THE CENTRAL BANK OF KENYA PENSION FUND

INVESTMENT JUSTIFICATION

(COST BENEFIT ANALYSIS)

FOR

THE PROPOSED OFFICE TOWER FOR CBK PENSION FUND AT THE CBD- NAIROBI CITY COUNTY.

BY

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A. INVESTMENT JUSTIFICATION

Definition

Investment justification is the process by which one demonstrates whether a project is financially feasible or not through careful analysis of all the relevant parameters.

These projects may be buildings, dams and highways or can be training programs and health care systems. It is important to note that for some projects whose benefits are more of social nature the justification of the investment can be a very complex issue. This is due to many intangible and non-financial benefits which in some cases are the primary purpose of such projects. Projects of this nature includes public schools, public hospitals and public roads such as highways

It is also true purely commercial projects could also have many intangible and non financial benefits which are sometimes difficult to quantify

In case of real estate development the primary objective by the investor is to make profit. The indirect benefits accruing from real estate development are mostly circumstantial but never the objective. Such benefits include rise in land values for neighbouring properties and provision of good social amenities that can also be beneficial to those who have access to the development. General improvement of public infrastructure as a result of the development could also be another tangible benefit

Because the proposed project is a real estate development which is purely commercial undertaking and whose primary objective is to make profit the best model for justifying the investment would be the cost benefit analysis

Arprim consortium will therefore, in this paper, use the cost benefit analysis to show whether the proposed CBK Pension office block which is purely a commercial project, is financially viable or not.

Towards the process of conducting the investment analysis on the best strategy to adopt in the development/ redevelopment of the proposed project, the study has analyzed several different options in an attempt to comprehend the merits and demerits of alternative strategies that can be employed in a bid to optimize the net worth of the development. The results of this study have been illustrated in the second section of this analysis and a recommendation provided on the best use of the proposed site. In arriving at conclusions, Arprim consultants have subjected the PF office block project to a number of conventional principles (parameters) of cost benefit analysis as listed below.

Principles (Parameters) of cost benefit analysis as applied to CBK-PF project.

The following parameters of cost benefit analysis which are the main tools through which it can be established whether a commercial project is financially viable or not will be used in justifying the proposed investment

a) Project net cash flows
b) Net present value (NPV) of the projected cash flows (discounted cash flow analysis)
c) Internal rate of return (IRR)
d) Return on investment (ROI)
e) Payback period
f) Total cost of the project
g) Total operating expenses

As mention above real estate development has intangible benefits which we shall also endeavour to establish for the proposed development

2. PROJECT COSTS

The costs of a constructed facility to the owner include both the initial capital cost and the subsequent operation and maintenance costs. Each of these major cost categories consists of a number of cost components.

a) The capital cost for a construction project includes the expenses related to the initial establishment of the facility:

- Land , including assembly, holding and improvement
- Planning and feasibility studies
- Architectural and engineering design
- Construction, including materials, equipment and labor
- Field supervision of construction
- Construction financing
- Insurance and taxes during construction
- Owner's general office overhead
- Equipment and furnishings not included in construction
- Inspection and testing

b) The operation and maintenance cost in subsequent years over the project life cycle includes the following expenses:

- Land rent, if applicable
- Operating staff
- Labour and material for maintenance and repairs
- Periodic renovations(CAPEX)
- Insurance and taxes
- Financing costs
- Utilities
- Owner's other expenses

c) Contingencies or unexpected costs occurring during construction:

In most construction budgets, there is an allowance for contingencies or unexpected costs occurring during construction. This contingency amount may be included within each cost item or be included in a single category of construction contingency. The amount of contingency is based on historical experience and the expected difficulty of a particular construction project. For example, in our case, Arprim have made estimates of the expected cost in five different areas:

- Design development changes
- Schedule adjustments,
- General administration changes (such as wage rates),
- Differing site conditions for those expected, and
- Third party requirements imposed during construction, such as new permits

The Contingent amounts not spent for construction can be released near the end of construction to the owner or to add additional project elements

3 BENEFITS OF THE PROJECT

3.1 Manufacturers and suppliers of building materials and service

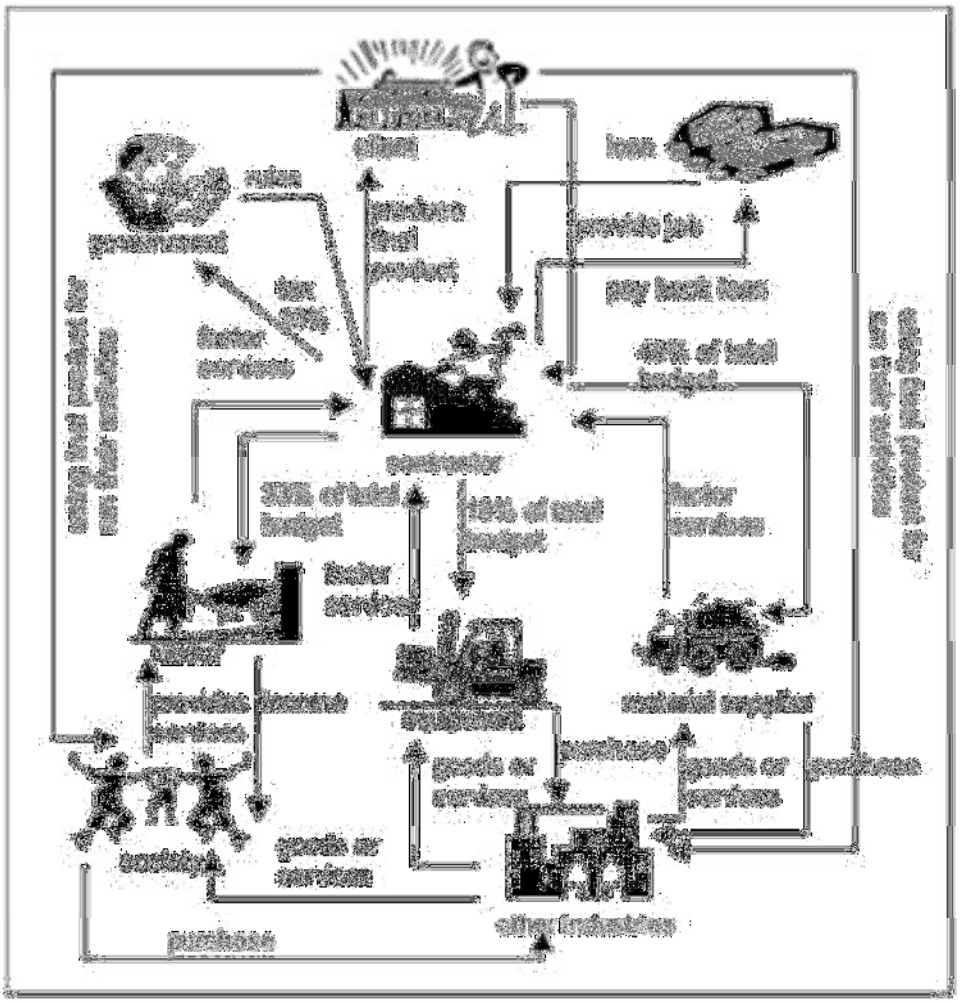


Figure 1

It can be seen from figure 1 that the money flow will come from the Central Bank of Kenya-Pension Fund and pass through the contractor. The contractor will purchase something from material supplier, hire equipments from plant supplier and pay the labour as the wages in order to construct the office block. The contractor, also, will pay tax to the government when they finish their work.

The money received from the contractor can be used by the material supplier, plant supplier and labour to purchase something from the other industries. The other industries in turn produce products that can be used by the construction industry as an input factor to produce their final product. This process is a cyclic process.

The contribution of the contractor to the economy can be seen from figure 1 as follows:

- There is a link from the contractor to the material supplier which represents 40% of the total budget project for purchasing material.
- There is a link from the contractor to the plant supplier which constitutes 19% of the total budget project for rent the equipment.
- There is a link from the contractor to the labour which represents 33% of the total budget for labor's wages.
- There is a link from the contractor to the government which constitutes 10% of the total budget for paying government's tax.
- There is a link from the contractor to the client where the contractor produce the final product then the client, the government, the society and the other industries could use this one to run their activities.

In conclusion contribution to the Kenyan economy by this project is limitless as shown in the figure above. The linkage from the contractor to the final product and from the final product to the society, the government, the bank and the other industries is cyclical.

3.2 Government and county authorities

The CBK - PF project will provide a very important contribution to the national/local economy through its job generating ability for unskilled, semi-skilled and skilled labour. The construction process needs inputs from other industries and production factors (labour, land and capital). This will generate considerable employment through multiplier effects. The project will also see Nairobi City County recoup on the increase in property value of this project.

B. COST- BENEFIT ANALYSIS

1 PROJECT DEFINITION.

The Central Bank Pension Fund is in the process of re-developing their existing property, the Central Bank Pension House, on their 0.712 acres piece of land plot number L.R. NO. 209/4976&77 at Harambee Avenue within Nairobi Central Business District. The fund intends to lease this development to other government agencies and private sector entities as a way of contributing to the need for modern office space for government and related agencies and expanding their income streams.

The proposed project by Arprim consortium involves the re-development of the existing properties. This concept paper has considered several re-development options and analyzes their commercial viability. I t has also recommended the best viable option out of all the options considered.

2 APPROACH

Towards the redevelopment of this property, an analysis in to the financial feasibility is important to understand the viability of the project. Six options have been utilized in performing the analysis from a development and financing spectrum and a comparison included to determine the best alternative for the fund. The options are analyzed below.

3. OPTION 1

This option focuses on qualitatively analyzing alternative strategies that may be employed by the fund that dwell on disposing of the existing asset or purchase of an already performing asset and also developing a different asset on a different site.

These are as shown below;

3.1 Retention and renovation

The existing property can be retained by the fund and renovated to enable it preserve its income potential. Capital expenditures will involve slight refurbishment with modern fittings and fixtures of the existing building improving the property's stature to a class B grade facility aimed at maintaining the rental income streams. The uplift will involve minimal costs to the fund however this will limit the project site as the option does not fully optimize the potential of the site neither does it improve the status of the building fully. Further the supply of grade B office space in the city is at an all time high and with the current softening of the market, uptake has been really hampered resulting in rents declining thereby reducing returns for most property owners. By re-developing through new construction the fund can scale up to a grade A office space attracting more rental revenue and hence higher returns.

3.2 Sale of subject property.

Alternatively, the property can be sold off in the open market thereby enabling the fund achieve capital returns from the sale. The demand for income producing real estate in prime areas especially with quality tenant profiles is high in the current market buoyed by the advent of the REIT investment vehicles looking for attractive returns to offer to investors. As a result, the fund will be able to achieve a decent return from the sale however the fund shall lose immensely as the opportunity cost of selling is higher. The gains to be made by the fund through re-development far outweigh the gain to be made from the sale of the asset on a long term basis. A comparative net present value analysis shows that if the property were to be sold at the current value of Kshs 850 million, the net loss to the fund would amount to almost Kshs 150 million. This arises from a situation whereby, if the property is retained and redeveloped, based on a ten year period, it will yield a present value of over Kshs 1 billion in a good market.

3.3 Greenfield development

Further the fund may consider holding the current site as it is and acquisition of another viable land parcel and later develop the new site with new office facilities. The option involves identification of suitable locations for commercial development especially within upcoming nodes for office developments. These include Upper hill and Westlands areas. The greatest advantage is that it provides the fund with new sites that seemingly offer good returns to investors however has great demerits. The increase in demand for sites in these new business areas has forced the cost of land to sky rocket in the recent past to as much as 18.1% annually. (Hass Land Composite Index Q4 2014) Consequently, this shall increase the equity required for the investment for an equivalent size of land thus lowering the return in the long run after development. Further, this is also compounded by the increased cost of construction due to inflationary aspects which combined with the land values will significantly affect returns. In addition to this, for an equivalent land value as currently owned by the fund, the land size to be obtained through purchase significantly reduces owing to the increased land prices thereby limiting the built up area to be developed reducing the returns to the investor albeit a similar rental market and cost being a major constraint.

3.4 Purchase of income producing property.

The fund may still consider the purchase of an already existing development as opposed to redevelopment. The greatest advantage towards this approach is that it provides the fund with a lower level of risk associated with new construction especially associated with acquisition of tenants, project management, cost management etc. and also steady positive cash flow from the initial period of acquisition. However, the current local market has witnessed high property prices owing to increased demand and un-informed pricing in urban areas have negated the benefits associated with purchasing developed real estate lowering potential

returns to investors. Further through development, developers are able to command higher returns for the higher risks assumed.

4. OPTION 2: Demolish and Re-development

This option evaluates the merits and demerits of a complete re-construction of the site. The greatest advantage to the developer would be in the optimal use of the site from the ground up. This definitely creates more leasable space to the developer thereby providing higher revenues increasing rental yields to the developer. This option provides the project design team flexibility in the creative use of space and scaling to a grade A office space. However, the challenge to this alternative would be the high cost involved in the construction as this will entail demolition of the existing facility which is in perfect operational condition after improvements and erection of a new building and the opportunity cost associated. The demolition which also comes at a significant cost outlay shall result in the fund losing the investment made in the construction of the existing building which has a quite relevant useful life with decent income generating potential. In analyzing the option we have used two approaches based on a financing spectrum i.e. own developer financing and the use of leverage in the financing structure. This is as shown below.

