	49.657.982	48.041.211	46.424.439	44.807.668	43.190.896	0
Interests	0	2.482.899	2.413.378	2.343.857	2.274.336	2.204.814	2.135.293	2.065.772	1.996.251	1.926.730	1.857.209
Debt service	0	4.099.671	4.030.149	3.960.628	3.891.107	3.821.586	3.752.065	3.682.544	3.613.022	3.543.501	45.048.105
DSCR		1,34	1,63	1,76	1,89	1,99	2,08	2,19	2,30	2,42	

Table 26: Financing line of Scenario A (debt/equity ratio: 70/30)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial debt		67.365.480	65.479.247	63.593.013	61.706.780	59.820.546	57.934.313	56.048.079	54.161.846	52.275.612	50.389.379
New financing	67.365.480										
Debt amortization		1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233
Debt final reimboursement											48.503.146
Final debt	67.365.480	65.479.247	63.593.013	61.706.780	59.820.546	57.934.313	56.048.079	54.161.846	52.275.612	50.389.379	0
Interests	0	2.896.716	2.815.608	2.734.500	2.653.392	2.572.283	2.491.175	2.410.067	2.328.959	2.247.851	2.166.743
Debt service	0	4.782.949	4.701.841	4.620.733	4.539.625	4.458.517	4.377.409	4.296.301	4.215.193	4.134.085	52.556.122
DSCR		1,15	1,40	1,51	1,62	1,70	1,79	1,87	1,97	2,07	

Table 27: Financing line of Scenario A (debt/equity ratio: 80/20)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial debt		76.989.120	74.833.425	72.677.729	70.522.034	68.366.339	66.210.643	64.054.948	61.899.252	59.743.557	57.587.862
New financing	76.989.120										
Debt amortization		2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695
Debt final reimboursement											55.432.166
Final debt	76.989.120	74.833.425	72.677.729	70.522.034	68.366.339	66.210.643	64.054.948	61.899.252	59.743.557	57.587.862	0
Interests	0	3.310.532	3.217.837	3.125.142	3.032.447	2.939.753	2.847.058	2.754.363	2.661.668	2.568.973	2.476.278
Debt service	0	5.466.228	5.373.533	5.280.838	5.188.143	5.095.448	5.002.753	4.910.058	4.817.363	4.724.668	60.064.140
DSCR		1,01	1,22	1,32	1,42	1,49	1,56	1,64	1,72	1,81	

b. Scenario B:

Table 28: Financing line of Scenario B (debt/equity ratio: 60/40)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial debt		57.741.840	56.125.068	54.508.297	52.891.525	51.274.754	49.657.982	48.041.211	46.424.439	44.807.668	43.190.896
New financing	57.741.840										
Debt amortization		1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772	1.616.772
Debt final reimboursement											41.574.125
Final debt	57.741.840	56.125.068	54.508.297	52.891.525	51.274.754	49.657.982	48.041.211	46.424.439	44.807.668	43.190.896	0
Interests	0	2.482.899	2.413.378	2.343.857	2.274.336	2.204.814	2.135.293	2.065.772	1.996.251	1.926.730	1.857.209
Debt service	0	4.099.671	4.030.149	3.960.628	3.891.107	3.821.586	3.752.065	3.682.544	3.613.022	3.543.501	45.048.105
DSCR		1,19	1,44	1,56	1,68	1,76	1,84	1,94	2,03	2,14	

Table 29: Financing line of Scenario B (debt/equity ratio: 70/30)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial debt		67.365.480	65.479.247	63.593.013	61.706.780	59.820.546	57.934.313	56.048.079	54.161.846	52.275.612	50.389.379
New financing	67.365.480										
Debt amortization		1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233	1.886.233
Debt final reimboursement											48.503.146
Final debt	67.365.480	65.479.247	63.593.013	61.706.780	59.820.546	57.934.313	56.048.079	54.161.846	52.275.612	50.389.379	0
Interests	0	2.896.716	2.815.608	2.734.500	2.653.392	2.572.283	2.491.175	2.410.067	2.328.959	2.247.851	2.166.743
Debt service	0	4.782.949	4.701.841	4.620.733	4.539.625	4.458.517	4.377.409	4.296.301	4.215.193	4.134.085	52.556.122
DSCR		1,02	1,24	1,34	1,44	1,51	1,58	1,66	1,74	1,83	

