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THE EFFECTIVE MANAGEMENT OF MUNICIPAL REAL PROPERTY. THE QUESTION OF SERVICES FOR THE BUSINESS USE OF REAL PROPERTY

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Abstract

The paper proposes a comparative analysis of three different scenarios for the efficient use of the former Bucharest City Hall building (BCHb) for business purpose. All three scenarios are related to the area of services, namely real estate, retail, cultural services and hotel services. In order to expose the scenario that leads to the best use of the former BCHb a classical model of development appraisal was elaborated.

For each scenario, market and financial analysis were conducted. In order to obtain a complex and well documented pre – feasibility study regarding the BCHb three scenarios have been designed, as follows: the first is a mix between offices at the upper levels and retail space at the ground floor of the BCHb; the second is composed of offices at the upper levels and museum at the ground floor; and the third scenario is projected for hotel destination.

Starting from the national perspective and continuing with the analysis up to the particular area of the BCHb, the major characteristics of the office, retail and hotel markets were revealed. The financial analysis implied calculations of the most representative indicators used in this type of study, such as net present value, internal rate of return or payback period.

Considering the financial indicators comparison, the pre-feasibility study pointed out that the BCHb should follow the scenario with the mix between offices and retail space.

Keywords: municipal real property, management of municipal real property, pre – feasibility study, business use, services

JEL Classification: R38, R52, R53, R58

Introduction

The management of public resources is the responsibility of public authorities that have to ensure their efficient use. One of the main components of the public management is represented by the management of municipal properties. Municipal property has started to be perceived as a productive asset that beside governmental and social benefits is generating cash revenues. In order to decide on the best use of a certain asset, it is

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recommended that public authority carry out a pre – feasibility study for assessing various potential scenarios. Representative examples of pre - feasibility studies dedicated to municipal properties for governmental, social or business uses were developed within the international project entitled “Municipal Property Management on South-Eastern Cities” (PROMISE)¹, funded by the European Regional Development Fund under the South-East Europe Transnational Cooperation Programme².

Particularly, the present paper is focused on exposing the main stages and results of the pre – feasibility study developed for the business use of the Bucharest City Hall building (BCHb) in Romania. All the three scenarios that are analysed within this particular pre - feasibility study are based on the provision of services that have the potential of generating cash revenues to the local budget.

The pre – feasibility studies starts with a short description of the BCHb that is pointing out the current state of the building and its potential as investment, through a SWOT analysis. The following part of the paper is referring to the market analysis of each scenario. After analysing each market, the highest and best use analysis is conducted with the purpose of finding the most feasible option of the BCHb for the business use. Applying the discounted cash flow analysis, the net present value, the internal rate of return, the benefit to cost, the payback period and discounted payback period for each scenario are obtained. These indicators are calculated and compared in order to select the best scenario for the business use of BCHb. Finally, the scenario that generates the highest net present value, internal rate of return and benefit to cost and the lowest payback period and discounted payback period is the one that worth the investment.

The BCHb is an impressive historical monument placed in the main area of Romania’s capital, next to the Bucharest’s Historical Center. The BCHb is under the private property of Bucharest Municipality and the administration of the Bucharest Municipality. Built between 1906 and 1911, the BCHb is structured in basement, ground floor and 4 floors. The building is currently under consolidation and vast refurbishment works are in progress. The cost of consolidation and refurbishment works for the entire building were budgeted at approximately 15 million Euro, excluding V.A.T. at an average 2012 exchange rate³. This investment project implies new aspects of the building, both interior and exterior.

The population surrounding BCHb is predominantly represented by retirees with small families, as owners of the dwellings located in the area, and young professionals renting properties in this central location. The proximity to the Cismigiu park and the subway stations, namely University and Izvor, makes the entire area a desirable location for rented accommodation. The degree of socio-economic complexity in the area, in particular the amount of working age population should be taken into account in terms of proposed economic activities. A wider range of employment opportunities and improved services targeted towards the local population should be a priority of any development scheme.

The urban structure of the area is typified by adaptable use mixes around the BCHb site, supporting a variety of uses, with different “flows” of activities at different times. The post-communist developments are based on refurbishments of old iconic buildings, usually

¹ More information on the project is available at <http://www.promise-project.net/>.

² More information on the programme is available at http://eudesk.org/lang1/south-east_europe_transnational_cooperation_progra.html

³ According to the contract signed between the Municipality of Bucharest and the constructor.

hotels, and newly-built large and tall block structures, usually office buildings. Despite these developments, the area as a whole has maintained its medium rise and original structures by its designation as conservation area despite enormous economic pressure. The proximity to the Bucharest’s Historical Center had consequences on the development of hotels, restaurants and bars on the large boulevards margining or crossing the BCHb’s area.

The building uses in the area can be mainly divided in commercial, leisure and hotels at the ground floor and residential at the upper levels. The residential buildings are not located on the borders of the pedestrian paths, where the economic pressure made the commercial and leisure developments more feasible than residential ones. In the latter years, the legislation dedicated to urban planning managed to enter into force and planning permissions are allocated only if the construction is in accordance to the general development plan of each area and of the central area in particular.

As an overall perspective on the BCHb a SWOT analysis is exposed in table no. 1.