4.1 Scenario A: Levered

Below is a breakdown of the total development costs for the project. The project under this approach is expected to take 28 months.

Figure 1: Development cost

Uses	Kshs
Land and buildings	850,000,000
Construction Cost incl. Preliminaries and External works	3,234,843,022
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licenses	
NEMA consultancy fees	500,000
NEMA application fees	3,234,843
NC Architectural Submission Fees	5,345,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	1,617,422
NCA Compliance certificate	16,174,215
Professional Fees	
Architects	161,742,151
Quantity Surveyor	64,696,860
Civil & Structural Engineer	58,227,174
Services Engineer	54,992,331
Project Manager	48,522,645
Financing Costs	
Finance charges fees	72,460,484
Interest Charges @10% P.A during construction	508,355,581
Miscellaneous Costs	

Legal Charges	7,246,048
Marketing & Letting	5,000,000
Total Estimated Project Cost	**5,094,958,027**

The above table provides the total cost of redeveloping the site. The construction cost includes the cost of demolition as well as the cost of construction of the new facility. The total built up area for the development shall be 38,880 sqm. The project cost amounts to Kshs 5.1 billion.

4.1.1 Project financing

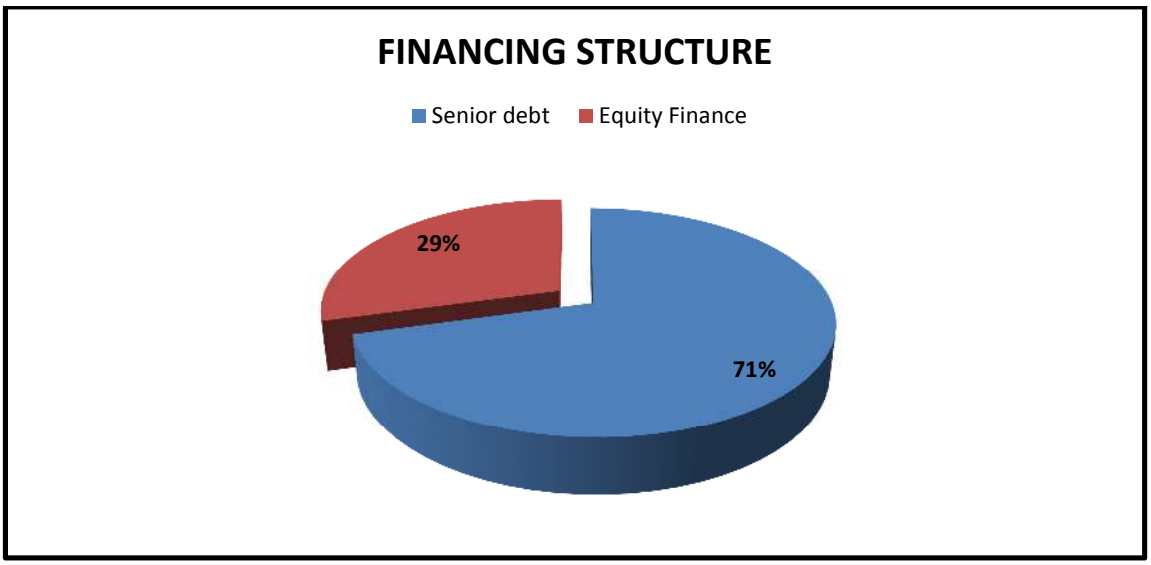
Under this scenario the project shall be financed using a mix of both debt and equity in varying proportions. The resulting capital structure is as illustrated below.

Figure 2: Finance structure

Sources	Kshs
Debt Finance	3,623,024,185
Equity Finance	
Land and buildings	850,000,000
Cash	621,933,843
Total	**5,094,958,027**

The project requires a cash equity infusion of Kshs 621 million which shall supplement the debt capital to be used in the development. In the analysis we have used the total valuation of the property as is, to reflect the opportunity cost of demolition of the existing building in favour of new construction of the proposed building. The debt component amounting to Kshs 3.6 billion will be financed at a projected rate of 10% over a 15 year period.

Chart 1: Capital structure



4.2 Scenario B: Unlevered

Alternatively, we have assessed the viability of the project should the project be financed using equity only. The resulting project budget is as shown below;

4.2.1 Project budget

Figure 3: Project Cost

Uses	Kshs
Land and buildings	850,000,000
Construction Cost incl. Preliminaries and External works	3,234,843,022
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licenses	
Extension of User & Property Amalgamation	-
NEMA consultancy fees	500,000
NEMA application fees	3,234,843
NC Architectural Submission Fees	5,345,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	1,617,422
NCA Compliance certificate	16,174,215
Professional Fees	
Architects	161,742,151
Quantity Surveyor	64,696,860
Civil & Structural Engineer	58,227,174
Services Engineer	54,992,331
Project Manager	48,522,645
Miscellaneous Costs	
Legal Charges	2,000,000
Marketing & Letting	5,000,000
Total estimated project cost	**4,508,895,915**

The above table provides the total cost of redeveloping the site. The construction cost includes the cost of demolition as well as the cost of construction of the new facility. The project cost amounts to Kshs 4.5 billion. The total built up area for the development shall be 38,880 sqm.

4.2.2 Project financing

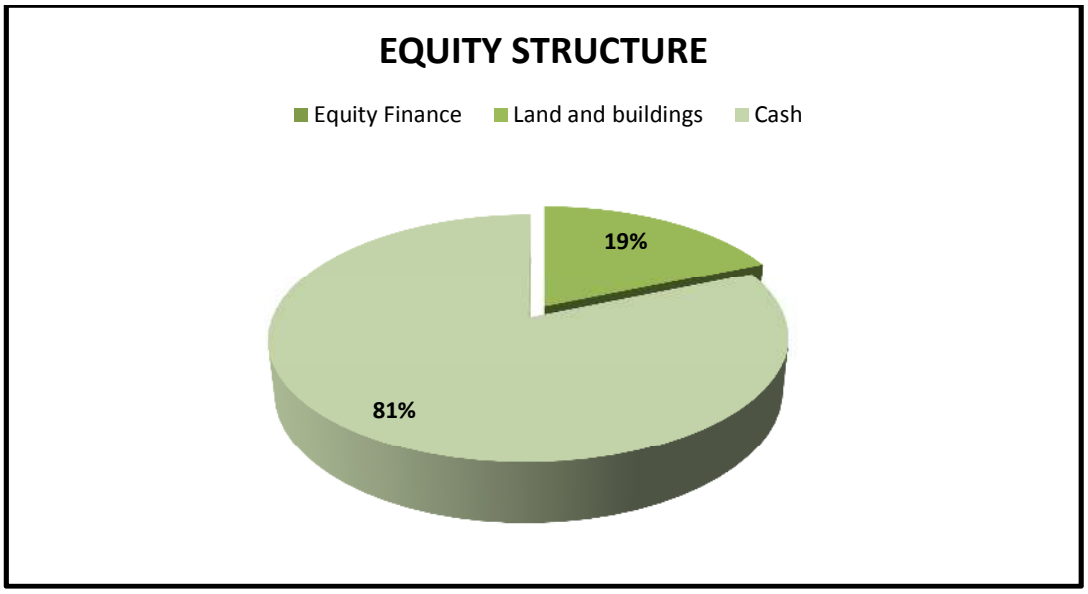
Towards financing the project cost of the development, the proposed financing structure based on equity funding is as shown below;

Figure 5: Project financing

Sources	Kshs
Land and buildings	850,000,000
Cash	3,658,595,915
Total	**4,508,895,915**

The project has a cash equity requirement of Kshs 3.6 billion which shall be used to finance the project construction cost including demolitions and other soft costs comprising of professional fees licensing and approvals as well as other miscellaneous expenses. The financing structure is as shown below;

Chart 3: Equity Structure



4.3 Operations

A ten year cash flow forecast depicting both financing scenarios is as shown below to illustrate the net income from the development option highlighted above.

Figure 6: Statement of Income and Expenditure

INCOME & EXPENDITURE STATEMENT	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Lease Rentals Revenues													
Occupancy	**80%**	**80%**	**80%**	**80%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**
Lease rental, office space per Sqft per month	138,787,860	138,787,860	138,787,860	138,787,860	624,545,370	624,545,370	655,772,639	655,772,639	688,561,270	688,561,270	722,989,334	722,989,334	759,138,801
Parking revenue	11,776,320	11,776,320	11,776,320	11,776,320	52,993,440	52,993,440	55,643,112	55,643,112	58,425,268	58,425,268	61,346,531	61,346,531	64,413,858
Gross Lease Rentals	**150,564,180**	**150,564,180**	**150,564,180**	**150,564,180**	**677,538,810**	**677,538,810**	**711,415,751**	**711,415,751**	**746,986,538**	**746,986,538**	**784,335,865**	**784,335,865**	**823,552,658**
Gross Potential Revenue	**150,564,180**	**150,564,180**	**150,564,180**	**150,564,180**	**677,538,810**	**677,538,810**	**711,415,751**	**711,415,751**	**746,986,538**	**746,986,538**	**784,335,865**	**784,335,865**	**823,552,658**
Less: Operating Expenses													
Bad debt allowance	4,516,925	4,516,925	4,516,925	4,516,925	20,326,164	20,326,164	21,342,473	21,342,473	22,409,596	22,409,596	23,530,076	23,530,076	24,706,580
Leasing commission	2,775,757	-	-	-	1,387,879	-							
Operating expense	22,584,627	22,584,627	22,584,627	22,584,627	101,630,822	101,630,822	106,712,363	106,712,363	112,047,981	112,047,981	117,650,380	117,650,380	123,532,899
Capital expenditures							56,913,260				62,746,869		
Property Management fees	7,528,209	7,528,209	7,528,209	7,528,209	33,876,941	33,876,941	35,570,788	35,570,788	37,349,327	37,349,327	39,216,793	39,216,793	41,177,633
Total Expenses	**37,405,519**	**34,629,761**	**34,629,761**	**34,629,761**	**157,221,805**	**155,833,926**	**220,538,883**	**163,625,623**	**171,806,904**	**171,806,904**	**243,144,118**	**180,397,249**	**189,417,111**
LEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**113,158,661**	**115,934,419**	**115,934,419**	**115,934,419**	**520,317,005**	**521,704,884**	**490,876,868**	**547,790,128**	**575,179,634**	**575,179,634**	**541,191,747**	**603,938,616**	**634,135,547**
Less:													
Interest	90,356,464	89,689,861	89,006,454	88,305,819	345,856,932	333,150,890	319,114,360	303,608,022	286,477,967	267,554,172	246,648,809	223,554,380	198,041,663
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	20,767,473	20,767,473	20,767,473	20,767,473	93,453,629	93,453,629	98,126,310	98,126,310	103,032,626	103,032,626	108,184,257	108,184,257	113,593,470
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-		
Principal Repayment	26,443,146	27,109,749	27,793,156	28,493,791	121,341,508	134,047,550	148,084,080	163,590,418	180,720,472	199,644,267	220,549,631	243,644,060	269,156,776
Earnings After Tax	**(24,408,422)**	**(21,632,664)**	**(21,632,664)**	**(21,632,664)**	**(40,335,064)**	**(38,947,185)**	**(74,447,882)**	**(17,534,622)**	**4,948,569**	**4,948,569**	**(34,190,950)**	**28,555,919**	**53,343,637**
UNLEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	113,158,661	115,934,419	115,934,419	115,934,419	520,317,005	521,704,884	490,876,868	547,790,128	575,179,634	575,179,634	541,191,747	603,938,616	634,135,547
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	20,767,473	20,767,473	20,767,473	20,767,473	93,453,629	93,453,629	98,126,310	98,126,310	103,032,626	103,032,626	108,184,257	108,184,257	113,593,470
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings After Tax	**92,391,188**	**95,166,945**	**95,166,945**	**95,166,945**	**426,863,376**	**428,251,255**	**392,750,557**	**449,663,817**	**472,147,008**	**472,147,008**	**433,007,490**	**495,754,359**	**520,542,077**

Based on the cash flow projections above the project seems to be struggling if financed using debt as it results in negative cash flow streams from the first year of operations till the fifth year. This is occasioned by the high debt service payments that are straining the project cash flows.

4.4 Returns

In analyzing the project returns under this option, we have used the internal rate of return, project payback period and the net present value. The results are as shown below.

Figure 7: Project Returns

Scenario A (Levered)	
Internal rate of return	13.2%
Payback period	14.3yrs
Net Present Value (NPV)	Kshs 208,931,075
Scenario B (Unlevered)	
10 YR	12.6%
Payback period	8.5yrs
Net Present Value (NPV)	Kshs 355,294,566

4.5 Conclusion

4.5.1 Scenario A

From the findings we note that the project has an IRR of 13.2% based on a ten year period under scenario A which seemingly provides a similar risk free return compared to benchmark money market securities that provide returns of 13.3% over the same period. Further the returns above fall below required commercial real estate returns in the market which is at the mid to high teens in the current market. The decreased yield is as a result of the high equity investment required due to the higher project cost thereby depressing the returns from the project. The use of gearing further impacts the returns as the negative cash flow stream erodes the favorable use of leverage effectively diminishing the returns especially witnessed during the first five years of operations. Further, the project provides a lengthy payback period under scenario A at 14.3 years which falls out of required investment plough back periods.

