

Buy vs renting research paper



**ASSIGN
BUSTER**

Housing Decision: Should we rent or own a house

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The Decision Problem

The home ownership analysis to follow is intended to represent as realistically as possible as 2014 current market conditions in the areas two core cities of Kathmandu: – Jahmsikhel and Harisiddhi where the price is relatively low comparing to the first one. A quick survey/sampling of property

in several housing areas in Jahmsikhel indicated that a house with market value of Rs 3.1 corer could be rented for approximately Rs 60,000 per month and the house with the market value of Rs 1.01 corer in Harisiddhi could be rented for approximately for Rs 20,000 per month. Assuming that, there are two couples, each with Rs 40,000 per month. All two have the same gross income in salary and the filing status for income tax purposes.

- The first couple, designated as Owners,” purchases a home.
- The second couple, Renters”, decides to rent.

The home buyers (Owners and Capita lists) are married and file joint returns. (Their income will be itemized later.) The market costs of their houses at Jhamsikhel is 3.1 corer and in Harisiddhi its 1.09 corer. (For tax purposes in Jhamsikhel Rs 75000 per year and for Harisiddhi it is allocated Rs 18,750 per month for the building.) In addition to that for the building insurance for Jhamsikhel @ 0.12% Rs 1500 per month and Rs 750 per month, Rs 5000 per month at Jhamsikhel and Rs 2000 per month at Harisiddhi, for maintenance cost at Jhamsikhel Rs 3000 per month and at Harisiddhi Rs 1000 per month is allocated. The Renters invest their Rs 20,000 in a money fund that yields 6% yearly. They reinvest the interest income into the fund each year. In the initial year, the Renters pay rent of same amount which is not changed of Rs 20,000. Throughout the 20-year period of the analysis, all variables increase annually at the 6% annual inflation rate. These variables include the couples' salaries, loan service charge, and loan processing charge, property valuation charge, and mortgage loan payment, building insurance premium, maintenance cost, electricity, water and other utilities costs, depreciation on building, property tax and rental expenses. When discounting after-tax cash

flows, we use a 6% interest rate that represents these couples' market interest rate under inflation.

Research Methodology:

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic.

Methodology is the systematic, theoretical analysis of the methods applied to a field of study, or the theoretical analysis of the body of methods and principles associated with a branch of knowledge.

In short, the search for knowledge through objective and systematic method of finding solution to a problem is Research Methodology.

Research Objectives:

The main objectives of conducting the following research are as follows:

- To analysis out whether Buying versus Leasing/Renting house is cheaper
- To find out federal Taxation system on housing
- To identifying the Depreciation of Building and Appreciation of Land
- To find out the actual Capital Gains

TYPES OF RESEARCH

The basic types of research are as follows:

1. Descriptive vs. Analytical: Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of

descriptive research is description of the state of affairs as it exists at present. In social science and business research we quite often use the term Ex post facto research for descriptive research studies. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening. In analytical research, on the other hand, the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

2. Applied vs. Fundamental: Research can either be applied (or action) research or fundamental (to basic or pure) research. Applied research aims at finding a solution for an immediate problem facing a society or an industrial/business organization, whereas fundamental research is mainly concerned with generalizations and with the formulation of a theory.
3. Quantitative vs. Qualitative: Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity. Qualitative research, on the other hand, is concerned with qualitative phenomenon, i. e., phenomena relating to or involving quality or kind. For instance, when we are interested in investigating the reasons for human behavior (i. e., why people think or do certain things), we quite often talk of ‘ Motivation Research’, an important type of qualitative research.
4. Conceptual vs. Empirical: Conceptual research is that related to some abstract idea(s) or theory. It is generally used by philosophers and thinkers to develop new concepts or to reinterpret existing ones. On

the other hand, empirical research relies on experience or observation alone, often without due regard for system and theory. It is data-based research, coming up with conclusions which are capable of being verified by observation or experiment.

(v) Some Other Types of Research: All other types of research are variations of one or more of the above stated approaches, based on either the purpose of research, or the time required to accomplish research, on the environment in which research is done, or on the basis of some other similar factor. From the point of view of time, we can think of research either as one-time research or longitudinal research.

Should Mr. X stay in a rented house or buy a house?

Let us assume that Mr. X is a businessman and he is in search of a good house for the purpose of accommodation for his family. Either he can stay in a rented house or he can buy a house. He found two houses at two different locations with both the options open; either he can stay in rent or buy the house. Now, he is in dilemma that whether he should stay in rented house or buy one of these houses. He wanted to do economic analysis for both the houses from the perspective of staying in rent or buying before making any decision. He wanted to choose the best benefitting option based on the economic and financial analysis.

Initial Assumption

For the purpose of this analysis he gathered all the necessary data required for doing the analysis. Following is the initial assumption data for conducting the analysis.