Table no. 1: SWOT analysis regarding BCHb

Strengths (to be defended and built thought the redevelopment):	Weaknesses (to be addressed thought the redevelopment):
<ul style="list-style-type: none"> • Attractive location on the Regina Elisabeta Boulevard overlooking the beautiful Cismigiu garden. • Location as a connectivity point between the most important landmarks within the center of Bucharest: Parliament building, Royal Palace, Old City Center. • Good level of connectivity through public transport (bus stations at less than 100 m from the site and two metro stations at 300 and 800 m from the BCHb’s site) – connecting with the two major metro lines. 	<ul style="list-style-type: none"> • Derelict buildings in the analysed area disrupt city fabric and attractiveness. • Need of medium and long-term development strategy for the central area as a whole and for the individual parts- including the BCHb’s area.
Opportunities (to be maximized thought the redevelopment):	Threats (to be mitigated through the redevelopment):
<ul style="list-style-type: none"> • New multi-use building can unlock the potential to incorporate varied activities at different times. • Connect the variety of community and social identities surrounding the site. 	<ul style="list-style-type: none"> • The site will remain unused as development is reliant on the actual economic climate. • Social and political pressure will dictate what is developed on and around the site.

Source: own elaboration

Further on, the pre – feasibility study implies analysing scenarios that could be applied to BCHb. When formulating the scenarios two main issues are taken into account, namely the authorities’ intentions on the use of the building and the purposes of the historical buildings within the Bucharest’s Historical Center area related to the consumers’ expectations. As regards the former issue, the Municipality of Bucharest intends to create a historical museum of the municipality within the BCHb, which is considered in the projection of the second scenario. As for the latter issue, it is acknowledged by DesJardins (2007, cited in Holban (Oncioiu), 2010) that business people should have a bold attitude to generate demand for sustainable products and that a creative and imaginative marketing is necessary.

The three scenarios that are projected for the BCHb are as follows:

- mix of business offices at the upper floors and retail area at the ground floor;

- mix of business offices at the upper floors and museum at the ground floor;
- entirely dedicated to hotel destination.

1. The office market analysis

Office spaces are prevalent occupied by banks, IT&C companies and services suppliers, including law firms, accounting, advertising firms, pharmaceutical and medical field. Most developers choose to develop office projects in former industrial platforms located in the periphery. Due to the high demand, the booming economic conditions, relaxed financing criteria's and availability of funds, rents rose sharply starting with 2006, with a peak in mid 2008. Once the economic crisis started to affect the Romanian market, the demand of new office units came to stagnation. Asking prices/ rents started to decrease at a higher pace in 2009 and slightly further down during the first semester of 2010, the office market activity being characterized as low, mainly due to high asking prices/ rents to meet developer's expectations to counterbalance construction costs, as well as a low demand caused by the uncertainty of the general economic conditions. Moreover, it has been noticed a reluctance from the banks to release new loans in the above described conditions.

Due to the low supply levels during 2009-2010, the office market is more stable at the moment. The demand for quality space has increased slowly and the vacancy rate is lower than in 2010. However, overall the market is not a balanced one and the supply is significant higher than the demand. The few new buildings delivered on the market during 2011 have a satisfactory occupancy rate both due to the top facilities offered, but also due to the financial incentives available for committed tenants. The Colliers consultants sustain that the level of real estate investments in 2010 registered a significant growth in the volume of transactions, from 100 million in 2009 to 500 million euros (Negrila, 2011)

As regards the trend of real estate market in Romania, at the end of 2012 is expected to be registered the highest yields in Central and Eastern Europe (CEE) of over 10%, compared with the estimated level of return on equity in the region (4%) (Pirloiu, 2011). According to the same study, the increasing growth in the CEE is supported by the low level of vacancy, high demand and limited number of projects in developing countries.

Within the Bucharest's Historical Center area the average rent that is required by the developers is of 15.1 euro/sqm/month, plus a medium service charge of 3.6 euro/sqm/month⁴.

2. The retail market analysis

In 2011 the majority of shopping centers applied strategies to endorse customer traffic by changing the mixt of tenants, negotiating rents or extending contracts and even replacing some of the weaker tenants, thus contributing to a lower vacancy rate and attractive secure mixt.

⁴ Reported to 29 projects of buildings situated in top 100 buildings in Bucharest as having a leasable area higher than 2,100 sqm.

The Bucharest shopping center stock is dominated by units with more than 40,000 sqm. gross leasable area, followed by those with areas between 20,000 and 40,000 sqm. gross leasable area. According to real estate agencies Q4 2011 brought over 200,000 sqm of new retail supply on the market. After a stagnant year the demand for prominent retail units has started growing in 2012. Similar to previous years, international retailers played an important role for 2011 demand by continuing their expansion in Bucharest and also in the rest of the country. The most active players on the market were food retailers like Mega Image, Lidl or Carrefour and fashion retailers such as Inditex brands, H&M, C&A and NewYorker. At the beginning of 2012, the prime shopping center rents and prime high street rents range between 60 and 80 Euro/sqm/month. For the past year rent levels followed a constant trend with no major deviations to be seen in the next year. However, remote variations can appear in some cases based on financing, location, tenant mix and the power of negotiation of both parties (Jones Lang Lasalle, 2011a).