Table 30: Financing line of Scenario B (debt/equity ratio: 80/20)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial debt		76.989.120	74.833.425	72.677.729	70.522.034	68.366.339	66.210.643	64.054.948	61.899.252	59.743.557	57.587.862
New financing	76.989.120										
Debt amortization		2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695	2.155.695
Debt final reimboursement											55.432.166
Final debt	76.989.120	74.833.425	72.677.729	70.522.034	68.366.339	66.210.643	64.054.948	61.899.252	59.743.557	57.587.862	0
Interests	0	3.310.532	3.217.837	3.125.142	3.032.447	2.939.753	2.847.058	2.754.363	2.661.668	2.568.973	2.476.278
Debt service	0	5.466.228	5.373.533	5.280.838	5.188.143	5.095.448	5.002.753	4.910.058	4.817.363	4.724.668	60.064.140
DSCR		0,89	1,08	1,17	1,26	1,32	1,38	1,45	1,53	1,60	

Table 31: Financing lines of Scenario A & B – debt/equity: 60/40 vs. 70/30 vs. 80/20

Financing line of Scenario A & B summary				
Description		**debt/equity: 60/40**	**debt/equity: 70/30**	**debt/equity: 80/20**
New financing		€ 57.741.840	€ 67.365.480	€ 76.989.120
Debt amortization	∑	€ 16.167.715	€ 18.862.334	€ 21.556.954
Debt final reimboursement		€ 41.574.125	€ 48.503.146	€ 55.432.166
Interests	∑	€ 21.700.538	€ 25.317.295	€ 28.934.051
Debt service	∑	€ 79.442.378	€ 92.682.775	€ 105.923.171
min DSCR for Scenario A		**1,34**	**1,15**	**1,01**
min DSCR for Scenario B		**1,19**	**1,02**	**0,89**

Debt service cover ration (DSCR) assesses the project company's ability to service its debt from its annual cash flow, and is calculated as the ratio between the cash flow available for debt service (NOI) and Debt service (interest and principal – debt amortization). In their initial projections the lenders look at the projected DSCR for each period throughout the term of the loan and check that this does not fall below their required minimum at any time. Minimum DSCR ratio acceptable for shopping centres with risk characteristics in line with Stožice is around 1.3:1 (Yescombe, 2014). Only Scenario A with debt/equity ratio: 60/40 is able to fulfill this mandatory requirement with minimum DSCR – 1.34 (in the first year).

6.6 Financial statements

The pro forma projected financial statements (balance shhet, profit & loss statement, and the cash flow statement) are shown in Tables 32-34 for Scenario A, and in Tables 35-37 for B.

a. Scenario A – Balance sheet

Table 32: Balance sheet of Scenario A

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
ASSETS											
Real estate assets	96.236.400	93.830.490	91.424.580	89.018.670	86.612.760	84.206.850	81.800.940	79.395.030	76.989.120	74.583.210	
Cash		1.302.069	3.543.559	6.170.677	9.190.593	12.450.071	15.957.013	19.719.786	23.747.252	28.048.800	108.113.762
Total assets	**96.236.400**	**95.132.559**	**94.968.139**	**95.189.347**	**95.803.353**	**96.656.921**	**97.757.953**	**99.114.816**	**100.736.372**	**102.632.010**	**108.113.762**
LIABILITIES											
Debt on asset acquisition	57.741.840	56.125.068	54.508.297	52.891.525	51.274.754	49.657.982	48.041.211	46.424.439	44.807.668	43.190.896	0
Net income of the period		*512.931*	*1.452.351*	*1.837.979*	*2.230.778*	*2.470.339*	*2.717.803*	*2.973.635*	*3.238.327*	*3.512.410*	*48.672.648*
Net income of previous periods		*0*	*512.931*	*1.965.282*	*3.803.261*	*6.034.039*	*8.504.379*	*11.222.182*	*14.195.817*	*17.434.144*	*20.946.554*
Equity injected	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*
Equity	38.494.560	39.007.491	40.459.842	42.297.821	44.528.599	46.998.939	49.716.742	52.690.377	55.928.704	59.441.114	108.113.762
Total equity & liabilities	**96.236.400**	**95.132.559**	**94.968.139**	**95.189.347**	**95.803.353**	**96.656.921**	**97.757.953**	**99.114.816**	**100.736.372**	**102.632.010**	**108.113.762**