4.5.2 Scenario B

Scenario B provides an improved payback period at 8.5 years. The projects net present value is quite low Kshs 355 million which is rather low as shall be compared to other options illustrated below. The projects internal rate of return which measures the equity yield from the investment stands at 12.6% which is below the industry market rates as well as falls short of 10 year treasury yields.

5. OPTION 3

This option shall have the fund renovate the existing facility as well as the addition of 2 extra floors on the rear wing. A surface parking of 52 bays will also be developed on the vacant space adjacent to the building. Consequently, the property will have a total combined area of 11,365 sqm. The total cost for the construction and refurbishment shall amount to Kshs 412 million excluding soft costs. In analyzing the viability we have evaluated its feasibility based on own developer financing and external debt financing from commercial banks.

5.1 Scenario A: Unlevered

5.1.1 Project Cost

The projected total development cost for the development through this approach is estimated at Kshs 1.3 Bn. the project shall be completed within an estimated period of 12 months. The below table illustrates a breakdown of all cost components.

Figure 8: Cost budget

Use	Kshs
Land and buildings	**850,000,000**
Construction Cost incl. Preliminaries and External works	**412,656,938**
Licensees, Surveys and Approvals	
Surveys	
Geotechnical report	300,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licensees	
Extension of User & Property Amalgamation	-
NEMA consultancy fees	500,000
NEMA application fees	412,657
NC Architectural Submission Fees	1,704,750
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	206,328
NCA Compliance certificate	2,063,285
Professional Fees	
Architects	20,632,847
Quantity Surveyor	8,253,139
Civil & Structural Engineer	7,427,825
Services Engineer	7,015,168
Project Manager	6,189,854
Miscellaneous Costs	
Legal Charges	918,409
Marketing & Letting	2,500,000
Total Estimated Project Cost	**1,321,912,791**

The structure above includes the hard and soft costs of the development of the new wing and the renovation costs to be incurred in the upgrading of the existing building.

5.1.2 Financing Structure

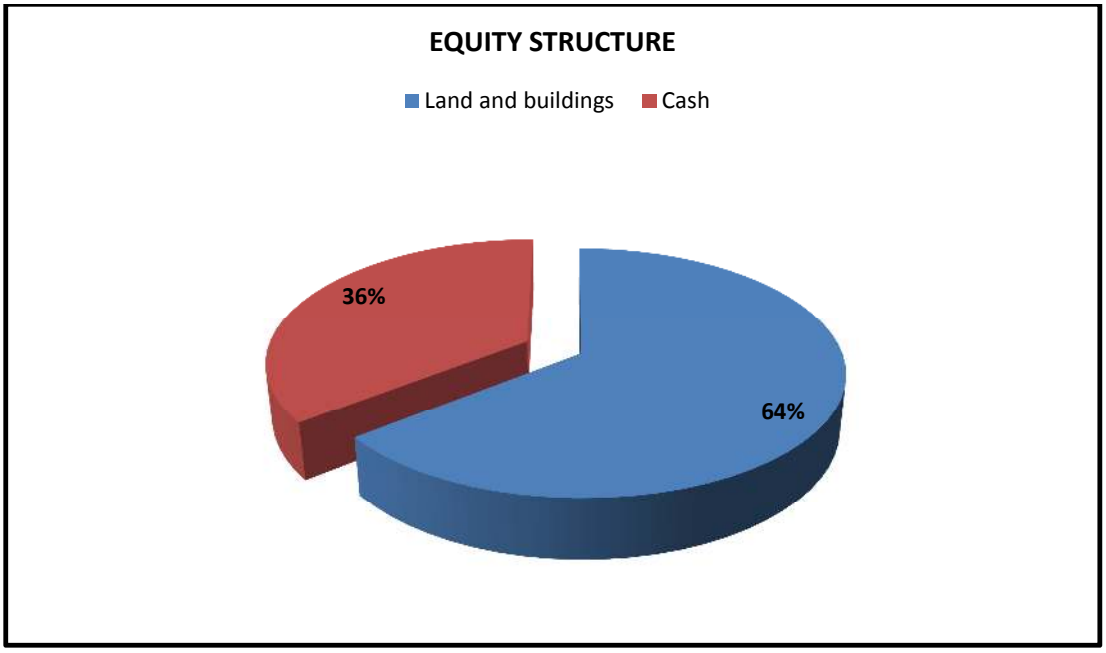
The table below illustrates the expected financial structure for the development of the project based on the above cost budget. The project financing shall be through equity sources comprising of the existing value of the development and cash injection.

Figure 6: Finance Structure

Sources	Kshs
Land and buildings	850,000,000
Cash	471,912,791
Total	**1,321,912,791**

Equity investment in the project shall be through land and buildings contribution by the fund estimated at Kshs 850 million. In addition the project shall require a cash equity injection of Kshs 472 million to cater for the construction costs, professional fees, approvals and licensing costs as well as other miscellaneous expenses.

Chart 3: Equity Structure



5.2 Scenario B: Levered

Alternatively, the project can be funded using a mix of both debt and equity based on a 33% and 67% ratio respectively. The project budget and financing structure is shown below;

5.2.1 Project cost

Figure 7: Cost Budget

Use	Kshs
Land and buildings	850,000,000
Construction Cost incl. Preliminaries and External works	412,656,938
Licensees, Surveys and Approvals	
Surveys	
Geotechnical report	300,000
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Professional Fees	
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Quantity Surveyor	8,253,139
Civil & Structural Engineer	7,427,825
Services Engineer	7,015,168
Project Manager	6,189,854
Financing Costs	
Finance charges fees	9,184,093
Interest Charges	46,991,080
Miscellaneous Costs	
Legal Charges	918,409
Marketing & Letting	2,500,000
Total Estimated Project Cost	**1,378,506,372**

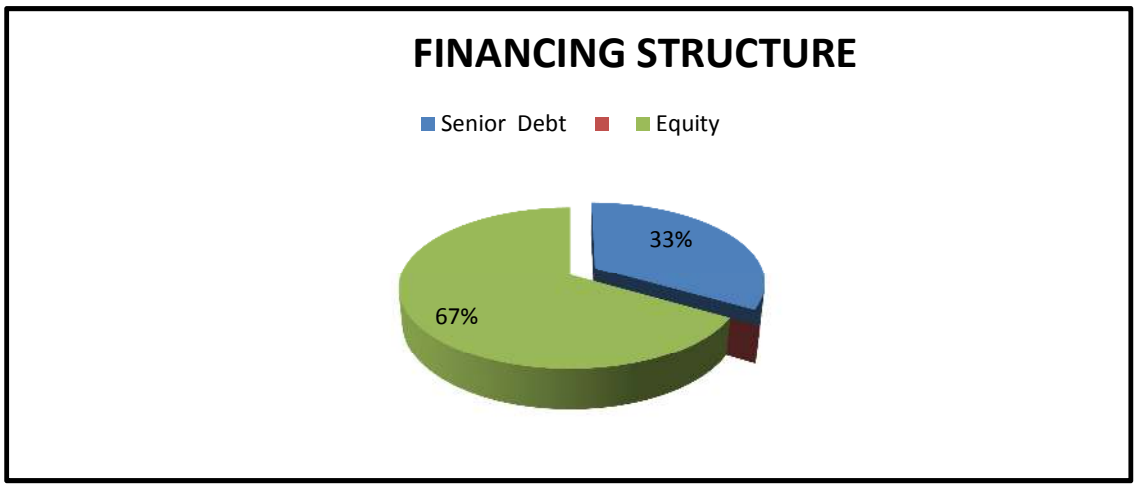
5.2.2 Financing structure

Figure 8: Project Finance

Source	Kshs
Debt	**459,204,641**
Equity	
Land and buildings	
Cash	**850,000,000**
Total	**69,301,732**
	1,378,506,372

From the above the project cost increases by Kshs 56 million owing to the financing costs arising from a debt amount of Kshs 460 million. A cash equity injection of 69 million will be required to meet financing cost and other soft costs including approvals and licenses and marketing costs. The loan shall be converted in to a permanent loan to be repaid over a 10 year period.

Chart 4: Financial Structure



As illustrated below we have deduced an operational cash flow forecast depicting expected profitability of the option.

5.3 Operations

Figure 9: Statement of Income and Expenditure

In assessment of the building performance over a 10 year period, we have provided a preliminary income and expenditure statement illustrating the potential net incomes to be achieved. The table is as shown below.

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Lease Rentals Revenues													
Occupancy	**80%**	**80%**	**80%**	**80%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**
Lease rental, office space per Sqft per month	50,890,091	50,890,091	50,890,091	50,890,091	229,005,411	229,005,411	240,455,682	240,455,682	252,478,466	252,478,466	265,102,389	265,102,389	278,357,509
Parking revenue	1,447,680	1,447,680	1,447,680	1,447,680	6,514,560	6,514,560	7,491,744	7,491,744	7,491,744	8,615,506	8,615,506	8,615,506	9,907,831
Gross Lease Rentals	**52,337,771**	**52,337,771**	**52,337,771**	**52,337,771**	**235,519,971**	**235,519,971**	**247,947,426**	**247,947,426**	**259,970,210**	**261,093,972**	**273,717,895**	**273,717,895**	**288,265,340**
Gross Potential Revenue	**52,337,771**	**52,337,771**	**52,337,771**	**52,337,771**	**235,519,971**	**235,519,971**	**247,947,426**	**247,947,426**	**259,970,210**	**261,093,972**	**273,717,895**	**273,717,895**	**288,265,340**
Less: Operating Expenses													
Bad debt allowance	1,570,133	1,570,133	1,570,133	1,570,133	7,065,599	7,065,599	7,438,423	7,438,423	7,799,106	7,832,819	8,211,537	8,211,537	8,647,960
Leasing commission	1,017,802	-	-	-	508,901	-							
Operating expense	7,850,666	7,850,666	7,850,666	7,850,666	35,327,996	35,327,996	37,192,114	37,192,114	38,995,532	39,164,096	41,057,684	41,057,684	43,239,801
Capital expenditures							19,835,794				21,897,432		
Property Management fees	2,616,889	2,616,889	2,616,889	2,616,889	11,775,999	11,775,999	12,397,371	12,397,371	12,998,511	13,054,699	13,685,895	13,685,895	14,413,267
Total Expenses	**13,055,489**	**12,037,687**	**12,037,687**	**12,037,687**	**54,678,494**	**54,169,593**	**76,863,702**	**57,027,908**	**59,793,148**	**60,051,613**	**84,852,547**	**62,955,116**	**66,301,028**
LEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**39,282,282**	**40,300,084**	**40,300,084**	**40,300,084**	**180,841,477**	**181,350,378**	**171,083,724**	**190,919,518**	**200,177,062**	**201,042,358**	**188,865,348**	**210,762,779**	**221,964,312**
Interest	11,423,917	11,252,967	11,077,707	10,898,029	41,703,014	38,444,546	34,844,874	30,868,270	26,475,262	21,622,250	16,261,064	10,338,491	3,795,748
Depreciation	660,956	660,956	660,956	660,956	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826
VAT	7,219,003	7,219,003	7,219,003	7,219,003	32,485,513	32,485,513	34,199,645	34,199,645	35,857,960	36,012,962	37,754,192	37,754,192	39,760,737
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal Repayment	6,781,352	6,952,303	7,127,563	7,307,241	31,118,064	34,376,532	37,976,204	41,952,808	46,345,816	51,198,828	56,560,014	62,482,587	69,025,330
Earnings After Tax	**13,197,053**	**14,214,855**	**14,214,855**	**14,214,855**	**72,891,060**	**73,399,961**	**61,419,175**	**81,254,969**	**88,854,198**	**89,564,493**	**75,646,252**	**97,543,683**	**106,738,672**
UNLEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**39,282,282**	**40,300,084**	**40,300,084**	**40,300,084**	**180,841,477**	**181,350,378**	**171,083,724**	**190,919,518**	**200,177,062**	**201,042,358**	**188,865,348**	**210,762,779**	**221,964,312**
Depreciation	660,956	660,956	660,956	660,956	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826	2,643,826
VAT	7,219,003	7,219,003	7,219,003	7,219,003	32,485,513	32,485,513	34,199,645	34,199,645	35,857,960	36,012,962	37,754,192	37,754,192	39,760,737
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings After Tax	**31,402,323**	**32,420,125**	**32,420,125**	**32,420,125**	**145,712,138**	**146,221,039**	**134,240,253**	**154,076,047**	**161,675,276**	**162,385,571**	**148,467,330**	**170,364,761**	**179,559,750**

The table above depicts the expected performance under both scenarios. The revenues are quite positive across the period.

5.4 Returns

From the above table we can be able to deduce the project returns as shown below;

Figure 10: Returns

SCENARIO A	
Unlevered IRR (10 YR)	13.4%
Payback period (yrs)	8.2
Net Present Value	Kshs 277,759,327
SCENARIO B	
Levered IRR (10YR)	14.5%
Payback period (yrs)	10.5
Net Present Value	Kshs 284,366,548

5.5 Findings

5.5.1 Scenario A

Based on a pure equity funding basis by the pension fund, the project provides an internal rate of return of 13.4% on a ten year investment horizon which represents the equity investment yield to the fund on their investment. The payback period stands at 8.2 years demonstrating the period to be taken by the fund to recover the investment in the project. The project under this financing method has a positive NPV.