With over 300,000 sq. m of new retail space delivered in 2011, it is expected that Bucharest in the two to four years will record a moderate increase in the shopping center sector, as no more than 13 projects are recently being announced. Approximately 174,000 sq. m's are presently under construction and with a delivery due in 2013 and 2014 (Jones Lang Lasalle, 2011a).

Rents for high street retail properties were under pressure in 2011 and followed the downward trend in annual comparison. The highest rents are obtained in Bucharest's Magheru and Balcescu Boulevards, the main high streets in Romania, with a rent of 50-80 euro per sq. m, followed by Calea Victoriei with 50-70 euro per sq. m, depending on numerous factors such as access, exposure, size of space, etc.

The high street merchandise and tenant mix continues to be dominated by banks, pharmacies, casinos and show-rooms of auto, mobile phone dealers and interior decorations, while the fashion component, the essence of the high street retail, capable of creating pedestrian traffic, has a limited representation.

3. The hotel market analysis

Prior to the crisis, Bucharest accommodation supply experienced constant growth and reached the peak. Since the crisis began, a gradually decline has been recorded, as a direct consequence to postponed or even suspended projects affected by the economic downturn and harsh imposed financing conditions.

2010 revealed the openings of the two newest five star hotels in Bucharest, namely the 53 room Grand Hotel Continental at the beginning of the year and the 45 units Epoque Hotel towards the end of the year, both located close to the Cismigiu Park and BCHb, adding around 100 units to the 2010 hotel supply.

Over the last three years the total room supply in Bucharest has grown across all-star levels. Taking into consideration the absolute change in the number of rooms between 2008 and 2010, the four star class contributed additionally with 489 rooms, meaning 38% of the new room supply (Micut C., 2011).

Based on the Jones Lang Lasalle (2011b) reports of the last three years, the hotel supply in Bucharest is dominated by four and three star units, holding 69% of the supply market measured by the number of rooms.

The five-star market accounts for 18% of the market and the majority of all these rooms are located in the Bucharest city center. The affiliated sector accounts for 35% of all hotels in Bucharest, the vast majority of them including four and five star hotels.

Bucharest is mainly a business destination and this segment represents over 80% of the hotel market clientele. As the international companies had reduced considerable the budgets allocated for business travels, the turnover of four and five star hotels, which target especially the foreign business clientele, had highly decreased.

The accommodation market began to mark quantifiable improvement in 2010, with an overall occupancy rate increasing by over 11% and reaching a level of 56.5%. The highest increase was for 4 star hotels, while the lowest increase was for 5 star hotels. While the overall Bucharest's Historical Center hotel market is characterized by stability and feasibility, the market is still highly seasonal. The lowest level of occupancy is met in January and August, and the highest level belongs to May, June, October and November.

As exposed by Micut (2011) in Hospitality Forum, the hotel rooms needed within Bucharest during the following four years are concentrated on the economy type and, on the opposite side, on the luxury class. Selecting from the economy type and luxury class, the BCHb based on its position and characteristics is better to be developed as a luxury hotel. Consequently, the pre-feasibility study is focused on the four and five star hotels that represent the subject's competitive market.

The purpose of the following part of the study is to investigate the variants allocated to the BCHb and to select the most feasible option for the business use.

4. Highest and Best Use Analysis of the Bucharest City Hall building

According to the 2011 International Valuation Standards *the highest and best use* is the use of an asset that maximizes its productivity and that is possible, legally permissible and financially feasible. The highest and best use may be for continuation of an asset's existing use or for some alternative use. This is determined by the use that a market participant would have in mind for the asset when formulating the price that would be willing to bid.

The determination of the highest and best use involves consideration of the following:

- To establish whether a use is possible, regard will be put on what would be considered reasonable by market participants;
- To reflect on the requirements to be legally permissible; any legal restrictions on the use of the asset, for example zoning designations, need to be taken into account;
- To accomplish the requirement of being financially feasible, meaning that the use of the asset that is physically possible and legally permissible will generate sufficient return to a typical market participant, after taking into account the costs of conversion to that use, over and above the return on the existing use (Erst & Young, 2011).

After conducting an analysis of the physical condition of the building and the current space utilization, the current design and organization of the building, focused on interior spaces, are assessed in accordance with the three proposed scenarios needs and uses of the spaces.

All the projections of the scenarios take into consideration that no additional divisions of the building are allowed, respecting the initial interior structure. The current interior arrangement of the BCHb space is subject of significant interior renovations that have already been started in recent years.

Analysis of the current space organization and use

The building contains three major different noticeable uses within approximately 21,992 sq. m of built space or 16,000 sq. m of usable area⁵. The major building space uses refer to the following:

- Offices
- Circulation (corridors, stairs, etc.)
- Storage (including basement).

According to the Bucharest City Hall representatives and received plans⁶, the ground floors have approximately the same quantity of buildable square footage, namely 3,814 sq. m and the basement area is estimated at 2,922 sq. m.

A very important aspect that has also impact on the current pre-feasibility study is that the administrative spaces encountered within the BCHb are not entirely allocated to the Municipality of Bucharest. The BCHb administrative spaces are mainly attributed to the Municipality of Bucharest, and the other part is occupied by offices of the Prefecture of Bucharest that are not making the subject of this study.