Profit & loss statement

Table 33: P&L of Scenario A

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Revenues	0	6.285.517	6.844.147	7.236.394	7.648.240	7.873.677	8.108.815	8.354.219	8.610.494	8.878.284	9.158.276
Costs	0	778.719	275.039	272.194	280.309	286.640	293.150	299.845	306.734	313.824	321.125
EBITDA (NOI)	**0**	**5.506.798**	**6.569.108**	**6.964.200**	**7.367.930**	**7.587.037**	**7.815.665**	**8.054.374**	**8.303.760**	**8.564.459**	**8.837.151**
Depreciation		2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910
EBIT	**0**	**3.100.888**	**4.163.198**	**4.558.290**	**4.962.020**	**5.181.127**	**5.409.755**	**5.648.464**	**5.897.850**	**6.158.549**	**6.431.241**
Interests	0	2.482.899	2.413.378	2.343.857	2.274.336	2.204.814	2.135.293	2.065.772	1.996.251	1.926.730	1.857.209
Operating Profit	**0**	**617.989**	**1.749.820**	**2.214.433**	**2.687.685**	**2.976.312**	**3.274.462**	**3.582.692**	**3.901.599**	**4.231.819**	**4.574.032**
Capital gain / loss											54.067.713
EBT	**0**	**617.989**	**1.749.820**	**2.214.433**	**2.687.685**	**2.976.312**	**3.274.462**	**3.582.692**	**3.901.599**	**4.231.819**	**58.641.745**
Taxes	0	105.058	297.469	376.454	456.906	505.973	556.659	609.058	663.272	719.409	9.969.097
Net income	**0**	**512.931**	**1.452.351**	**1.837.979**	**2.230.778**	**2.470.339**	**2.717.803**	**2.973.635**	**3.238.327**	**3.512.410**	**48.672.648**

Cash flow statement

Table 34: Cash flow statement of Scenario A

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
EBITDA	0	5.506.798	6.569.108	6.964.200	7.367.930	7.587.037	7.815.665	8.054.374	8.303.760	8.564.459	8.837.151
Investments / Divestments	-96.236.400	0	0	0	0	0	0	0	0	0	126.245.013
FCFO (pre tax)	**-96.236.400**	**5.506.798**	**6.569.108**	**6.964.200**	**7.367.930**	**7.587.037**	**7.815.665**	**8.054.374**	**8.303.760**	**8.564.459**	**135.082.163**
Operating Taxes	0	-527.151	-707.744	-774.909	-843.543	-880.792	-919.658	-960.239	-1.002.635	-1.046.953	-10.284.822
FCFO (post tax)	**-96.236.400**	**4.979.647**	**5.861.365**	**6.189.290**	**6.524.387**	**6.706.245**	**6.896.007**	**7.094.135**	**7.301.126**	**7.517.506**	**124.797.341**
Tax Shield	0	422.093	410.274	398.456	386.637	374.818	363.000	351.181	339.363	327.544	315.725
New debt	57.741.840	0	0	0	0	0	0	0	0	0	0
Debt reimboursement	0	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-43.190.896
Cost of debt	0	-2.482.899	-2.413.378	-2.343.857	-2.274.336	-2.204.814	-2.135.293	-2.065.772	-1.996.251	-1.926.730	-1.857.209
FCFE	**-38.494.560**	**1.302.069**	**2.241.489**	**2.627.118**	**3.019.917**	**3.259.478**	**3.506.942**	**3.762.773**	**4.027.466**	**4.301.549**	**80.064.962**
Equity In	*-38.494.560*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Equity Out	*0*	*1.302.069*	*2.241.489*	*2.627.118*	*3.019.917*	*3.259.478*	*3.506.942*	*3.762.773*	*4.027.466*	*4.301.549*	*80.064.962*