5.5.2 Scenario B

Alternatively, using both a mix of debt and equity, the project generates an IRR of 14.5% as its investment yield. This higher return reflects the impact of a positive financial leverage on the financing mix. The projects payback period increases to 10.5 years and also has a positive net present value.

6. OPTION 4

This option shall have the fund renovate the existing front wing of the building with an area of 5,755 sqm as well as extend the rear wing of 2 floors to 7 floors bringing the built up area of the wing to 6,090 sqm. In addition a new surface parking to accommodate 52 bays shall be created. Consequently, the property will have a total combined area of 13,455 sqm. The total cost for the construction and refurbishment shall amount to Kshs 598 million. In analyzing the viability we have evaluated its feasibility based on own developer financing and external debt financing from commercial banks.

6.1 Scenario A: Unlevered

6.1.1 Project cost

The total estimated development cost for the facility amounts to Kshs 1.5 billion. A breakdown of the expected costs is as shown below.

Figure 10: Project cost

Uses	Kshs
Land and buildings	850,000,000
Construction Cost incl. Preliminaries and External works	598,642,328
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licenses	
NEMA consultancy fees	500,000
NEMA application fees	598,642
NC Architectural Submission Fees	2,015,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	299,321
NCA Compliance certificate	2,993,212
Professional Fees	
Architects	29,932,116
Quantity Surveyor	11,972,847
Civil & Structural Engineer	10,775,562
Services Engineer	10,176,920
Project Manager	8,979,635
Miscellaneous Costs	
Legal Charges	500,000
Marketing & Letting	2,500,000
Total Estimated Project Cost	**1,531,885,832**

6.1.2 Project finance

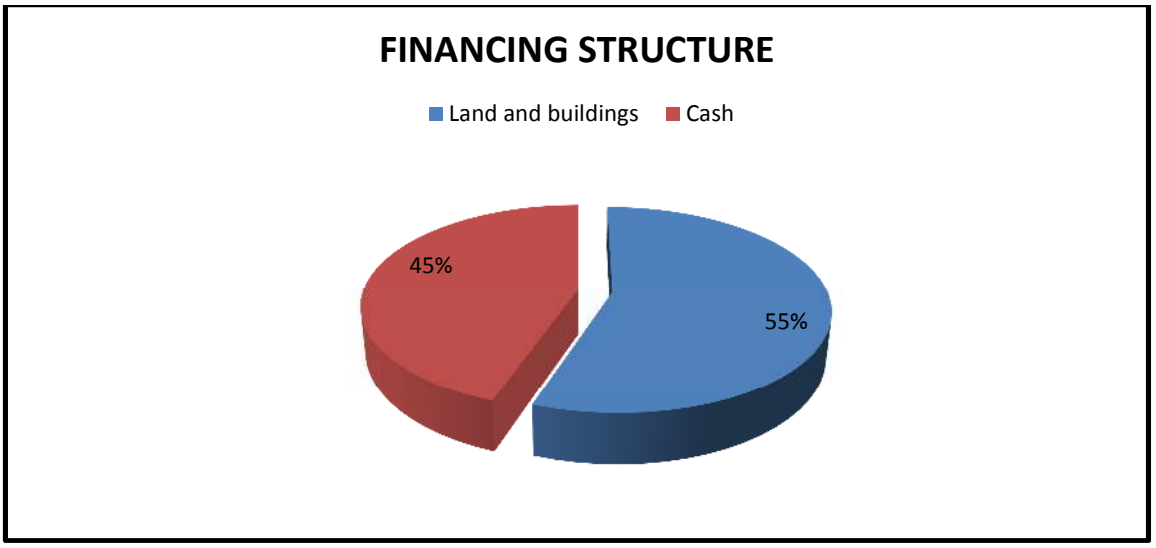
The project has a total cost of Kshs 1.5 billion that shall be financed solely using equity sources. An infusion of cash equity amounting to Kshs 682 million shall be required to finance the construction and renovation cost, professional fees as well as other miscellaneous costs.

Figure 11: Financing budget

Sources	Kshs
Land and buildings	850,000,000
Cash	681,885,832
Total	**1,531,885,832**

The proportion of the existing value of the facility vis a vis the additional equity towards the total budget is as shown below.

Chart 5: Equity structure



6.2 Scenario B: Levered

6.2.1 Project cost budget

The projected total development cost for the project under this scenario is estimated at Kshs 1.6 billion. The breakdown is as shown below;

Figure 12: Cost Budget

Uses	Kshs
Land and buildings	850,000,000
Construction Cost incl. Preliminaries and External works	598,642,328
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licenses	
NEMA consultancy fees	500,000
NEMA application fees	598,642
NC Architectural Submission Fees	2,015,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	299,321
NCA Compliance certificate	2,993,212
Professional Fees	
Architects	29,932,116
Quantity Surveyor	11,972,847
Civil & Structural Engineer	10,775,562
Services Engineer	10,176,920
Project Manager	8,979,635
Financing Costs	
Finance charges fees 2% of loan amount	13,323,384
Interest Charges @10% P.A during construction	101,219,443
Miscellaneous Costs	
Legal Charges	1,332,338
Marketing & Letting	2,500,000
Total estimated project cost	**1,647,260,997**

6.2.2 Project finance

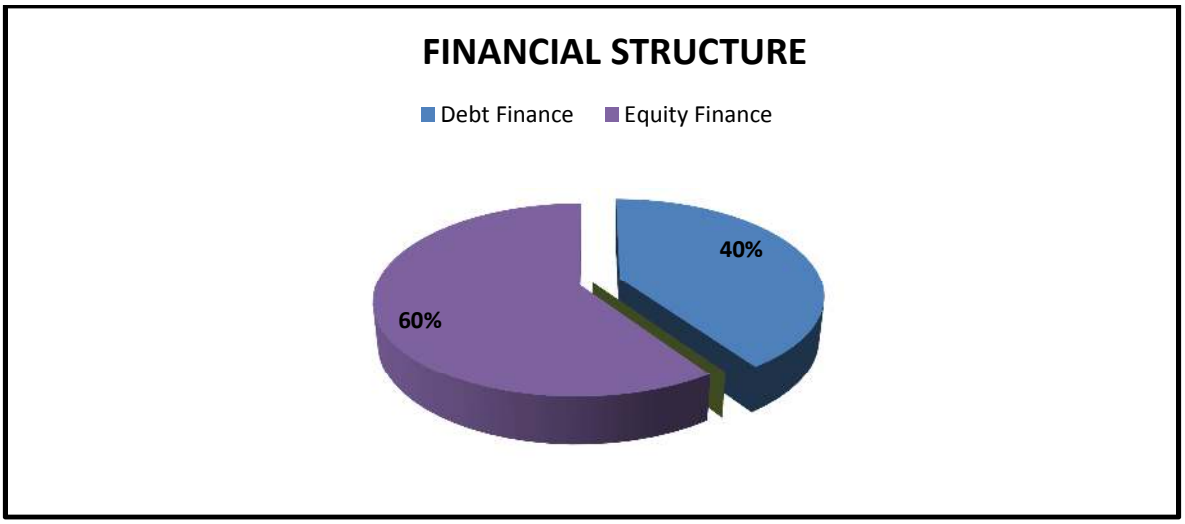
From the project budget shown above the project shall be financed through a mix of debt and equity as illustrated below.

Figure 13: Finance Budget

Sources	Kshs
Debt Finance	666,169,183
Equity Finance	
Land and buildings	850,000,000
Cash	131,091,814
Total	**1,647,260,997**

From the above table, the senior debt component amounting to Kshs 666 million shall be financed at an interest rate of 10% during and after construction. The construction loan shall be converted into a permanent mortgage to be repaid over a 10 year period. Further, the project shall require a cash infusion of Kshs 130 million to supplement the debt component. The valuation of the land and buildings represents additional equity for the development. An illustration of the resulting capital structure is shown below.

Chart 6: Capital Structure



6.3 Operations

To comprehend the performance of the project after lease up we have provided a tabular 10 year forecast of the project under this option. The results are as below;

Figure 14: Statement of Income and Expenditure

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Lease Rentals Revenues													
Occupancy	**80%**	**80%**	**80%**	**80%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**
Lease rental office space per Sqft per month	62,767,944	62,767,944	62,767,944	62,767,944	282,455,746	282,455,746	282,455,746	296,578,533	296,578,533	311,407,460	311,407,460	326,977,833	326,977,833
Parking revenue	1,447,680	1,447,680	1,447,680	1,447,680	1,628,640	1,628,640	1,628,640	1,628,640	1,628,640	1,628,640	1,628,640	1,628,640	1,628,640
Gross Potential Revenue	**64,215,624**	**64,215,624**	**64,215,624**	**64,215,624**	**284,084,386**	**284,084,386**	**284,084,386**	**298,207,173**	**298,207,173**	**313,036,100**	**313,036,100**	**328,606,473**	**328,606,473**
Less: Operating Expenses													
Bad debt allowance	1,926,469	1,926,469	1,926,469	1,926,469	8,522,532	8,522,532	8,522,532	8,946,215	8,946,215	9,391,083	9,391,083	9,858,194	9,858,194
Leasing commission	1,255,359	-	-	-	627,679	-							
Operating expense	9,632,344	9,632,344	9,632,344	9,632,344	42,612,658	42,612,658	42,612,658	44,731,076	44,731,076	46,955,415	46,955,415	49,290,971	49,290,971
Capital expenditures							22,726,751				25,042,888		
Property Management fees	3,210,781	3,210,781	3,210,781	3,210,781	14,204,219	14,204,219	14,204,219	14,910,359	14,910,359	15,651,805	15,651,805	16,430,324	16,430,324
Total Expenses	**16,024,952**	**14,769,593**	**14,769,593**	**14,769,593**	**65,967,088**	**65,339,409**	**88,066,160**	**68,587,650**	**68,587,650**	**71,998,303**	**97,041,191**	**75,579,489**	**75,579,489**
LEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**48,190,671**	**49,446,030**	**49,446,030**	**49,446,030**	**218,117,298**	**218,744,977**	**196,018,226**	**229,619,523**	**229,619,523**	**241,037,797**	**215,994,909**	**253,026,984**	**253,026,984**
Interest	16,572,702	16,324,704	16,070,454	15,809,794	60,498,655	55,771,588	50,549,536	44,780,667	38,407,721	31,367,445	23,589,961	14,998,072	5,506,499
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	8,857,327	8,857,327	8,857,327	8,857,327	39,184,053	39,184,053	39,184,053	41,132,024	41,132,024	43,177,393	43,177,393	45,325,031	45,325,031
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal Repayment	9,837,722	10,085,721	10,339,971	10,600,630	45,143,043	49,870,110	55,092,162	60,861,031	67,233,977	74,274,253	82,051,737	90,643,627	100,135,199
Earnings After Tax	**12,922,919**	**14,178,278**	**14,178,278**	**14,178,278**	**73,291,546**	**73,919,226**	**51,192,475**	**82,845,801**	**82,845,801**	**92,218,706**	**67,175,818**	**102,060,255**	**102,060,255**
UNLEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	48,190,671	49,446,030	49,446,030	49,446,030	218,117,298	218,744,977	196,018,226	229,619,523	229,619,523	241,037,797	215,994,909	253,026,984	253,026,984
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	8,857,327	8,857,327	8,857,327	8,857,327	39,184,053	39,184,053	39,184,053	41,132,024	41,132,024	43,177,393	43,177,393	45,325,031	45,325,031
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings After Tax	**39,333,344**	**40,588,703**	**40,588,703**	**40,588,703**	**178,933,244**	**179,560,924**	**156,834,173**	**188,487,499**	**188,487,499**	**197,860,404**	**172,817,516**	**207,701,953**	**207,701,953**

6.4 Returns

The option presented above provides slight the below returns.

Figure 15: Project Returns

Scenario A (Unlevered)	
Internal rate of return (IRR)-10 year	13.5%
Payback period	8.5 yrs
NPV	Kshs 341,642,463
Scenario B(Levered)	
Internal rate of return (IRR)-10 year	14.7%
Payback period	10.1 yrs
NPV	Kshs 322,517,491

6.5 Findings

6.5.1 Scenario A

If the project under option 4 is funded using equity only, it will give the fund a yield of 13.5% which is quite low for commercial property especially for class A investment grade office types. The project has a short payback period at 8.5 years owing to the lack of leverage. The net present value is positive at Kshs 340 million.

6.5.2 Scenario B

Using leverage the project provides a yield of 14.7% over a ten year period. This is an unfavorable return which can be further improved through optimization of the project. Current target rates for commercial real estate especially for investment grade property stand between 16-18%. It has a nominal payback period of 10 years which is within recommended thresholds. However, the project has a rather low net present value of Kshs 322 million.

7. OPTION 5

The option is based on the renovation of the existing facility and the extension of the rear wing by 5 floors. Further it will see the construction of a parking silo consisting of 5storeys with 2 basements on the adjacent vacant land to the existing building. The total built up area will total to 22,975 sqm. The estimated cost of the development will be Kshs 1.4 billion. A viability analysis has been performed on the financing mix to be adopted based on debt usage (levered) and developer financing (unlevered).