In consequence, the subject of our analysis comprises a major part of the building, approximately 14,000 sq.m of usable area, that excludes half of the BCHb south western section, where the offices of the Prefecture of Bucharest are placed. According to the Municipality of Bucharest the excluded section will most certainly remain at its present use as administrative office space, and therefore cannot be subject of any proposed scenario.

Proposed layouts

Scenario 1. Mix of Offices and Retail

This scenario respects the current layout of the building since the office use is complementary to the present administrative use of the building. The retail part of the

⁵ Is an estimation considering the internal area of the premises by using the interior plans of the ground floor and first floor of the BCHb. The plans do not mention the usable area of the interior space, but indicates the width and length of each room. Based on these two variables the area of each room has been calculated.

⁶ During the elaboration of the pre-feasibility study, the Bucharest Academy of Economic Studies team had the support of the Municipality of Bucharest, as partners within the PROMISE project, and a couple of formal letters were formulated in order to receive some particular pieces of information.

building comprises three spaces with areas larger than 100 sq. m located at the ground floor of the BCHb. In this scenario, the floors are proposed to accommodate offices.

Scenario 2. Mix of Offices and Museum

The hypothesis assumed in this scenario regards that the museum will cover the entire ground floor of the BCHb and the other four floors will accommodate offices. The interior partitioning is the same as the one used in the first scenario. The basement in both scenario 1 and scenario 2 are used as storage space. The same distribution of offices at the upper levels as scenario 1 is maintained.

Scenario 3. Hotel

The third scenario is corresponding to the hotel use of BCHb. The hotel could be projected as a representative accommodation option within Bucharest and will be branded as a full-service property with 118 accommodation units, including a full-service restaurant, a ballroom, fitness facility and conference room.

One of the major decision factors when considering the proposed interior layout delimitation was the hotel classification system developed by the Romanian authorities, represented by the Ministry of Tourism (2002). In order for the proposed hotel to be rated at 5 stars quantitative criteria have to be surpassed. The minimum criteria that should be taken into consideration when classifying a hotel are precisely specified in the Romanian legislation.

The feasibility of investment projects is usually carried out using the technique of discounted cash flow (DCF) analysis which takes into account the time value of money and the risk of investing.

5. Discounted Cash Flow Analysis

The discounted cash flow analysis provides as result the net present value which is estimated as the sum of all discounted future incoming and outgoing cash flows. The feasibility of each scenario was prepared by analysing their performance criteria such as net present value (NPV), internal rate of return (IRR), benefit to cost (B/C) ratios and payback period.

According to McClure (2010), the procedures for determining the net present value refer to the following issues:

- Forecasting the Period and Revenue Growth.
- Forecasting the Net Cash Flows (remaining cash after all the operating cash expenses are paid).
- Estimating the Discount Rate.
- Calculating Project's Residual Value.

The starting date of this analysis is 1 January 2012, because that was the due time of the BCHb investment project.

5.1 Scenario 1. Mix of offices and retail project

The forecasting period depends on the project's competitive position and how long will the project be able to generate excess returns to investors. Ultimately, every project settles into maturity phase. As a rule of thumb, the forecasting period should be 5 years for real estate projects with prelease contracts, low mix complexity, excellent location, visibility, access or any other advantage. We have assumed the period of the project to be five years due to the building's equitable competitive position validated by strong location, efficient transportation access, architecture and prestige.

For the office destination of the BCHb a survey on modern office rental offerings in Bucharest city center was conducted. As a result a list of comparable rental levels was obtained. The survey includes 29 office buildings with an average size of 10,000 sq. m., out of which only 14% of the buildings are covering an area over 10,000 sq. m. The survey results show that the range of monthly unit rental rates between 8 and 21 Euro/ sq. m. per month with the average around 15 Euro/ sq. m. per month.

It is generally known that office space rent can vary intensely from one office building to another due to several factors that contribute to this differential, such as location, lease features, building features, services and management and others. In the particular case of BCHb, some factors compared to others have a greater impact in estimating the rental level, such as letting area and level of finishes. In estimating the rental value of the subject an analysis on the specific rental market in a radius of 1 km of the property was carried out. We have made an estimation of the market rent of the subject property situated in the same area as selected comparable spaces that have 5 leasable floors of 2,485 sq. m. each, presumed average to high finishes and administrative layout, at 10.4 Euro/ sq. m./month. We stress that the above estimates does not consider other positive features of the building, for instance: excellent access, visibility and prestige, features that will be reflected in the final decision.

Considering the competitive projects and current market situation in Bucharest office market, including market and location specificities, the recommendation for BCHb is to use the current marketable rent level of 13 Euro/ sq. m./month.

As regards the retail destination, the BCHb is situated very next to a unique retail mix which includes the high street section represented by Magheru Boulevard, Calea Victoriei and Bucharest's Historical Center, and the Shopping Centre section exemplified by Cocor and Unirea Shopping Centre. Regina Elisabeta Boulevard, although interconnected with Magheru Boulevard, can be included in the category of secondary retail locations reaching an average rent level between 20 and 30 Euro/sq. m. per month.

Rents for high street retail properties were under pressure in 2011 and followed the downward trend in annual comparison. The highest rents are obtained in Bucharest's Magheru and Balcescu Boulevards - the main high streets in Romania - with 50-80 Euro/ sq. m. per month, followed by Calea Victoriei with 50-70 Euro/sq. m. per month, depending on numerous factors such as access, exposure, size of space and others.