	House A	House B		
Description	(Jhamsikhe l)	(Harisiddh i)		
Qty./Rate	Amount	Qty./Rate	Amount	
Estimated Purchase Price of House		15, 000, 000. 00		7, 500, 000. 00
Down Payment on House (Bank Scheme)	30%	4, 500, 000. 00		2, 250, 000. 00
Land Price (Current Market Price)	4 Aana	10, 000, 000. 00	4 Aana	4, 000, 000. 00
Building Price (Deducting Land Price from Total Price)		5, 000, 000. 00		3, 500, 000. 00
House Rent (Current Market	Monthly	60, 000. 00	Per Month	20, 000. 00

Rate)				00
Closing Cost of				1,
Building		2, 500,		500,
(Expected		000. 00		000.
Residual Value				00
after 20 Years)				
Loan Service		105, 000.		52,
Charge	1%	00	1%	500.
				00
Loan Processing		26, 250.		13,
Charge	0. 25%	00	0. 25%	125.
				00
Property		15, 000.	One	8,
Valuation Charge	One Time	00	Time	000.
				00
Mortgage Loan		94, 471.		47,
Payment	Monthly	00	Monthly	236.
				00
Building				
Insurance	0. 12%		0. 12%	
Premium	Yearly		Yearly	

Interest on Fixed Deposit	6% Yearly	6% Yearly
Property Tax	0.5%	0.25%
Capital Gain Tax	5%	5%

Calculation of Rent

Since the mortgage is available for 20 years term, Mr. X calculated the estimated costs for both buying and renting considering 20 years' period. He calculated all the costs that he may incur if he is to stay in the rented house.

Description	House A (Jhamsikel)		House B (Harisiddhi)		20 Years
	Monthly	Yearly	Monthly	Yearly	
Rent Cost		60,000.00	14,400.00	172,800.00	240,800.00
Maintenance		3,000.00	720.00	8,640.00	12,240.00

			000.	000.	000.	'
ce Cost	00	00	00	00	00	000
						. 00
Electricity,						
Water &			1, 200,	2,	24,	480
	5, 000.	60, 000.				,
Other			000.	000.	000.	000
	00	00				000
Utilities			00	00	00	. 00
Costs						
						5,
			16,			
Total Rent	68, 000.	816,	320,	23,	276,	520
Cost	00	000. 00	000.	000. 000.	,	
			00	00	00	000
			00			. 00
						2,
Less:			5, 400,	11,	135,	700
Interest	22, 500.	270,	000.	250.	000.	,
	00	000. 00				000
Income			00	00	00	000
						. 00
			10,			2,
(A) Net	45, 500.	546,	920,	11,	141,	820
Rent Cost	00	000. 00	000.	750.	000.	,
			00	00	00	000
			00			. 00

Mr. X calculated that if he is to stay in the rented house, he does not have any initial investment and he can simply move into the house. He also estimated that he only needs to pay the rent and bear the general maintenance cost and costs associated with the electricity, water and other utilities.

If he plans to stay in House A, his monthly cost will be Rs. 68, 000. Since he does not have to make any down payment he can deposit the down payment amount of Rs. 4, 500, 000 in the fixed deposit and benefit 6% yearly interest income. Also, his monthly payment amount would be Rs. 45, 500 only as he will be earning interest of Rs. 22, 500 per month. He will be spending net rent cost of Rs. 10, 920, 000 in 20 years' time.

If he plans to stay in House B, his monthly cost will be Rs. 23, 000. Since he does not have to make any down payment he can deposit the down payment amount of Rs. 2, 250, 000 in the fixed deposit and benefit 6% yearly interest income. Also, his monthly payment amount would be Rs. 11, 750 only as he will be earning interest of Rs. 11, 250 per month. He will be spending net rent cost of Rs. 2, 820, 000 in 20 years' time.

Calculation of Cost of Buying House

Mr. X also calculated all the costs that may incur and associated if he is to buy a house. The details of the calculation are in the following table.

Descriptio	House A	House B
n	(Jhamsikh	(Harisidd

	el)	hi)	Rent Per Month	Per Annu m	20 Year s
Monthly	Yearly	20 Years			
Down			4,		2,
Payment			500,		250
(One Time			000.		,
Cost)			00		000
					. 00
Loan					
Service			105,		52,
Charge			000.		500
(One Time			00		. 00
Cost)					
Loan					
Processing			26,		13,
Charge			250.		125
(One Time			00		. 00
Cost)					
Property			15,		8,
Valuation			000.		000
Charge					

(One Time Cost)		00		. 00
Mortgage Loan	94, 471.	22,	47,	11, 336
Payment (Monthly)	00	673, 040.	236. 00	, 640 . 00
Building Insurance Premium @ 0. 12% p. a.	18, 000. 00	360, 000.	9, 000. 00	180 , 000 . 00
Maintenan ce Cost (Monthly)	3, 000. 00	720, 000.	1, 000.	240 , 000 . 00
Electricity, Water & Other Utilities Costs (Monthly)	5, 000. 00	1, 200,	2, 000. 00	480 , 000 . 00

Opportunity Cost of Buying (Interest) @ 6% p. a.		2,500.00		135,700.00
Property Tax	75,000.00	500.00	1,187.50	
(B) Total Cost on Buying		36,499.00		17,635.265

Mr. X calculated and identified that if he is to buy the house, he has some initial investment before he can move into the house. He calculated in detail that how much he need to invest initially and how much shall be spending during the mortgage period of 20 years taking into account all the foreseeable expenditures. Most interestingly he did not miss to calculate the opportunity cost that he could earn by depositing the initial investment amount in a 6% fixed deposit account of a bank if he were not to invest buying the house. He also calculated he will require paying EMI, 0.12% insurance premium for building, and property tax.