b. Scenario B – Balance sheet

Table 35: Balance sheet of Scenario B

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
ASSETS											
Real estate assets	96.236.400	93.830.490	91.424.580	89.018.670	86.612.760	84.206.850	81.800.940	79.395.030	76.989.120	74.583.210	
Cash		779.920	2.400.523	4.368.987	6.691.511	9.231.707	11.996.473	14.993.108	18.229.341	21.713.361	88.860.345
Total assets	**96.236.400**	**94.610.410**	**93.825.103**	**93.387.657**	**93.304.271**	**93.438.557**	**93.797.413**	**94.388.138**	**95.218.461**	**96.296.571**	**88.860.345**
LIABILITIES											
Debt on asset acquisition	57.741.840	56.125.068	54.508.297	52.891.525	51.274.754	49.657.982	48.041.211	46.424.439	44.807.668	43.190.896	0
Net income of the period		*-9.219*	*831.465*	*1.179.326*	*1.533.385*	*1.751.058*	*1.975.627*	*2.207.496*	*2.447.095*	*2.694.881*	*35.754.671*
Net income of previous periods		*0*	*-9.219*	*822.246*	*2.001.572*	*3.534.957*	*5.286.014*	*7.261.642*	*9.469.138*	*11.916.233*	*14.611.114*
Equity injected	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*	*38.494.560*
Equity	38.494.560	38.485.341	39.316.806	40.496.132	42.029.517	43.780.574	45.756.202	47.963.698	50.410.793	53.105.674	88.860.345
Total equity & liabilities	**96.236.400**	**94.610.410**	**93.825.103**	**93.387.657**	**93.304.271**	**93.438.557**	**93.797.413**	**94.388.138**	**95.218.461**	**96.296.571**	**88.860.345**

Profit & loss statement

Table 36: P&L of Scenario B

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Revenues	0	5.591.661	6.087.345	6.434.820	6.799.519	6.998.319	7.205.595	7.421.838	7.647.573	7.883.360	8.129.797
Costs	0	713.959	266.292	264.179	271.822	277.887	284.118	290.521	297.105	303.875	310.840
EBITDA (NOI)	**0**	**4.877.702**	**5.821.053**	**6.170.641**	**6.527.697**	**6.720.432**	**6.921.477**	**7.131.316**	**7.350.468**	**7.579.485**	**7.818.957**
Depreciation		2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910	2.405.910
EBIT	**0**	**2.471.792**	**3.415.143**	**3.764.731**	**4.121.787**	**4.314.522**	**4.515.567**	**4.725.406**	**4.944.558**	**5.173.575**	**5.413.047**
Interests	0	2.482.899	2.413.378	2.343.857	2.274.336	2.204.814	2.135.293	2.065.772	1.996.251	1.926.730	1.857.209
Operating Profit	**0**	**-11.107**	**1.001.765**	**1.420.874**	**1.847.451**	**2.109.708**	**2.380.274**	**2.659.634**	**2.948.307**	**3.246.845**	**3.555.838**
Capital gain / loss											39.522.079
EBT	**0**	**-11.107**	**1.001.765**	**1.420.874**	**1.847.451**	**2.109.708**	**2.380.274**	**2.659.634**	**2.948.307**	**3.246.845**	**43.077.917**
Taxes	0	-1.888	170.300	241.549	314.067	358.650	404.647	452.138	501.212	551.964	7.323.246
Net income	**0**	**-9.219**	**831.465**	**1.179.326**	**1.533.385**	**1.751.058**	**1.975.627**	**2.207.496**	**2.447.095**	**2.694.881**	**35.754.671**