The retail space located at the ground floor of the BCHb can accommodate leisure units like bakery/cafe/restaurant or even a fashion store since the rest of the building is projected to be used as office space and can easily sustain the retail demand for such shops.

Since the analysed retail space does not benefit from direct street visibility and in some cases can solely depend on the demand endorsed by the building without major inflows from exterior pedestrian traffic, an achievable rent level of 15 Euro/ sq. m per month would be recommended. The rent was considered to be closer to what restaurants or fast foods usually pay when leasing a space in a food court area of a shopping mall or the ground floor of a modern office building.

In order to conduct the calculations for the net present value two indicators have to be previously explained, namely capitalization rate and discount rate.

Capitalization Rate (Yield) provides for return on invested capital plus a return on the investment. Investment transactions of office buildings are rare; consequently the market yield is based mainly on estimations, and less on the actual achieved rates. One recent major office transaction was made at the end of 2010 when investment fund NEPI (New Europe Property Investments) bought Floreasca 169A (Floreasca Business Park) for 101.2 M from developer Portland Trust at a yield of about 8%. The project has a total leasable area of 36,032 sq. m with an average rent of 17.21 Euro/ sq. m excluding any parking income.

The estimated yields for prime office buildings in the central area of Bucharest estimated by first five major real estate companies are as follows: 8.0%, 8.0%, 8.25%, 8.5% and 9.0%. Based on this, an appropriate overall capitalization rate is established at 8.25%.

As regards the discount rate, it measures the investment performance over a given period that accounts for risk and return on capital. The discount rate represents the sum between the capitalization rate and the constant rate of change. A discount rate can be built up using the capitalization rate if the income and growth both vary at a constant rate. Thus, if the market extracted capitalization rate was estimated at 8.25% and the constant rate of change is 2.7%, the discount rate is 10.95%.

The net present value (NPV) is the sum of the discounted annual cash flows. The cost of consolidation and refurbishment works for the entire BCHb were budgeted at approximately 15 million Euro excluding V.A.T. at an average 2012 exchange rate⁷. Since the subject of analysis represents about 88% of the total built area of the BCHb, the costs were proportionally divided resulting in an initial investment of 13,674,099 Euro. Complex calculations were made in order to obtain the result of each indicator. Finally, the NPV of the first scenario is of 4,489,030 Euro.

5.2 Scenario 2. Mix of office and museum

As the office market was detailed in the previous part of the pre - feasibility study, the museum area is the subject that needs to be debated in this section. The projection of museum at the ground floor of BCHb is more like a social purpose than a business use, but we have considered the future intentions of the local authorities to develop a museum for the Municipality of Bucharest. We have assumed that the museum component of BCHb will contain the entire ground floor of the building, namely a total usable area of 2,366 sq. m.

⁷ According to the contract signed between the Municipality of Bucharest and the company that is in charge of the consolidation and refurbishment works of BCHb.

According to the Law no. 311/2003 on museums and public collections (Romanian Parliament, 2003), the proposed museum will be financed from own revenues and state budgetary allotment, subordinated to the Ministry of Culture and National Heritage.

Our estimates are based on an extensive analysis of the museum market and of the actual operating results of two of the most representative museums situated in close proximity of the BCHb. As direct comparison we have used the financial statements of the National Museum of History and National Museum of Art.

By comparison with the National Museum of History that comprises a total area of 20,000 sq. m., we estimate that the subject museum should be able to achieve a stabilized annual traffic level of 9,000 visitors, with daily attendance projected at 25 visitors. In order to develop this projected utilization level, we looked at the number of annual visitors of the first five most visited museums in Bucharest. The estimations for the following year were developed based on the data provided by the National Institute of Statistics (2011) within TempoOnline at Section Culture, museum direction.

Based on the date of the two comparable museums, we assume that the BCH museum can capture its fair share of 9,000 annual visitors out of which 30% paid tickets and 70% free entrance. The average entrance fee is estimated at 1.5 Euros, lower than 1.84 Euros for an entrance at the National Museum of History or National Museum of Art taking into account that the subject museum is addressing to a certain niche.

Prices and tariffs for the museums services are set by the museum management, excluding the implication of any authority. According to the legislation in force, the entrance fees set by the museum management need to be approved by the authority to which is subordinated. After analyzing the historic charges set by several museums we can conclude that an increase of the entrance fees are really seen and tend to remain at the same level for several years.

In estimating the number of potential visitors we have used the estimated return values along the linear trend (using the method of least squares) of historic data for number of visitors in Bucharest. As a result, the number of visitors is estimated to increase with an average of 2.3% per year within the 2012-2015 period.

Bucharest has numerous museums, many financed by local authorities, and few of them receive budget allotment directly from the Ministry of Culture and Heritage. It is our opinion that the level of financed allotment depends mostly on two major factors: medium to long-term strategy and the approved budget of Ministry of Culture and Heritage. As primary strategy, the museums should decrease its budgetary finance dependency and become more like competitive enterprises. However, with no concrete plan of implementation, no major changes are to be expected in the near future period. The vast majority of museums are struggling to increase their private income through sponsorship, services and entrance fees, and only few are those who have significant income that derive from other sources than budget subsidy.