7.1 Scenario A: Unlevered

7.1.1 Cost Budget

The total project cost stands at Kshs 2.4 billion and has been shown below.

Figure 16: Cost budget

Uses	Kshs
Land and buildings	850,000,000
Construction Cost	
Construction Cost incl. Preliminaries and External works	1,370,566,187
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
NEMA consultancy fees	500,000
Approvals & Licenses	
Extension of User & Property Amalgamation	
NEMA consultancy fees	500,000
NEMA application fees	13,705,662
NC Architectural Submission Fees	3,446,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy (0.05% of Construction Cost)	685,283
NCA Compliance certificate	6,852,831
Professional Fees	
Architects	68,528,309
Quantity Surveyor	27,411,324
Civil & Structural Engineer	24,670,191
Services Engineer	23,299,625
Project Manager	20,558,493
Miscellaneous Costs	
Legal Charges	500,000
Marketing & Letting	2,500,000
Total Estimated Project Cost	**2,415,274,156**

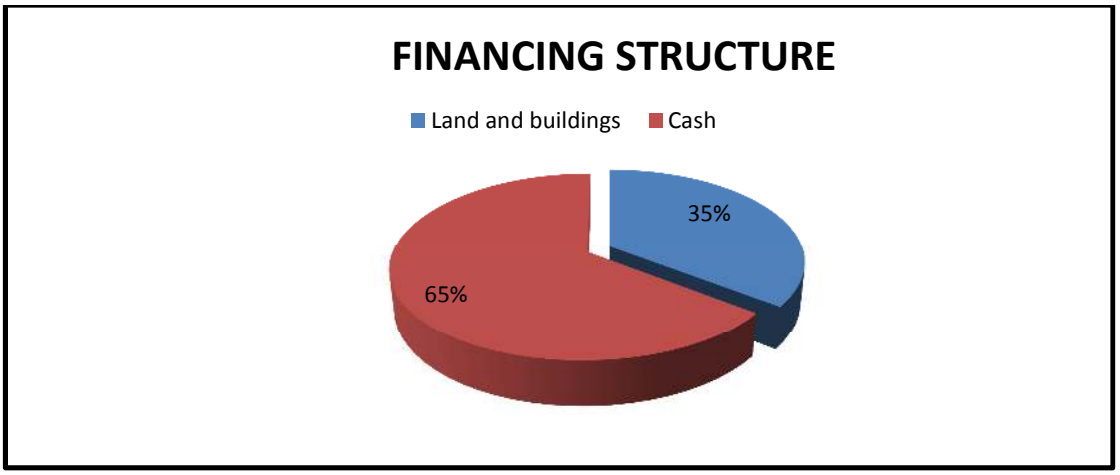
7.1.2 Financing

Figure 17: Financing Structure

Sources	Kshs
Land and buildings	850,000,000
Cash	1,565,274,156
Total	**2,415,274,156**

Based on a pure equity financing model the project requires a cash equity injection of Kshs 1.56 billion funded by the project developer. The amount will be used to fund construction costs, professional fees as shown above in the development budget. The land and buildings has been included as part of the cost for purposes of computation of returns as they are considered relevant.

Chart 7: Unlevered Structure



7.2 Scenario B: Levered

Alternatively, utilizing a mix of both debt and equity in funding the project, the project cost budget shifts slightly upwards to Kshs 2.5 billion and is as shown below ;

7.2.1 Project cost Figure 13: Cost Budget

Uses	Kshs
Land and buildings	850,000,000
Construction Cost incl. Preliminaries and External works	1,370,566,187
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
NEMA consultancy fees	500,000
Approvals & Licenses	
Extension of User & Property Amalgamation	
NEMA consultancy fees	500,000
NEMA application fees	13,705,662
NC Architectural Submission Fees	3,446,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	685,283
NCA Compliance certificate	6,852,831
Professional Fees	
Architects	68,528,309
Quantity Surveyor	27,411,324
Civil & Structural Engineer	24,670,191
Services Engineer	23,299,625
Project Manager	20,558,493
Financing Costs	
Finance charges fees 2% of loan amount	30,700,683
Interest Charges @10% P.A during construction	94,203,583
Miscellaneous Costs	
Legal Charges	1,535,034
Marketing & Letting	2,500,000
Total Estimated Project Cost	**2,541,213,455**

7.2.2 Financing

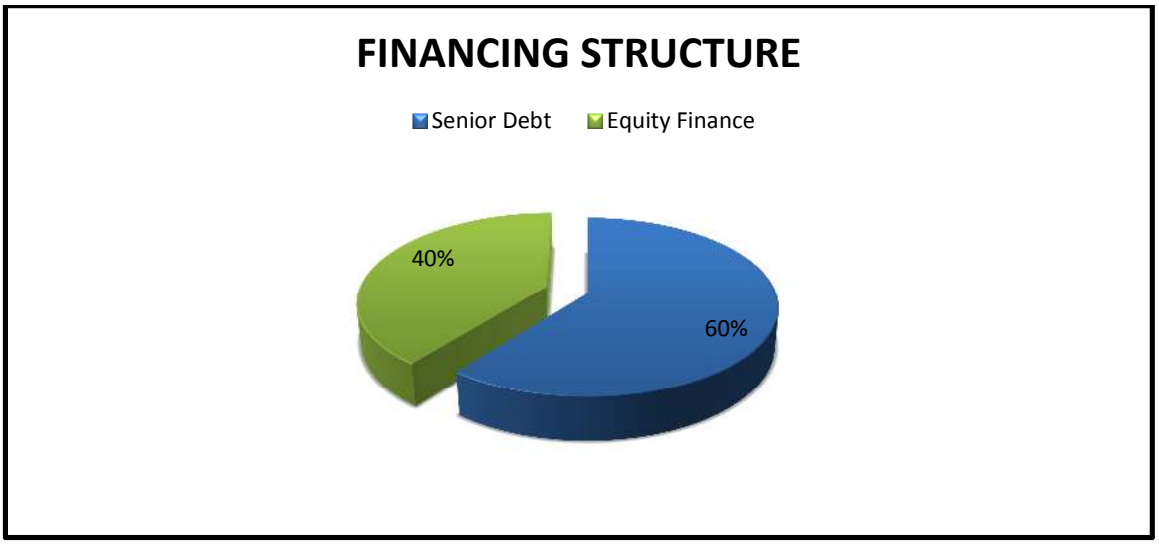
The resulting financing structure is shown below;

Figure 17: Project Financing

Sources	Kshs
Debt	1,535,034,129
Equity Finance	
Land and buildings	850,000,000
Cash	156,179,325
Total	**2,541,213,455**

The project financing incorporates a mix of 60% and 40% debt to equity ratio respectively. The debt amounts to Kshs 1.5 billion representing 60% of the project budget. The loan amount upon conversion to a permanent loan on completion of construction will be repaid over a 10 year period at a projected 10% interest cost. Further, an infusion of cash equity shall be required amounting to Kshs 156 million to complement the debt amount.
This shall bring the total project cost to Kshs 2.5 billion.

Chart 8: Leverage Structure



7.3 Operations

In assessment of the building performance over a 10 year period, we have provided a preliminary income and expenditure statement illustrating the potential net incomes to be achieved from both scenarios (levered and unlevered). The table is as shown below;

Figure 18: Income and Expenditure Statement

INCOME & EXPENDITURE STATEMENT	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Lease Rentals Revenues													
Occupancy	**80%**	**80%**	**80%**	**80%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**
Lease rental, office space per Sqft / month	62,767,944	62,767,944	62,767,944	62,767,944	282,455,746	282,455,746	296,578,533	296,578,533	312,297,195	312,297,195	327,912,055	327,912,055	344,307,658
Parking revenue	10,133,760	10,133,760	10,133,760	10,133,760	45,601,920	45,601,920	47,882,016	47,882,016	50,276,117	50,276,117	52,789,923	52,789,923	55,429,419
Gross Lease Rentals per Quarter	**72,901,704**	**72,901,704**	**72,901,704**	**72,901,704**	**328,057,666**	**328,057,666**	**344,460,549**	**344,460,549**	**362,573,312**	**362,573,312**	**380,701,978**	**380,701,978**	**399,737,077**
Gross Potential Revenue	**72,901,704**	**72,901,704**	**72,901,704**	**72,901,704**	**328,057,666**	**328,057,666**	**344,460,549**	**344,460,549**	**362,573,312**	**362,573,312**	**380,701,978**	**380,701,978**	**399,737,077**
Less: Operating Expenses													
Bad debt allowance	2,187,051	2,187,051	2,187,051	2,187,051	9,841,730	9,841,730	10,333,816	10,333,816	10,877,199	10,877,199	11,421,059	11,421,059	11,992,112
Leasing commission	1,255,359	-	-	-	627,679	-							
Operating expense	10,935,256	10,935,256	10,935,256	10,935,256	49,208,650	49,208,650	51,669,082	51,669,082	54,385,997	54,385,997	57,105,297	57,105,297	59,960,562
Capital expenditures							27,556,844				30,456,158		
Property Management fees	3,645,085	3,645,085	3,645,085	3,645,085	16,402,883	16,402,883	17,223,027	17,223,027	18,128,666	18,128,666	19,035,099	19,035,099	19,986,854
Total Expenses	**18,022,751**	**16,767,392**	**16,767,392**	**16,767,392**	**76,080,943**	**75,453,263**	**106,782,770**	**79,225,926**	**83,391,862**	**83,391,862**	**118,017,613**	**87,561,455**	**91,939,528**
LEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**54,878,953**	**56,134,312**	**56,134,312**	**56,134,312**	**251,976,723**	**252,604,403**	**237,677,779**	**265,234,623**	**279,181,450**	**279,181,450**	**262,684,365**	**293,140,523**	**307,797,549**
Interest	38,187,992	37,616,537	37,030,676	36,430,046	139,405,277	128,512,836	116,479,815	103,186,778	88,501,787	72,279,086	54,357,655	34,559,617	12,688,465
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	10,055,407	10,055,407	10,055,407	10,055,407	45,249,333	45,249,333	47,511,800	47,511,800	50,010,112	50,010,112	52,510,618	52,510,618	55,136,149
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal Repayment	22,668,776	23,240,231	23,826,092	24,426,721	104,021,792	114,914,233	126,947,255	140,240,291	154,925,283	171,147,984	189,069,414	208,867,453	230,738,605
Earnings After Tax	**(16,033,222)**	**(14,777,863)**	**(14,777,863)**	**(14,777,863)**	**(36,699,680)**	**(36,072,000)**	**(53,261,091)**	**(25,704,247)**	**(14,255,731)**	**(14,255,731)**	**(33,253,323)**	**(2,797,164)**	**9,234,331**
UNLEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	54,878,953	56,134,312	56,134,312	56,134,312	251,976,723	252,604,403	237,677,779	265,234,623	279,181,450	279,181,450	262,684,365	293,140,523	307,797,549
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	10,055,407	10,055,407	10,055,407	10,055,407	45,249,333	45,249,333	47,511,800	47,511,800	50,010,112	50,010,112	52,510,618	52,510,618	55,136,149
Corporate Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings After Tax	**44,823,545**	**46,078,904**	**46,078,904**	**46,078,904**	**206,727,390**	**207,355,069**	**190,165,979**	**217,722,823**	**229,171,338**	**229,171,338**	**210,173,747**	**240,629,905**	**252,661,401**

7.4 Returns

From the above table we can be able to deduce the project returns as shown below;

Figure 19: Return Summary

Scenario A	
Unlevered IRR (10 YR)	9.8%
Payback period	10.1 years
Net Present Value	Kshs (98,809,711)
Scenario B	
Levered IRR (10YR)	10.7%
Payback period	21.8 years
Net Present Value	Kshs (1,039,315,780)

7.5 Findings

7.5.1 Scenario A

The project provides an internal rate of return of 9.8% on a ten year investment horizon which represents the investment yield to the fund on their investment. The rate falls short of benchmark rates which stand at 16-18% required for investment grade real estate thus presents an unattractive investment option. The payback period is at 10.1 years demonstrating the period to be taken by the fund to recover the investment in the project which within the recommended 10 year period required for a feasible project. The net present value is also negative further indicating the projects unavailability.

7.5.2 Scenario B

Using financial leverage within the financing mix, the project is able to achieve an internal rate of return of 10.7 % to the pension fund. The return is again lower than minimum required rates of return for commercial real estate in the current market. In addition, the payback period increases to a weak 21.8 years as a result of a lower income stream, higher cash equity investment albeit an existent debt service payment which results in lowering the cash flow streams to negative values over a nine year period. Further, the project under this scenario has a negative net present value as exhibited by the IRR being lower than the minimum required rate of return or the cost of capital which stands at 13%.

8. OPTION 6 – RECOMMENDED OPTION BY ARPRIM CONSORTIUM

Further in full optimization of the project site, this option examines the feasibility of renovating the existing facility and construction of a new office block. The new 26 storey block shall have a total built up area of 26,950 sqm which shall comprise of parking areas and office space. The total built up area will be 36,035 sqm and will be developed at an estimated construction cost of Kshs 2.5 billion. A viability analysis has been performed on the financing mix to be adopted based on debt availability and sole developer financing i.e. levered and unlevered scenarios. Option 6 is the option Arprim is recommending to be developed by CBK pension fund as it was found to be the most viable commercially. The returns for this option are very good as it will be shown later.