Cash flow statement

Table 37: Cash flow statement of Scenario B

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
EBITDA	0	4.877.702	5.821.053	6.170.641	6.527.697	6.720.432	6.921.477	7.131.316	7.350.468	7.579.485	7.818.957
Investments / Divestments	-96.236.400	0	0	0	0	0	0	0	0	0	111.699.379
FCFO (pre tax)	**-96.236.400**	**4.877.702**	**5.821.053**	**6.170.641**	**6.527.697**	**6.720.432**	**6.921.477**	**7.131.316**	**7.350.468**	**7.579.485**	**119.518.335**
Operating Taxes	0	-420.205	-580.574	-640.004	-700.704	-733.469	-767.646	-803.319	-840.575	-879.508	-7.638.971
FCFO (post tax)	**-96.236.400**	**4.457.497**	**5.240.479**	**5.530.637**	**5.826.993**	**5.986.964**	**6.153.831**	**6.327.997**	**6.509.893**	**6.699.977**	**111.879.364**
Tax Shield	0	422.093	410.274	398.456	386.637	374.818	363.000	351.181	339.363	327.544	315.725
New debt	57.741.840	0	0	0	0	0	0	0	0	0	0
Debt reimboursement	0	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-1.616.772	-43.190.896
Cost of debt	0	-2.482.899	-2.413.378	-2.343.857	-2.274.336	-2.204.814	-2.135.293	-2.065.772	-1.996.251	-1.926.730	-1.857.209
FCFE	**-38.494.560**	**779.920**	**1.620.604**	**1.968.464**	**2.322.523**	**2.540.196**	**2.764.766**	**2.996.635**	**3.236.233**	**3.484.020**	**67.146.985**
Equity In	*-38.494.560*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Equity Out	*0*	*779.920*	*1.620.604*	*1.968.464*	*2.322.523*	*2.540.196*	*2.764.766*	*2.996.635*	*3.236.233*	*3.484.020*	*67.146.985*

6.7 Financial implications

In the calculation, we used the 10-year discounted cash flow (DCF) in which we applied a WACC of 6.1 %, in case of the basic financing structure (debt/equity ratio: 60/40). The calculation includes the terminal value at the end of the period assuming an exit strategy where the capitalization rate of 7 % was applied. The Table 38 shows the final results – KPIs for both scenarios.

Table 38: KPIs for scenarios A and B

Scenario summary		
Description	**Scenario A**	**Scenario B**
GDV (Present Value)	€ 112.377.586	€ 100.589.414
GDV per NLA	€ 2.106	€ 1.885
NPV of Total Investment costs	€ 96.236.400	€ 96.236.400
Potential NOI (stabilized level)	7.587.037 €	6.720.432 €
IRR	8,2%	6,7%
Estimated NPV of the Project	**€ 16.141.186**	**€ 4.353.014**

As can be seen from the Table 38, both scenarios have a positive result and the internal rate of return is above the WACC, with Scenario A prevailing on Scenario B in all KPIs.

6.7.1 Sensitivity analysis – investment costs and revenues

Sensitivity analysis is a risk assessment procedure, where changes in significant variables are made to determine the effect of these changes on the planed outcome.

In different scenarios, we tested changes in investment costs and revenues. For changes in investment costs we assumed a change of +/- 5 %, while we tested revenues with changes of +/- 5 % and +/- 10 %. The Tables 39 and 40 show the final results of the sensitivity analysis for scenarios A and B.