For the proposed BCHb museum the staff and goods/ services expenditures represents over 80% of the total expenses and are expected to grow year to year based on the estimated average gross earnings change and annual inflation. In these conditions, presuming that the budget allotment follows a downward trend, the total operating expenses exceeds by far the total income implying a negative operational income. Therefore, our opinion is that the

museum has no possibility of self-sustainability and additional financing will be needed from the state budget or local authorities. As a result, the projected museum implies a zero net present value.

Consequently, the NPV of the second scenario is 1,763,084 Euro, mainly based on the office destination of the BCHb at the upper levels.

5.3 Scenario 3. Hotel

In practice, consultants use one of two known methods to analyse competitive positions, namely the market penetration method and the competitive index method. In order to determine the expected occupancy rate of the proposed accommodation facility, both approaches calculate the obtained specific 5 star market share.

Market penetration is based upon our evaluation of the attributes of the subject 118 unit-hotel and the subject site relative to the competitive accommodation market. Market penetration achieved by a hotel is correlated to the proportion of the total hotel room supply in the subject market represented by the property.

We have based our estimates of future market penetration for the BCHb hotel on the location, targeted market segments, effective marketing, professional management, and levels of services and amenities offered at the subject property. We have assumed that the Hotel component of the proposed development will be branded as a full-service property and will contain 118 units, a full-service restaurant, a ballroom, fitness facility and conference room.

The correlation factor for the 2008-2011 period between the country's GDP and hotel occupancy rate is around 78%. Therefore, by means of forecast of the main economic indicators released by the National Prognosis Commission, we were able to estimate the future occupancy rate by using also a 3% increase for 2012 according to the information provided by market leaders and for the forthcoming years the linear regression function (table no. 2).

Table no. 2: Data on projected subject occupancy

Year	Market Occupancy	Subject Occupancy	Hotel Penetration Rate
2012	70%	56%	80%
2013	66%	58%	87%
2014	67%	62%	93%
2015	67%	67%	100%

Source: own elaboration, based on data collected from the reports of the National Commission of Prognosis (2012) and the National Institute of Statistics (2011)

As the previous table illustrates, we expect the property to gradually increase its penetration rate reaching the market rate in year 2015, at which time we anticipate occupancy at the subject property to stabilize at 67%.

On the basis of our analysis of the proposed scenario, and our findings relative to the indicated market demand for accommodations such as the proposed property, we have prepared statements of estimated annual operating results for the project.

To develop financial estimates for the first four years of operation, an estimate was first made of annual operating results that could be achieved with competent management in a representative or stabilized year in 2011 value euros. From this basis, assumptions regarding inflation, start-up periods, and rates of capture demand were made to derive the statement for period January 1, 2013th rough December 31, 2015. Depending on the activity type of the business we have estimated that after a period of 4 volatile years, the cash flow will stabilize starting with the 5th year.

Our estimates are based on an extensive analysis of the accommodation market in Bucharest, especially 4 and 5 stars hotels and of the actual and projected operating results of hotels of a similar size and type operating at occupancy and average room rate levels similar to those projected for the subject property. For our estimates, depending on similar characteristics such as location, rating, amenities, etc., but also on the availability of public data, we have selected Intercontinental Hotel to be the most representative guideline in our estimation.

As direct comparison we have used the financial statements of Intercontinental Bucharest Hotel (2010), a five star high rise facility located in Universitatii Square, in walking distance from the Bucharest' S Historical Center and Cismigiu Park. The hotel was selected as a major benchmark for the subject property due to its similar features such as location, star classification and size.

In addition, for a better understanding of the general market hotel benchmark, we have also considered the U.S. Hotel Operating Statistics Study (H.O.S.T., 2012). The H.O.S.T. program is the most extensive and definitive database on U.S. hotel industry revenues and expenses. The operating statements of more than 6,200 hotels have been entered into this database, giving the capability to produce custom reports tailored to a variety of client needs. H.O.S.T. contains information on hotel revenues and expenses and presents information by department including rooms, food & beverage, marketing, utility costs, property and maintenance, administrative & general as well as selected fixed charges. The HOST Study is an annual publication that provides an overview of U.S. lodging industry performance along with detailed information on industry revenues and expenses.

For the purpose of our analysis we recommend Intercontinental Hotel statements to be more reliable comparable data and we have used the H.O.S.T. survey only for guidance.

Our representative year estimates, which are intended to reflect average performance over the economic life of the property, indicate an occupancy rate of 67% at an average daily room rate of approximately 93 Euro in 2011 value i.e. 102 Euro in 2015 value.

In order to estimate the refurbishment cost and furniture, fittings and equipment expenditures (FE & E) (table no. 3) necessary to operate the hotel at normal parameters, we have applied prices derive both from the corporate expertise and from the market research performed among reputational local and international contractors.