8.1 Scenario A: Unlevered

This option assumes the project shall be financed using own developer financing without any leverage in the capital structure.

8.1.1 Project cost

The below table provides a breakdown of the expected total development cost for the project;

Figure 19: Project budget

Uses	Kshs
Land and buildings	850,000,000
Construction Cost	
Construction Cost incl. Preliminaries and External works	2,497,831,310
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licenses	
NEMA consultancy fees	500,000
NEMA application fees	2,497,831
NC Architectural Submission Fees	5,405,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	1,248,916
NCA Compliance certificate	12,489,157
Professional Fees	-
Architects	124,891,566
Quantity Surveyor	49,956,626
Civil & Structural Engineer	44,960,964
Services Engineer	42,463,132
Project Manager	37,467,470
Miscellaneous Costs	
Legal Charges	2,000,000
Marketing & Letting	5,000,000
Total Estimated Project Cost	**3,678,712,221**

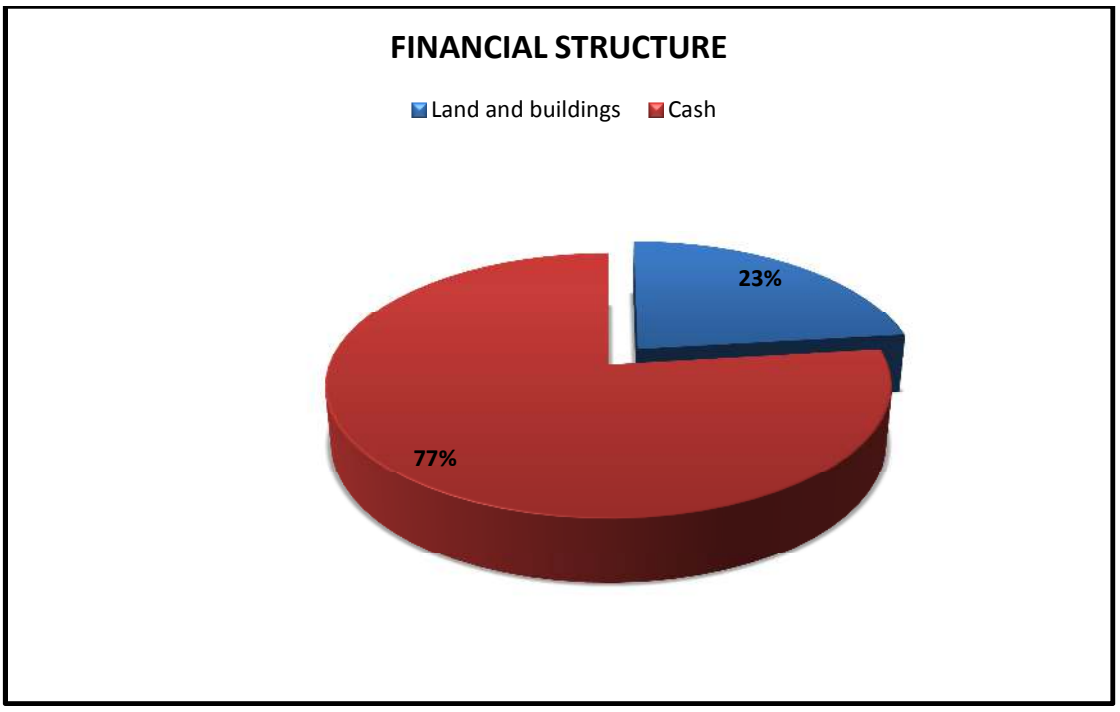
8.1.2 Financing structure

Figure 16: Finance Budget

Sources	Kshs
Land and buildings	850,000,000
Cash	2,828,712,221
Total	**3,678,712,221**

The project based on the proposed funding structure will involve the infusion of Kshs 2.8 Billion in cash. The amount shall be used in the funding of the construction cost, professional fees, approvals and licensing as well as other miscellaneous costs. in addition the current value of the subject property as estimated has been included as part of the going in investment by the fund.

Chart 9: Unleveraged Structure



8.2 Scenario B: Levered

Alternatively, the project can be financed through a mix of both equity and debt instruments in order to reduce the cash requirements and use leverage to finance the development of the facility.

A project cost budget is shown below;

8.2.1 Project cost

Figure 17: Project budget

Uses	Kshs
Land and buildings(valuation)	850,000,000
Construction Cost incl. Preliminaries and External works	2,497,831,310
Licenses, Surveys and Approvals	
Surveys	
Geotechnical report	450,000
Property Valuation	500,000
Topographical Survey	300,000
Market feasibility report	450,000
Approvals & Licenses	
NEMA consultancy fees	500,000
NEMA application fees	2,497,831
NC Architectural Submission Fees	5,405,250
NC Occupation, signboard, road access fee	300,000
NC Infrastructure levy	1,248,916
NCA Compliance certificate	12,489,157
Professional Fees	
Architects	124,891,566
Quantity Surveyor	49,956,626
Civil & Structural Engineer	44,960,964
Services Engineer	42,463,132
Project Manager	37,467,470
Financing Costs	
Finance charges fees (2% of loan amount)	55,351,942
Interest Charges (@10% p.a during construction)	391,996,196
Miscellaneous Costs	
Legal Charges (0.2% of debt amt)	5,535,194
Marketing & Letting	5,000,000
Total Estimated Project Cost	**4,129,595,553**

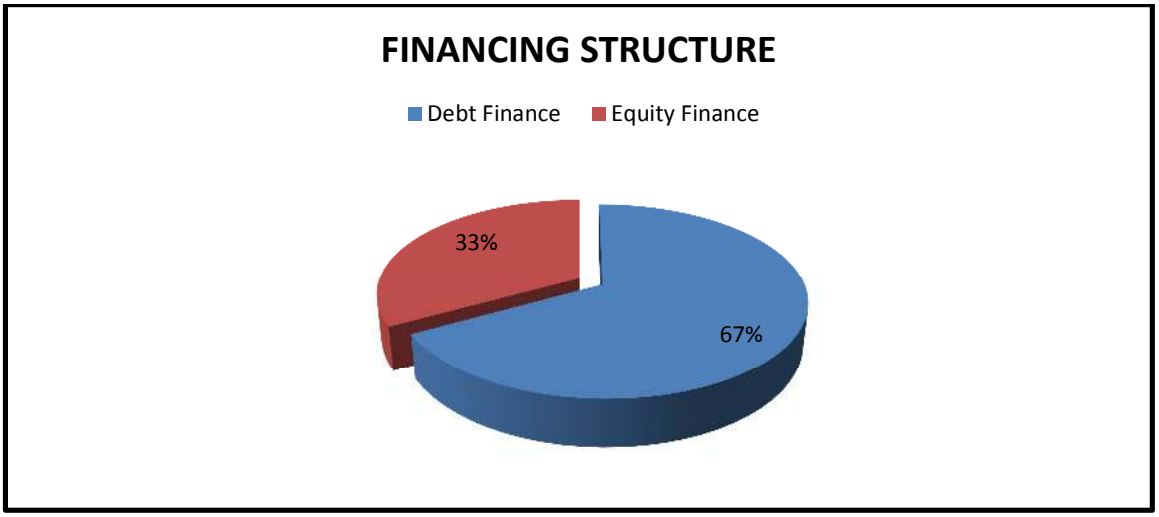
8.3 Project Finance

Figure 18: Finance Structure

Source	Kshs
Debt Finance	
Senior Debt	2,767,597,091
Equity Finance	
Land and buildings	850,000,000
Cash	511,998,461
Total	**4,129,595,553**

From the financing structure shown above, the project will be financed using a debt to equity mix of 67% and 33% respectively. This will see the project being funded by Kshs 2.7 million using debt. This amount will be used to finance the project construction cost and professional fees. The amount will be sourced at 10% interest cost during the construction period giving rise to a financing cost of Kshs 450 million. The loan will further be converted to a permanent loan to be repaid over a period of 15 years after construction and lease up period. A further infusion of cash equity amounting to Kshs 511 million shall be required. The amount will be used to cater for the financing costs of the project as well as other soft costs arising including approvals and required permits, legal and marketing expenses.

Chart 10: Capital Structure



8.4 Operations

In assessment of the building performance over a 10 year period, we have provided a preliminary income and expenditure statement illustrating the potential net incomes to be achieved from both scenarios (levered and unlevered). The table is as shown below;

Figure 19: Projected Income and Expenditure Statement

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Lease Rentals Revenues													
Occupancy	**80%**	**80%**	**80%**	**80%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**	**90%**
Lease rental, office space per sqft per month	138,787,860	138,787,860	138,787,860	138,787,860	624,545,370	624,545,370	633,913,551	665,609,228	665,609,228	698,889,689	698,889,689	733,834,174	733,834,174
Parking revenue	11,776,320	11,776,320	11,776,320	11,776,320	52,993,440	52,993,440	52,993,440	52,993,440	52,993,440	52,993,440	52,993,440	52,993,440	52,993,440
Gross potential revenue	**150,564,180**	**150,564,180**	**150,564,180**	**150,564,180**	**677,538,810**	**677,538,810**	**686,906,991**	**718,602,668**	**718,602,668**	**751,883,129**	**751,883,129**	**786,827,614**	**786,827,614**
Less: operating expenses													
Bad debt allowance	4,516,925	4,516,925	4,516,925	4,516,925	20,326,164	20,326,164	20,607,210	21,558,080	21,558,080	22,556,494	22,556,494	23,604,828	23,604,828
Leasing commission	2,775,757	-	-	-	1,387,879	-							
Operating expense	22,584,627	22,584,627	22,584,627	22,584,627	101,630,822	101,630,822	103,036,049	107,790,400	107,790,400	112,782,469	112,782,469	118,024,142	118,024,142
Capital expenditures							34,345,350				22,556,494		
Property management fees	7,528,209	7,528,209	7,528,209	7,528,209	33,876,941	33,876,941	34,345,350	35,930,133	35,930,133	37,594,156	37,594,156	39,341,381	39,341,381
Total expenses	**37,405,519**	**34,629,761**	**34,629,761**	**34,629,761**	**157,221,805**	**155,833,926**	**192,333,957**	**165,278,614**	**165,278,614**	**172,933,120**	**195,489,614**	**180,970,351**	**180,970,351**
LEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**113,158,661**	**115,934,419**	**115,934,419**	**115,934,419**	**520,317,005**	**521,704,884**	**494,573,033**	**553,324,054**	**553,324,054**	**578,950,010**	**556,393,516**	**605,857,263**	**605,857,263**
Interest	69,022,528	68,513,316	67,991,267	67,456,057	264,197,143	254,491,107	243,768,722	231,923,563	218,838,061	204,382,337	188,412,909	170,771,273	151,282,328
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	20,767,473	20,767,473	20,767,473	20,767,473	93,453,629	93,453,629	94,745,792	99,117,609	99,117,609	103,708,018	103,708,018	108,527,947	108,527,947
Corporate tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal repayment	20,199,692	20,708,904	21,230,953	21,766,163	92,691,737	102,397,773	113,120,158	124,965,317	138,050,818	152,506,543	168,475,971	186,117,607	205,606,552
Earnings after tax	**3,168,968**	**5,944,726**	**5,944,726**	**5,944,726**	**69,974,496**	**71,362,375**	**42,938,362**	**97,317,565**	**97,317,565**	**118,353,112**	**95,796,618**	**140,440,436**	**140,440,436**
UNLEVERED CASH FLOWS													
Earnings Before Interest, Depreciation & Tax	**113,158,661**	**115,934,419**	**115,934,419**	**115,934,419**	**520,317,005**	**521,704,884**	**494,573,033**	**553,324,054**	**553,324,054**	**578,950,010**	**556,393,516**	**605,857,263**	**605,857,263**
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT	20,767,473	20,767,473	20,767,473	20,767,473	93,453,629	93,453,629	94,745,792	99,117,609	99,117,609	103,708,018	103,708,018	108,527,947	108,527,947
Corporate tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings After Tax	**92,391,188**	**95,166,945**	**95,166,945**	**95,166,945**	**426,863,376**	**428,251,255**	**399,827,241**	**454,206,445**	**454,206,445**	**475,241,992**	**452,685,498**	**497,329,316**	**497,329,316**

8.5 Returns

From the above table we can be able to deduce the project returns as shown below;

Figure 20: Return Summary

Scenario A	
Unlevered IRR (10 Yr)	13.5%
Payback Period	8.6 Yrs
NPV	Kshs 829,581,356
Scenario B	
Levered IRR (10yr)	17%
Payback Period	11 Yrs
NPV	Kshs 843,062,722

8.5.1 Findings

8.5.2 Scenario A

Based on this scenario, where the fund will finance the project purely using equity, the project provides an internal rate of return of 13.5% based on a ten year investment horizon which represents the investment yield to the fund on their investment. The payback period is at 8.6 years demonstrating the period to be taken by the fund to recover the investment in the project which stands within the recommended 10 year threshold for commercial real estate. This scenario has a quite impressive positive net present value.