Table 39: Sensitivity analysis for Scenario A – investment costs and revenues

Sensitivity analysis					
	Revenue				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	€ 11.372.070	€ 11.594.496	€ 11.816.921	€ 12.039.346	€ 12.261.771
0,00%	€ 15.696.335	€ 15.918.761	€ 16.141.186	€ 16.363.611	€ 16.586.036
-5,00%	€ 20.020.600	€ 20.243.026	€ 20.465.451	€ 20.687.876	€ 20.910.301
% change					
	Revenue				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	-30%	-28%	-27%	-25%	-24%
0,00%	-3%	-1%	0%	1%	3%
-5,00%	24%	25%	27%	28%	30%

MIN	€ 11.372.070
MAX	€ 20.910.301
MEDIAN	€ 16.141.186
AVERAGE	€ 16.141.186

The sensitivity analysis has shown that due to changes in investment costs and revenues net prevent values (NPVs) of the project are between € 11.4 mil and € 20.9 million, which represents a change of +/- 30 % compared to the obtained result.

Table 40: Sensitivity analysis for Scenario B – investment costs and revenues

Sensitivity analysis					
	Revenue				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	-€ 366.994	-€ 169.123	€ 28.749	€ 226.621	€ 424.493
0,00%	€ 3.957.271	€ 4.155.143	€ 4.353.014	€ 4.550.886	€ 4.748.758
-5,00%	€ 8.281.536	€ 8.479.408	€ 8.677.279	€ 8.875.151	€ 9.073.023
% change					
	Revenue				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	-108%	-104%	-99%	-95%	-90%
0,00%	-9%	-5%	0%	5%	9%
-5,00%	90%	95%	99%	104%	108%

MIN	-€ 366.994
MAX	€ 9.073.023
MEDIAN	€ 4.353.014
AVERAGE	€ 4.353.014

The sensitivity analysis has shown that due to changes in investment costs and revenues net prevent values of the project are between € -0.4 million and € 9.1 million, which represents a change of +/- 108 % compared to the obtained result.

6.7.2 Sensitivity analysis – investment costs and capitalization rate

In different scenarios, we tested changes in investment costs and capitalization rate. For changes in investment costs we assumed a change of +/- 5 %, while we tested capitalization rate with changes of +/- 5 % and +/- 10 %. The Tables 41 and 42 show the final results of the sensitivity analysis for scenarios A and B.

Table 41: Sensitivity analysis for Scenario A – investment costs and capitalization rate

Sensitivity analysis					
	Going out cap rate				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	€ 18.231.995	€ 14.855.640	€ 11.816.921	€ 9.067.603	€ 6.568.224
0,00%	€ 22.556.260	€ 19.179.905	€ 16.141.186	€ 13.391.868	€ 10.892.489
-5,00%	€ 26.880.525	€ 23.504.170	€ 20.465.451	€ 17.716.133	€ 15.216.754
% change					
	Going out cap rate				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	13%	-8%	-27%	-46%	-67%
0,00%	40%	19%	0%	-19%	-40%
-5,00%	67%	46%	27%	8%	-13%

MIN	€ 6.568.224
MAX	€ 26.880.525
MEDIAN	€ 16.141.186
AVERAGE	€ 16.432.342

The sensitivity analysis has shown that due to changes in investment costs and capitalization rate net prevent values (NPVs) of the project are between € 6.6 mil and € 26.9 million, which represents a change of +/- 67 % compared to the obtained result.

Table 42: Sensitivity analysis for Scenario B – investment costs and capitalization rate

Sensitivity analysis					
	Going out cap rate				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	€ 5.704.695	€ 2.717.355	€ 28.749	-€ 2.403.799	-€ 4.615.206
0,00%	€ 10.028.960	€ 7.041.620	€ 4.353.014	€ 1.920.466	-€ 290.941
-5,00%	€ 14.353.225	€ 11.365.885	€ 8.677.279	€ 6.244.731	€ 4.033.324
% change					
	Going out cap rate				
Investment costs	-10,00%	-5,00%	0,00%	5,00%	10,00%
5,00%	31%	-38%	-99%	-161%	-230%
0,00%	130%	62%	0%	-62%	-130%
-5,00%	230%	161%	99%	38%	-31%

MIN	-€ 4.615.206
MAX	€ 14.353.225
MEDIAN	€ 4.353.014
AVERAGE	€ 4.610.624

The sensitivity analysis has shown that due to changes in investment costs and capitalization rate net prevent values (NPVs) of the project are between € -4.6 mil and € 14.4 million, which represents a change of +/- 230 % compared to the obtained result.