Table no. 3: Estimation of the refurbishment cost and furniture, fittings and equipment expenditures for hotel use

Construction cost	
High quality capital city hotel	835 – 1,242 Euro/sq. m.
Provincial/ suburban hotel	373 – 447 Euro/sq. m.
Comments	High quality hotel in excess of 400 bedrooms, conference facilities, extensive restaurant, lounge and foyer areas, leisure facilities including indoor pool, retail and service areas. Costs exclude FF&E. (Gardiner & Theobald, 2011)
Budget hotels	1,045 -1,364 Euro/sq. m.
Mid-market-low	1,171 – 1,388 Euro/sq. m.
Mid-market-high	1,373 – 1,587 Euro/sq. m.
Luxury	1,621 – 1,794 Euro/sq. m.
Comments	These figures have been calculated from a survey which EC Harris has carried out of construction costs in 50 different countries. Costs are given per sq. m. of gross internal floor area and include for FF&E. Costs may include dry leisure facilities, but not swimming pools. Costs include contractor’s preliminaries and overheads and profits, but no allowance for land costs, land procurement fees, or consultants’ fees. Although all the hotels are ‘international’, and constructed to Western European specification standards, there will always be some differences in specification for the same building constructed in different countries. (Cushman & Wakefield, EC Harris and STR Global, 2011)
Furniture, Fittings and Equipment (FE & E)	
Comments	13.6% out of the cost of construction Construction cost includes: 45% construction, 25% technical equipment and 9% soft costs. Construction Works: direct and indirect costs, associated with the physical construction and erection of a hotel building. Technical Equipment: Installation of air conditioners, elevators, heating systems, pipelines and networks, etc. Soft Costs: Fees for architect design, planning, obtaining licenses, advisory services, etc. FF&E: Furniture, Fixtures and Equipment and includes all furniture for guestrooms and public areas, wall and floor coverings, etc. OS&E: Operating Supplies & Equipment and includes linen, kitchenware, uniforms, supplies, stationary, accessories, etc. (Elaine Sahlins, 2011)
FE & E	15.1% out of the cost of construction (KPMG, 2009)

Source: own elaboration, using the mentioned references

We have received the general estimated cost schedule for the subject building which includes consolidation works and total refurbishment with medium quality finishes for office space. The cost amounts to around 13.6 million Euro, i.e. 619 Euro/ sq. m. built. The project is divided in two stages: first stage totalling 9.3 million Euro for consolidation works and second stage at 4.37 million in Euro in refurbishment works for the total 19,070

sq. m. above ground section or 229 Euro/sq. m. The cost of the basic investment, excluding the technical equipment and soft categories, cumulates 81% of phase two, 3.54 million Euro equivalent to 185.5 Euro/sq. m.

In addition to the executed medium office finishes the initial investment for the proposed hotel needs to include supplementary quality finishes and specific furniture, fittings and equipment. We estimate an average replacement cost of 1,200 Euro sq. m. built and a weight of 15% for FE & E which stands for a cost of an additional 3.96 million Euro. By excluding all soft costs and technical equipment, the 1,200 Euro sq. m. built can be distributed in 45% actual construction cost, equivalent to 540 Euro sq. m. built. Furthermore, the unitary construction cost can be divided into 50% structure/ architectural cost and 50% finishes, resulting an allowance of 270 Euro/sq. m. on hotel quality finishes. We conclude that the additional investment for hotel scenario should stand at 5,572 million Euro: 3.96 million Euro for FE & E and 1.612 million Euro for supplementary finishing works.

The cost of consolidation and refurbishment works for the entire building were budgeted at approximately 15 million Euro, excluding V.A.T. at an average 2012 exchange rate. Since the subject of analysis represents about 88% of the total built area of the building, the costs were proportionally divided resulting an initial investment of approximately 14 million Euro. To this value additional works of about 5,572 million Euro are needed for the hotel to operate at projected standards. By calculating the annual net operating income, the value of -7,133,930 Euro for NPV is obtained.

Conclusions

The present state of the BCHb and the market analysis for each scenario are representing the first stages of the pre – feasibility study. The selection of the best variant from the suggested scenarios related to the business use of BCHb implied the conducting of the highest and best use analysis. The particular technique of discounted cash flow analysis was applied and results on the net present value, the internal rate of return, the benefit to cost, the payback period and discounted payback period were generated for each scenario. The purpose of these indicators is to reveal the best variant that could be developed for the business use of BCHb by comparing the scenarios’ values.

Finally, the scenario that generates the highest net present value, internal rate of return and benefit to cost and the lowest payback period and discounted payback period is the best solution that it is recommended to be adopted by the Municipality of Bucharest for the business use of BCHb. The summary of the overall pre - feasibility study is comprised in table no. 4.

Table no. 4: Summary of the main financial values of the pre-feasibility study

Scenario		1	2	3
Net Present Value	NPV	4,489,030	1,763,084	-7,133,930
Internal Rate of Return	IRR	19%	14%	-3%
Benefit to Cost	B/C	1.36	1.14	0.74
Payback Period	PP	9	10	-
Discounted Payback Period	DPP	23	>100	-

Source: own elaboration

Comparing the net present value and other financial indicators of the three scenarios, the best solution that could be adopted by the Municipality of Bucharest to use the Bucharest City Hall building for business purpose is represented by the first scenario, precisely the mix of offices and retail.