The calculation shows that if he plans to buy House A, he will require spending 36, 499, 290 in 20 years' time; including the opportunity cost he will be sacrificing. He shall be paying property tax @ 0. 5% of the price of property based on the size of the property.

The calculation also shows that if he plans to buy House B, he will require spending 17, 635, 265 in 20 years' time; including the opportunity cost he will be sacrificing. He shall be paying property tax @ 0. 25% of the price of property based on the size of the property.

Calculation of Value Appreciation of Property

Since Mr. X already has calculation for choosing to stay in rent at any one house or buy any one house, he now wanted to ascertain the estimated value that the properties will have after 20 years' time to rightly analyze the expected ROI from the investment. Following is his estimation for the future value of the properties to be bought.

Description	House A (Jhamsikhel)	House B (Harisiddhi)
20 Years	20 Years	
Original Value of Property	15, 000, 000. 00	7, 500, 000. 00
Less: Estimated Depreciation on Building	2, 500, 000. 00	2, 000, 000. 00

Add: Estimated @ 10%	20,000,000.	8,000,000.
Annual Appreciation of Land Value	00	00
Expected Value of Property	32,500,000.	13,500,000.
Less: 5% Capital Gain Tax	875,000.00	300,000.00
Expected Sales Proceed after 20 Years	31,625,000.	13,200,000.
Expected Value Appreciation of Property in 20 Years' Time	17,500,000.	6,000,000.

While estimating the future value appreciation of the properties, he considered various factors. He calculated the depreciation taking: Original Cost of Building – Estimated Closing Cost of Building. Though there is defined depreciation rate of 5%, if he considers this rate the value of building will be zero in 20 years' time; however, he estimated that the closing cost of House A and House B should remain minimally Rs. 2,500,000 and Rs. 1,500,000 respectively. Hence, he took bit different approach while calculating the depreciation in contrast to standard practices. While estimating the sales proceed he may be receiving if he plans to sell the property after 20 years, he also deducted applicable 5% capital gain tax from the cost of the property. Hence, Mr. X estimated the expected sales proceed after 20 years

by selling the House A and House B of Rs. 31, 625, 000 and Rs. 13, 200, 000 respectively.

Analysis of Gain or (Loss) between Staying in Rented House or Buying a House

After having all the above calculations, Mr. X wanted to analyze which way would be economical or profitable for him. He did the calculation as given in the following table.

Description	House A (Jhamsikhel)	House B (Harisiddhi)
20 Years	20 Years	
Expected Sales Proceed	31, 625, 000. 00	13, 200, 000. 00
Less: Total Cost of Buying House	36, 499, 290. 00	17, 635, 265. 00
Deficit or Actual Cost to Mr. X in 20 Years' Time	(4, 874, 290. 00)	(4, 435, 265. 00)
Add: Total Cost of Rent to Mr. X in 20 Years' Time	10, 920, 000. 00	2, 820, 000. 00
Gain or (Loss) by Investing on the Property	6, 045, 710. 00	(1, 615, 265. 00)

The above calculation shows that Mr. X is better off by Rs. 6, 045, 710 by investing in House A. Additionally, since he has also included the opportunity cost of 5, 400, 000, which he actually did not spend. So, Mr. X is expected to better off by 11, 445, 710 by investing in House A than staying in the rent. Though the calculation shows that Mr. X is deficient of Rs. 1, 615, 265 by investing in House B, if we calculate the opportunity cost of 2, 700, 000 he has included in his calculation; here also he is expected to better off by 1, 084, 735.

Therefore, the above analysis of Mr. X guides us to conclude that we can better off by investing in the House rather than staying in the rent; provided we have necessary resources or say financial capacity to conduct the above business.

The analysis has also revealed a next prospect that if Mr. X does not have any intention to use the house; he can buy and rent the house and can add the above estimated rent cost to his gain.

Conclusion

We can thus conclude that investing in house has economic benefit if one has long term vision of staying on it. If one has short term desire to stay in house then he can rent a house since he will gain from opportunity cost by investing the sum in other areas. Also, depreciation and inflation are facts that one must consider while buying property. This case is relevant not only in buying or renting a house but also relevant in buying or renting warehouse, infrastructure or even manpower.