CONCLUSION

With the aim of assessing the feasibility and long term financial viability of the foreseen development strategy – scenarios for Stožice shopping centre (presenting the best possible scenarios through different concepts of development), or in other words defining the highest and best use analysis for the development project, several scenarios were developed, to achieve the highest net present value, but also maximize the potential of the property in question and determine the best possible scenario through both risk analysis and net present value approach.

Scenario A defined a destination shopping centre with focus on medical & health activities and fashion shops/outlets, in an environment that promotes vibrant atmosphere, while Scenario B represents a different approach – shopping centre with focus on playgrounds & sports (underground) and social clubs & entertainment (student population, youth, etc.).

Since the property in question is part of the Športni Park Stožice, it is forseen to be very attractive and the most favourable for a destination shopping centre. With regard to the analysis that was conducted earlier in this thesis, and due to the highest development potential, as well as the highest KPIs values – present value (GDV) and net present value (NPV), the recommendation is in favour of Scenario A, i.e. shopping centre with focus on medical & health activities and fashion shops/outlets in an environment that promotes

vibrant atmosphere with supporting contents on the real estate in question is the optimal solution, and has also achieved the best financial results.

The main advantages of a destination shopping centre are manifested especially in the unique location and visibility from the main roads, a public garage as part of the development, and therefore attractiveness for potential tenants. On the other hand, shortcomings are primarily related to the distress situation of the development project, finding the appropriate financing line, and demanding process of obtaining the required construction permits.

Using financial modelling based on knowledge of the market and the estimated market value of the property in the Scenario A of a destination shopping mall with focus on medical & health activities and fashion shops/outlets, with supporting contents, the net present value of the project is €16.1 million, with the IRR value at 8.2 %.

In the analysis, another scenario is been taken into consideration: Scenario B – destination shopping centre with focus on playgrounds & sports (underground) and social clubs & entertainment (student population, youth, etc.). Due to construction costs that are not accompanied by sufficient financial effects on revenue side Scenario B results in a lower project net present value of €4.3 million and lower IRR value at 6.8 %. Scenario B brings the risks that are manifested in the lower purchasing power of the target segment (students, and new generation population with lower wages/higher unemployment rate, etc.) compared to Scenario A (population in the middle of their life/working cycle with higher wages and purchasing power). The basic problem of this scenario is unpredictability of the revenue stream – issues regarding the necessary revenues to meet the quality of the offer and expected return on investment.

Both A and B scenarios have the projected financial structure of the SPV determined as 60 % debt and 40 % equity, with the cost of debt of at 4.3 % and the cost of equity at 10 %. The financing line is projected as a 10 years balloon loan (2.8 % yearly amortization, balance at end) from the local bank at current market conditions (i.e. 60 % loan to value and a 4.3 % interest rate). Two additional sub-scenarios with debt/equity ratio of 70/30 and 80/20 were also projected (all other parameters *ceteris paribus*), showing increasing GDV and NPV values, but also higher amounts of cumulative interest and debt service, together with lower minimum DSCR values. The basic financial structure of the SPV determined as 60 % debt and 40 % equity is the only one projected in this thesis that is able to provide the min DSCR above 1.3:1, and only for Scenario A (min DSCR for Scenario A is 1.34). The other two financial structures (more leveraged), are not able to fulfill this mandatory requirement, and for that reason, and not recommended.

Given the location of the property in question, it is to be expected that this assessment of the potential value of the project is highly conservative, and with GDP and purchasing power growth in Slovenia, the property in question has a strong appreciation potential, expecialy taking into consideration that a 10 % decrease of the capitalisation rate (from 7 % to 6,3 %), with a simultaneous decrease of the investment costs for 5 %, bringing an increase in the NPV value for 67 % in scenario A, and 230 % in scenario B.

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