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References

- Cushman & Wakefield, EC Harris and STR Global, 2011. *EMEA Hotels Monitor. Issue 7*. [online] Available at: <<http://fr.scribd.com/doc/59923381/EMEA-HotelsMonitor-2011>> [Accessed 19 March 2012].
- Elaine Sahlins, 2011. *HVS Hotel development cost survey 2010*. Available at: <www.hvs.com/article/5061/hvs-hotel-development-cost-survey-2010/> [Accessed 20 February 2012].
- Erst & Young, 2011. *IFRS 13 Fair value measurement, 21 st century real estate values “Implications for the real estate and construction industries”*. [online] Available at :<[http://www.ey.com/Publication/vwLUAssets/IFRS_13_fair_value_measurement_real_estate/\\$FILE/IFRS_13_fair_value_measurement_real_estate_values_GL_IFRS.pdf](http://www.ey.com/Publication/vwLUAssets/IFRS_13_fair_value_measurement_real_estate/$FILE/IFRS_13_fair_value_measurement_real_estate_values_GL_IFRS.pdf)> [Accessed 20 February 2012].
- Gardiner & Theobald, 2011. *International Construction Cost Survey*. [online] Available at: <[http://www.gardiner.com/assets/files/files/754eaaa87339762263f4f4b459542d7631100edd/2010%20International%20Construction%20Cost%20Survey%20\(Euro%20Version\).pdf](http://www.gardiner.com/assets/files/files/754eaaa87339762263f4f4b459542d7631100edd/2010%20International%20Construction%20Cost%20Survey%20(Euro%20Version).pdf)> [Accessed 23 March 2012].
- Holban (Oncioiu), I., 2010. Business, ethics, and the environment: imagining a sustainable future. *Amfiteatru Economic*, XII(27), pp. 254-256.
- H.O.S.T., 2012. *U.S. Hotel Operating Statistics Study- Report for the year 2011*. [online] Available at: <<http://www.strglobal.com/Samples/NA/HOSTHighlights.pdf>> [Accessed 20 March 2012].
- Intercontinental Bucharest Hotel, 2010. *Raport privind exercitiul financiar al anului 2010*. [online] available at: <[http://www.bvb.ro/info/Raportari/RCHI/RCHI-Raport%20anual%202010%20\(cu%20anexe\).pdf](http://www.bvb.ro/info/Raportari/RCHI/RCHI-Raport%20anual%202010%20(cu%20anexe).pdf)> [Accessed 19 March 2012].
- International Valuation Standards Council, 2011. *International Valuation Standards Council*. [online] Available at: <<http://www.ivsc.org>> [Accessed 12 February 2012].
- Jones Lang Lasalle, 2011a. *Bucharest City Report (Q4)*. [online] Available at: <http://www.joneslanglasalle-romania.com/ResearchLevel1/Q4_2011_Bucharest_City_Report.pdf> [Accessed 21 February 2012].

- Jones Lang Lasalle, 2011b. *Bucharest City Reports (quarterly)*. [online] Available at: <<http://www.joneslanglasalle-romania.com>> [Accessed 22 February 2012].
- KPMG, 2009. *Hotel Development Cost- Guideline for new hotel projects in Central and Eastern Europe*. [online] Available at: <http://www.kpmg.com/TH/en/IssuesAndInsights/ArticlesPublications/Documents/Industries/ICE/Hotel_Leisure/Hotel-Development-Costs-2009.pdf> [Accessed 20 February 2012].
- Romanian Parliament, 2003. *Law no. 311/2003 on museums and public collections*. [online] Available at: <http://www.dreptonline.ro/legislatie/legea_muzeelor_colectiilor_publice.php#> [Accessed 07 March 2012].
- McClure, B., 2010. *Discounted Cash Flow Analysis*. [online] Available at: <<http://i.investopedia.com/inv/pdf/tutorials/dcfa.pdf>> [Accessed 12 March 2012].
- Micut, C., 2011. *Dezvoltarea si conversia pe segmentul hotelier (pdf presentation)*. [online]. Available at: <http://conferintahrb.ro/prezentari/cris_micut.pdf> [Accessed 18 February 2012].
- Ministry of Tourism, 2002. *The Order of Ministry of Tourism no. 510/2002 for the approval of the Methodological norms regarding the classification of structures for receiving tourists*. [online] Available at: <http://www.sutalaturism.ro/legislatie/omt510_2002.pdf> [Accessed 01 March 2012].
- National Commission of Prognosis, 2012. *Prognose*. [online] Available at: <<http://www.cnp.ro/ro/prognose>> [Accessed 12 March 2012].
- National Institute of Statistics, 2011. *Database TempoOnline, Section Culture, Museum direction, section ART113A – Visitors in museums and public collections, on counties and localities*. [online] Available at : <www.insse.ro> [Accessed 10 March 2012].
- Negrila, S., 2011. *Cel mai pesimist scenariu. Investitiile ar putea creste cu 30%*. [online] Available at : <<http://www.wall-street.ro/articol/Real-Estate/100442/Cel-mai-pesimist-scenariu-Investitiile-imobiliare-ar-putea-creste-cu-30.html>> [Accessed 11 October 2011].
- Pirloiu, M., 2011. *Erste: Piata imobiliara din Romania cea mai rentabila din regiune in 2012, pe fondul chiriilor modeste*. [online] Available at: <<http://www.capital.ro/detalii-articole/stiri/erste-piata-imobiliara-din-romania-cea-mai-rentabila-din-regiune-in-2012-pe-fondul-chiriilor.html>> [Accessed 03 October 2011].