8.5.3 Scenario B

Using financial leverage within the financing mix, the project is able to achieve the highest internal rate of return of 17% to the pension fund representing quite a handsome return over the investment holding period. Current market returns in the office market range between 16% and 20%. The payback period stands at 11 years which lies just slightly above the recommended minimum threshold for property investment. This scenario has the highest positive net present value at Kshs 0.8 billion.

9. Summary and Conclusion

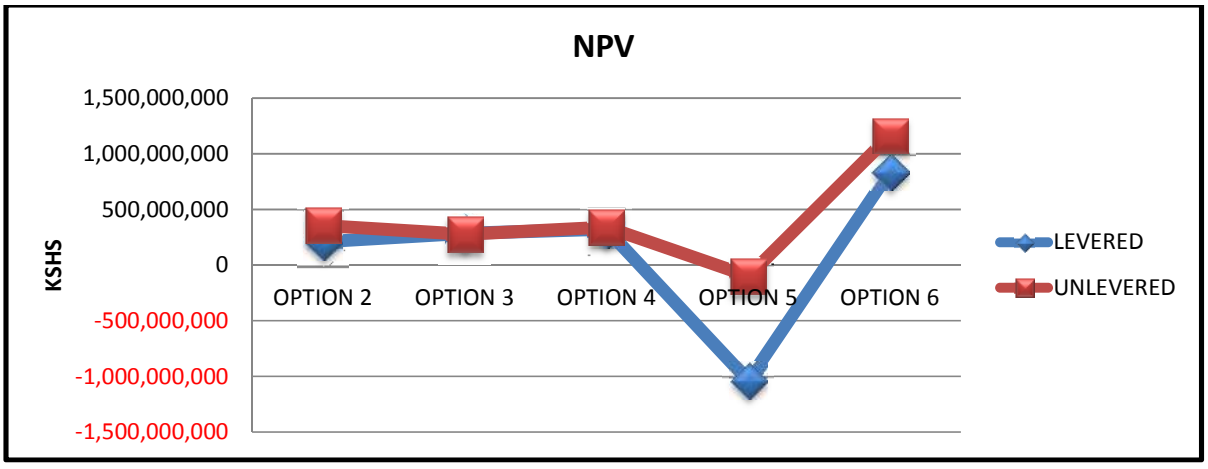
Figure 21: Return Summary

	OPTION 2	OPTION 3	OPTION 4	OPTION 5	OPTION 6
IRR					
LEVERED	13.3%	14.5%	14.7%	10.7%	17.0%
Ranking	4	3	2	5	1
UNLEVERED	12.6%	13.4%	13.5%	9.8%	13.5%
Ranking	4	2	1	5	1
PAY BACK PERIOD					
LEVERED (Yrs)	14.27	10.48	10.05	21.83	11.10
Ranking	4	2	1	5	3
UNLEVERED (Yrs)	8.54	8.18	8.48	10.11	8.62
Ranking	3	1	2	5	4
NET PRESENT VALUES					
LEVERED	KES 208,931,075	KES 282,841,547	KES 321,780,908	(KES 1,039,315,780)	KES 843,062,722
Ranking	4	3	2	5	1
UNLEVERED	KES 355,294,566	KES 276,234,326	KES 341,642,463	(KES 98,809,711)	KES 829,581,356
Ranking	2	4	3	5	1

9.1 Net Present Value

From the Net Present Value analysis the project has returned positive as well as a negative NPV under all the options and scenarios analyzed. Option 6 has the highest net present value from all the options studied at Kshs 800 million under both financing scenarios with Option 5 the most unfavorable option posting negative net present values. Option 2, 3 and 4 have positive NPVs which fall below Kshs 400 million, which is over half what is achieved in Option 6. Using this metric we recommend the adoption of Option 6 as the ideal strategy. The free cash flows have been discounted using a risk free rate of 13%.

Chart 11: Net Present Value

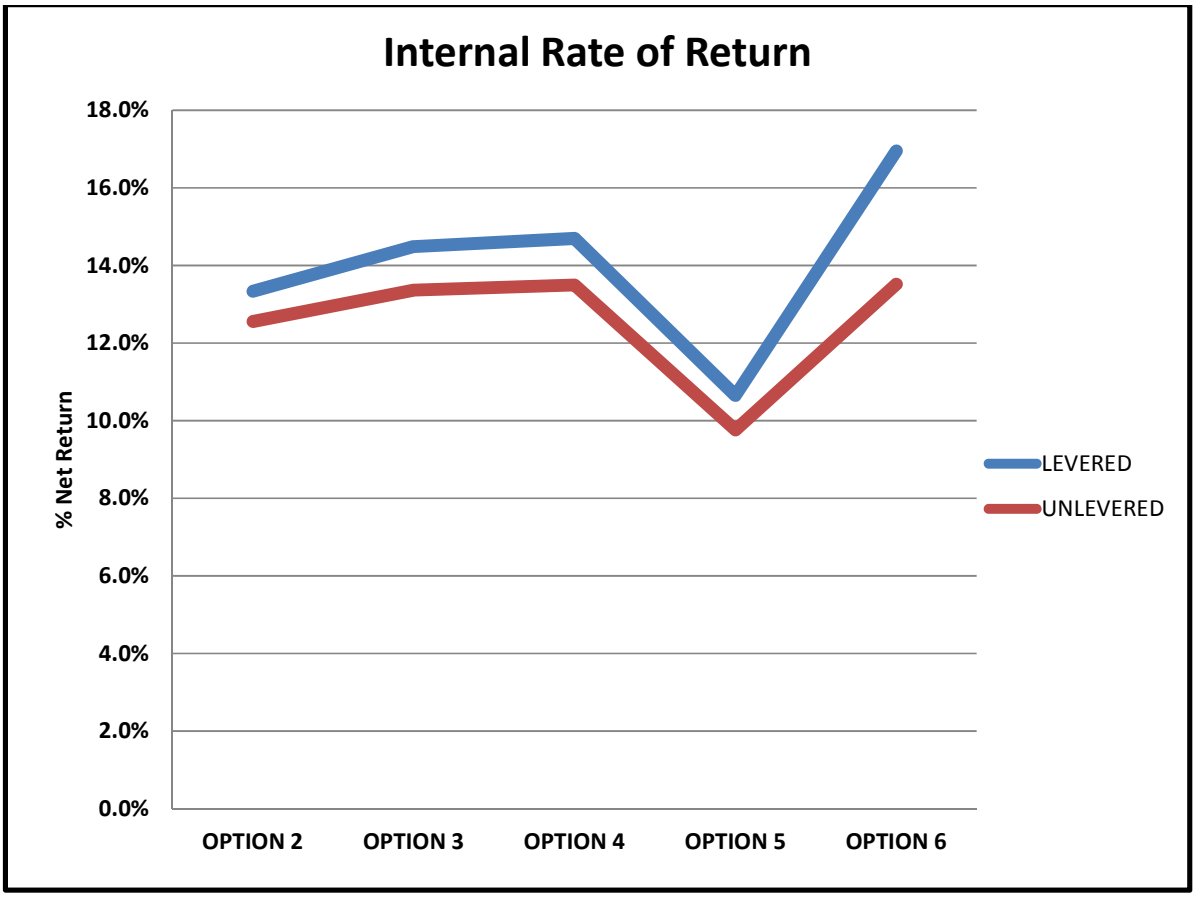


9.2 Internal rate of return

The financial viability study has analyzed the 6 development options to generate the most feasible alternative for the fund. Using leverage, Option 6 has the highest return at 17% followed by Option 4 which has a return of 14.5% falling out of the expected market return rates currently standing at 16-18% for commercial real estate. Option 2 that involves demolition and reconstruction of the site, has a low return of 13.3% owing to the high cost in redeveloping the site and debt level to be assumed vis a vis the resulting cash inflows. Option 5 produces lower returns at 10.7% which illustrate how the added cost of re-development and putting up a parking silo adjacent to the existing building yields very minimal benefit to the fund and thus proves to be uneconomical. However all the returns indicate a positive effect of financial leverage as the returns are higher than the cost of senior debt assumed i.e. a borrowing rate of 10%.

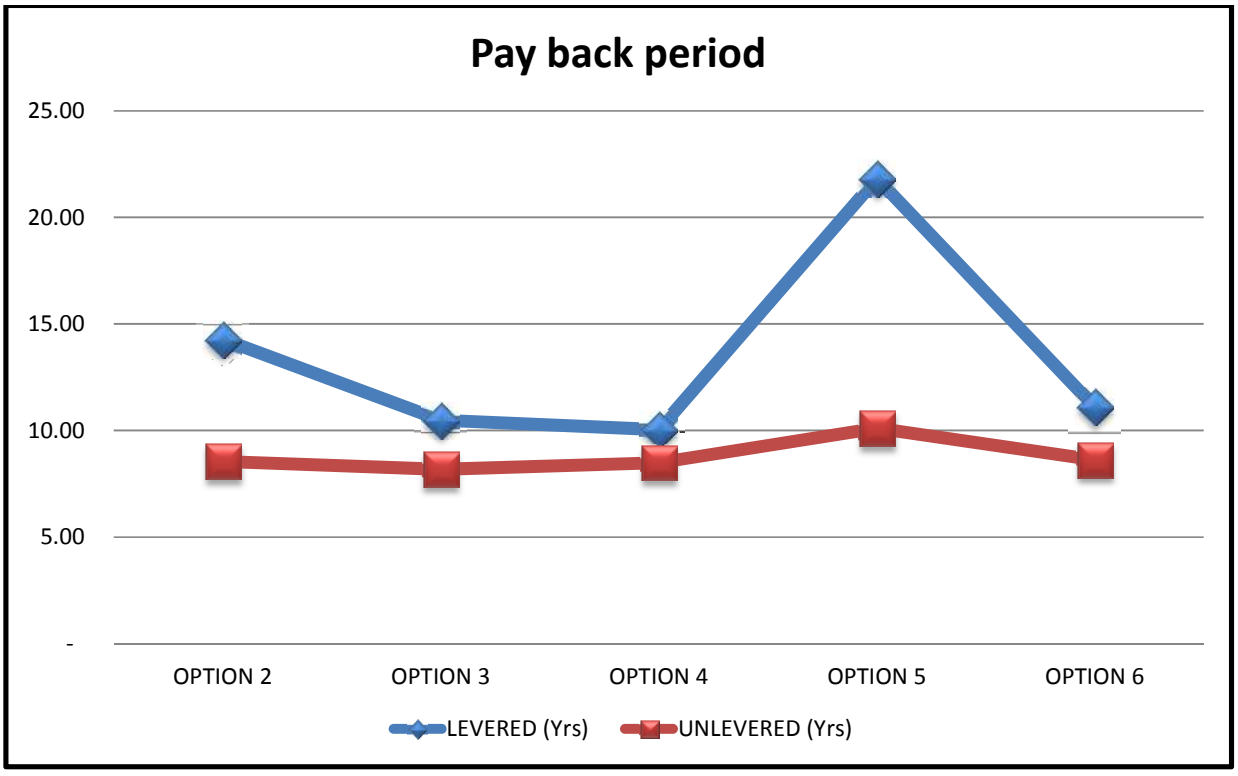
If the project is funded using equity only, Option 6 yields an IRR of 14.5% while Option 4 yields a return of 13.5% to be followed by Option 3 standing at 13.4%. The two options i.e. 3 and 4 have slight differences in the redevelopment strategy and provide minimal variation in yields. Option 2 and 5 post lower returns at 12.6% and 9.8% respectively. A graphical representation of the outcomes is shown below.

Chart 12: Internal Rate of Return



9.3 Payback period

Using the project payback period and based on a leveraged structure, Option 3 and Option 4 yield almost similar return periods at almost 10 years. Option 3 produces a return period of 10.5 years whereas Option 2 records a lengthy payback period of 14.3 years. Option 5 has the longest payback period sitting at 21.8 years which presents an unfeasible investment option. Option 6 produces a payback period of 11 years which slightly falls out of the recommended viable duration. If the project is funded using equity only, i.e. Unlevered, Option 3 produces the best return period followed by Option 4 and Option 2. Option 6 records a payback period of 8.6 years and lastly Option 5 with 10.1 years. The payback periods between Option 2, 3, 4 and 6 are very close. Comparatively, Option 2 and 6 which have slightly similar concepts differ on the total leasable areas to be developed with the former having more space yielding higher cash flow streams than the later thus a lower pay back period based on the unlevered option at 8.5 years and 8.6 respectively. However, to arrive at a feasible decision all the measures have to be analyzed together across all the options presented. Conclusively, the unlevered option provides the best financing alternative based on this metric.



10. Conclusion

Option 6 provides the preferred development strategy as it provides the highest investment return and a shorter payback period comparatively. It has a return of 17% and 14.5% and pay back of 11 years and 8 years respectively based on a levered and unlevered basis. It has a greater revenue stream and takes advantage of the site through optimization and degree of leverage fully though requires a higher level of cash investment. It results in the highest net present value at just over Kshs 0.8 billion under both levered and unlevered basis. The closest less feasible alternative is Option 4 which has a lower return at 14.7 % and 13.5% and a payback period of 10 and 8.5 years on a levered and unlevered basis respectively. The net present value is also lower at Kshs 321 million. Option 3 provides less attractive returns to the fund with lower returns compared to Option 4. Option 2 posts lower returns and ranks as the 4th most feasible option which requires a large capital outlay with little to justify for the huge investment needed in terms of returns. Option 5 ranks as the worst development option as it posts the worst investment outcome.

We thus recommend the adoption of Option 6 as the ideal option as it ranks as the first most feasible option from all the options studied providing superior market returns to the fund. Debt can be employed in the financing based on the funds appetite for risk with more preference on a more levered structure.

APPENDICES

Appendix 1: Market survey

A. Central Business District

	PROPERTY	LOCATION	DESCRIPTION	SPACE	RENT/SF	SERVICE CHARGE/SF	PARKING	CLASS
					KSHS	KSHS	KSHS	
1	Contrust House	Moi Avenue	• Functional office space	Office	65.00	20.00	7,000.00	C
2	Corner House	Kimathi street	• Standard office space • High speed lifts • 24hr security • Close proximity with Stanley Hotel • Secured metallic doors • Common kitchen	Office	100.00	25.00		B
3	Hazina Towers	Utalii Lane	• Strategically located within the central business district, • Hazina towers provides standard office spaces.	Office	100.00	25.00		B
4	Vedic Offices	Mama Ngina Street	• The building is well secured and has a reliable and safe elevator. • Functional office space	Office	60.00	20.00		C
5	View Park Towers	Utalii Lane	• Standard office space • Wide corridor • Good light • Sun screened windows • Great view to Uhuru Park	Retail	160.00	25.00		B
6	Alibahi Sharif House	Kimathi Street	• Standard office and retail space • Recently renovated • High speed lifts • 24hr security	Retail Office	110.00 80.00	20.00		B
7	Pan African Life House	Kenyatta Avenue	• Standard Retail Space • High Speed Lifts • 24hr Security	Retail	160.00	30.00		B
8	NSSF Building	Milimani	• Standard office and retail space • Institutional Profile • Good security	Office	120.00	25.00		C
9	Nairobi City County (monthly saloon parking rate)						5,000.00	
10	Longonot place	Kijabe street	• Standard office space • Good security • Adequate parking • Well maintained	Office	100.00	20.00	8,000.00	B

B. New construction in Upper hill area

COMPARABLE PROJECTS	LOCATION	FEATURES	PRICE	PROJECT COST	PROPERTY CLASSES
KCB PLAZA	Kenya Road, Upper Hill.	The new headquarters for the Kenya Commercial Bank will house a state of the art banking hall, personal banking facilities, administrative offices and conference facilities for meetings, conventions and workshops. The building will provide 800SQM of office space per level, and about 400 car parking on five parking levels. The non frontal triangular shaped plan was intended to give all facades of the building prominence since a triangle has no front or back. This was to pose another great challenge; the building was, to a large extent, exposed to the glaring rays of the sun. The heat gain had to be contained at the minimum while allowing maximum daylight into the building. Use of mechanical ventilation systems was not an option. The result was a fully sun-shaded office spaces achieved by the solar control envelope, which comprises vertical and horizontal Aluminum fins. An atrium and triple storey landscaped sky courts will allow for natural ventilation.	• Price: per sq ft KES130 – KES180 • Type: Office • Estimated Service Charge: KES 25 Per sq ft • Let able areas from: 171792 sqft / 15960 SQM	Kshs. 2.1Billion	GRADE B
UAP TOWERS	Upper hill along Upper hill Road.	The office complex offers high quality office accommodation, designed to International standards, offering the Tenant a secure, highly efficient and flexible working environment. The attractive amenities like; •Security and safety: Security has been prioritized, systems of international standards have been provided, integrating access control systems, CCTV surveillance, main entrance booms, parking management and 24 hour security services. Safety has been prioritized with provision of defined fire escape routes, modern firefighting equipment, emergency alarm system and sprinkler systems. •Cost efficiency Open plan office spaces that allow for business.	• Price: per sq ft KES130 - KES180 per month • Type A: Office • Service charge KES25 Per sq ft • Let able areas from: 3,000 - 309,700 sqft - 278.7 - 28,772.1 sqm	Kshs 3.03 Billion.	GRADE A
CORPORATE BUSINESS PARK	Upper hill, Elgon Road	Corporate Business Park consists of 5 blocks with over 118,000sqft of Lettable space with flexible internal layouts. Office space available is from 1,625sqft to 2971sqft a floor. Ready for viewing Amenities – Flexible floor units – High quality finishes and fittings – Ample parking for tenants and visitors – Standby generator – Borehole and underground water reservoirs – Provision for air conditioning – Fire alarm and detection system – Dedicated WCs provided for each unit – Access control, CCTV surveillance and 24hr security – Fiber optic ICT cable	• Price: per sq ft KES110 - KES200 • Type A: Mixed Use • Rent: KES110 - KES200 Per sq ft • Estimated Service Charge: KES20 Per sq ft. • Let able areas from: 1,625 - 118,000 sqft - 151 - 10,962.6 sqm • **Sales Prices**: Kshs. 16,000 - 17,000 per sqft, Parking Bays: Kshs. 1,000,000	Kshs 1.3Billion	GRADE A
RENAISSANCE CORPORATE PARK	UPPERHILL, ELGON ROAD	Renaissance Corporate Park is a 13 storey building totaling approximately 52,350 square feet with international appeal in design and finish. Renaissance Corporate park capitalizes on the need and caters to those very areas	• Price: per sq ft KES100 - KES150 • Type: Mixed Use • Rent: KES100 - KES150 Per sq ft • Estimated Service Charge: KES20 Per sq ft	Kshs 1.2Billion.	GRADE A

		which determines the perfect corporate setting –offices which are space and amenities such as; Standby generatorsω 3 high speed passenger lifts.ω Access control and CCTV surveillance.ω Ample underground water storage and borehole water supplyω 24 hr securityω Fire alarm and detection systemω Ample onsite parking provisionω Direct link from main fiber opticω Sound security detailω Roof Terrace for business cocktailω	• Let able areas from: 3,100 - 52,350 sqft / 288 - 4,863.5 sqm		
BRITAM TOWERS	Upper hill, Mara Road, Near Blue shield.	31-storey office tower and car park facility. The design for the proposed complex provides for a 31 grade A office building with a detached 10 storeyparkade with 970 parking bays. This unique complex will feature a collection of wind turbines hung off a central spire. The turbines will generate power for some parts of the building and will be the symbol of the iconic building, making it a city landmark. The tower has several green features to comply with international green regulations. The complex will comprise of an atrium with the tower housing office, accommodation on the top levels and retail facilities, including banking halls, restaurants and shops on the ground and mezzanine levels.	• Price: per sq ft KES 130 – KES200 • Type: Office • Estimated Service Charge: KES25 Per sq ft • Let able areas from: 350,000 sqft / 27870 sqm for both commercial and office for rental.	Kshs. 7 Billion.	GRADE A
VIENNA COURT	Located along State House Crescent	The building's features include rainwater harvesting, balconies for solar shading, solar control glass, and bicycle storage facilities.	• Price: per sq ft KES110 - KES200 • Type A: Mixed Use • Rent: KES110 - KES200 Per sq ft • Estimated Service Charge: KES20 Per sq ft. • Let able areas 129166 sqft/ 12000sqm • **Sales Prices**: Kshs. 17,000 per sqft, Parking Bays: Kshs. 1,000,000	KSh1.6 Billion.	Grade B
FLAMINGO TOWERS	Upper Hill, Mara Road in Upper hill next to the British High commission and the Embassy of Japan.	The development consists of two wings, each with 10 levels of Grade 'A' offices for sale/let. Corporates, NGO's, Professionals and business people now have the opportunity to own prime commercial real estate in Upper hill; an excellent choice for high quality grade 'A' offices. Flamingo Towers has been designed to offer the ideal working environment to ensure seamless business operations for the occupants. The key features include elegant design, ample parking space for 235 cars, CCTV surveillance, modern security features, stand-by generators and high speed elevators among others.	• Price: per sq ft KES110 - KES200 • Type A: Mixed Use • Rent: KES110 - KES200 Per sq ft • Estimated Service Charge: KES25 Per sq ft. • **Sales Prices**: Kshs. 18,000 per sqft, 235 Parking Bays: Kshs. 1,000,000 per Bay. • Total build up / let able area 120,942 sqft.	Ksh.1.2 Billion.	GRADE B
OLYMPIC PLAZA-UPPER HILL	Kenya road, opposite crown plaza	This building offers 16 Storey modern Executive office space measuring from 745-1700 sqft designed under green Architecture principles. Amenities-Rotating floor with Museum & Hall of Fame of Olympic Heroes, Viewing deck &Terrace, Roof garden, Food court & Restaurants,3 speed lifts, backup generator, Borehole, IT ready offices & security enhanced with CCTV.	• Price: per sq ft KES130 - KES180 per month • Type A: Office • Service charge KES25 Per sq ft • Sale able areas from: 1,000 - 10763 sqft – 1700 – 18298sqft.	Kshs. 1.1B	GRADE B

Appendix 2: Property classification

Class A

These buildings are said to make up 10% of the market. They have the highest quality infrastructure with unique and modern designs that can include glass, steel, and stone. Class A buildings attract the most prestigious tenants, such as financial institutions, law firms and energy firms. These buildings are newly constructed, usually within the last 10 years, or they are older but well renovated with modern finishes. They are commonly located in high demand areas with good accessibility via major freeways and public transportation. Class A buildings offer 24-hour access, state-of-the-art HVAC systems, covered parking with direct access to the building, swift elevators, and modern technology. Common building amenities include: dining facilities, valet parking, concierge services, on-site building administration, and a complete service staff with full-time maintenance, security, health clubs, and child care services.

Class B

This class of buildings makes up the majority of the market. They attract a wide variety of tenants, such as accountants and foundations. Class B buildings are usually located near public transportation but they are located in less exclusive areas. These buildings typically offer 24-hour access, adequate heating/cooling systems, ample covered/uncovered parking, and updated technology, such as video security and adequate elevator service. Building amenities include: dining facilities, conference facilities, on-site building administration, maintenance staff, and customer service centers.

Class C

Class C buildings are typically 20 or more years old and have not undergone recent renovations. They attract tenants who require no more than functional office space, such as staffing agencies, call centers, realtors, or first time office renters. Class C buildings are in less desirable locations that are usually located in transitional areas. They have older but functional heating/cooling systems, less robust technologies, and the aging finishes. Building amenities may not include: 24-hour access, on-site building administration, maintenance staff and covered parking.

ASSUMPTIONS

Areas

Below are the areas that have been assumed in developing the financial models.

Figure 1: Lettable Areas

	OPTION 2	OPTION 3	OPTION 4	OPTION 5	OPTION 6
New Building	**Sqm**	**Sqm**	**Sqm**	**Sqm**	**Sqm**
Total Built up area					
Parking	13,490	1,590	1,590	11,130	9,540
Commercial office	18,885		3,450	3,450	12,160
Commercial conference/ theatre	3,660				1,490
Commercial retail	2,770				3,760
Total	**38,805**	**1,590**	**5,040**	**14,580**	**26,950**
EXISTING					
Retail		1,180	1,180	1,180	1,180
Office		8,595	7,215	7,215	7,905
Total		9,775			
Parking					
Total		9,775	8,395	8,395	9,085
Total area	**38,805**	**11,365**	**13,435**	**22,975**	**36,035**
Parking	**No.**	**No.**	**No.**	**No.**	**No.**
# of parking bays	347	52	347	347	347

Debt Financing

Where debt shall be used the project shall be financed at an interest cost of 10% p.a over the construction period and operational period for a period of up to 15 years. The project debt amount assumes 100% funding for construction cost and professional fees. The debt component shall be converted to a permanent mortgage from a construction loan upon completion of construction and repaid over a 10-15 year period depending on the option analyzed.

Equity finance

The projects land value and buildings have been pegged at Kshs 850 Million. The equity return assumes combined cash, land and buildings valuation in the computation of the internal rate of return.

Operations

a. Tax exempt status of the pension fund;
b. Average occupancy rate of 87% p.a;
c. Bad debt allowance of 2% p.a;
d. Operating expense ratio of 15% p.a;
e. Property management fees of 5% p.a;
f. Capital expenditures of 8% after every 3 years;
g. Rent escalation of 5% after every two years;
h. Capitalization rate of 7%.
i. Discount rate used in NPV computation is 13%.

Pricing

The below table indicates the expected pricing structure. The pricing structure adopted is based on current market prices for similar properties within the projects investment grade and classification as a type A office space as specified.

Target lease rate assumptions

FLOOR	RATE PER SQFT/MONTH (Kshs)
Ground floor	180
1st floor	180
2nd floor	180
3rd floor	180
4th floor	170
5th floor	170
6th floor	170
7th floor	170
8th floor	160
9th floor	160
10th floor	160
11th floor	160
12th floor	160
13th floor	160
14th floor	150
15th floor	150
16th floor	150
17th floor	150
18th floor	150
19th floor	150
20th floor	140
21st floor	140
22nd floor	140
23rd floor	140
24th floor	140
25th floor	100
26th floor	100

Figure 3: Parking prices

Use	Rate per bay	Rate per bay incl. VAT
Parking	10,000.00	11,600.00

The above lease prices have been selected based on current market prices as demonstrated by asking rents for class A properties.