



Investing in real estate

Real estate as an asset class

- Real estate has been a great asset class and has provided a lot of people with a sense of security and pride, while generating decent returns
- Real estate is probably a more dependable hedge against inflation than many other asset classes
- Adding real estate to a portfolio tends to reduce its overall volatility
- Many governments encourage home ownership and provide financial incentives to do so
 - This reduces the cost of ownership and encourages investment

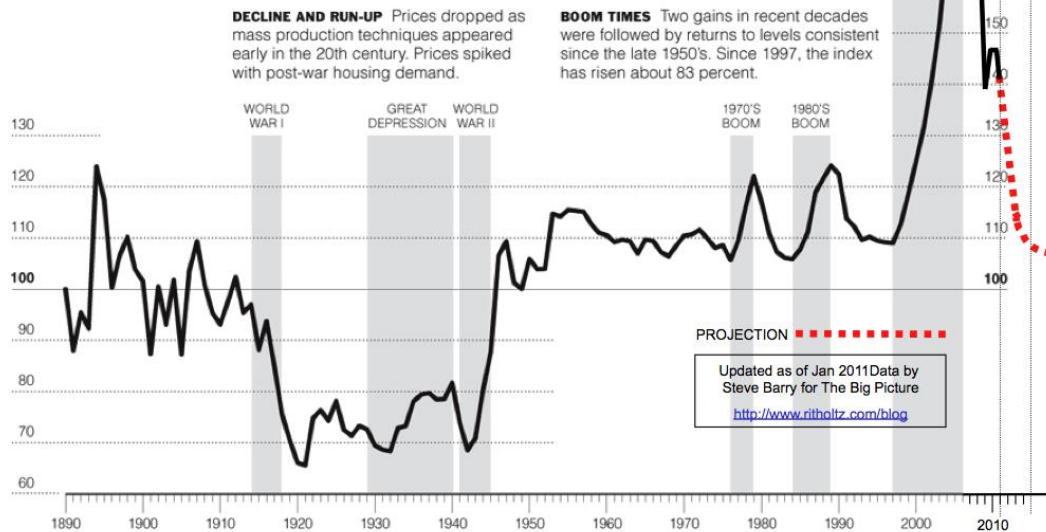
Is real estate always good investment?

- Obvious answer is not always
- Lets look at data and research for developed markets (US and UK) proves that the long term returns in real estate have been nil to modest
 - <http://www.ritholtz.com/blog/2011/04/case-shiller-100-year-chart-2011-update/>
 - http://www.nytimes.com/2013/07/14/business/owning-a-home-isnt-always-a-virtue.html?_r=1&adxnnl=1&adxnnlx=1396502492-vDQJyb//IK304FNUfoOC5Q
 - Burton Malkiel in his Random Walk down the wall street has also presented very good perspectives. Some excerpts from the book
 - <http://rishiverma.com/writing/reads/a-random-walk-down-wall-street-by-burton-malkiel/>

A History of Home Values

The Yale economist Robert J. Shiller created an index of American housing prices going back to 1890. It is based on sale prices of standard existing houses, not new construction, to track the value of housing as an investment over time. It presents housing values in consistent terms over 116 years, factoring out the effects of inflation.

The 1890 benchmark is 100 on the chart. If a standard house sold in 1890 for \$100,000 (inflation-adjusted to today's dollars), an equivalent standard house would have sold for \$66,000 in 1920 (66 on the index scale) and \$199,000 in 2006 (199 on the index scale, or 99 percent higher than 1890).

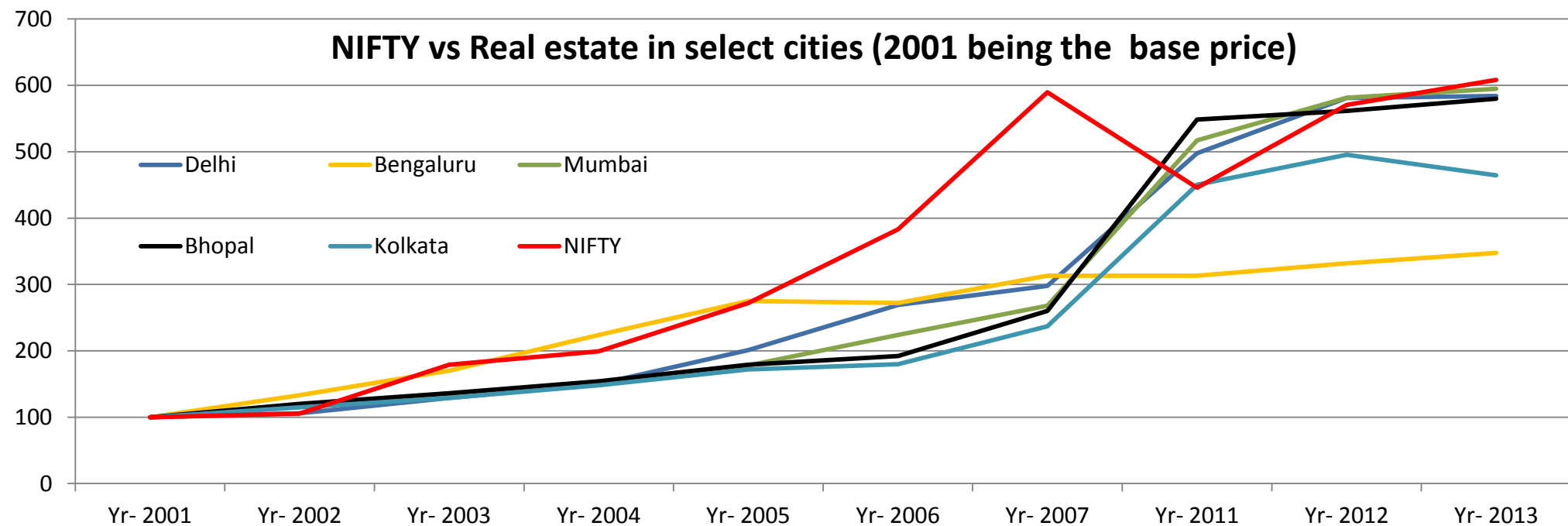


Source: "Irrational Exuberance," 2nd Edition, 2006, by Robert J. Shiller

Bill Marsh/The New York Times

What does the data say about real estate in India?

- There is limited historical data but since 2001 there National Housing Bank has started a RESIDEX index for real estate prices
 - <http://www.nhb.org.in./Residex/Data&Graphs.php>
- Nifty has done slightly better than real estate return since 2001
 - Most of the real estate gains have been in the period of 2008 to 2011 when the stock markets were doing poorly world wide.
 - <http://www.jagoinvestor.com/2009/12/returns-of-real-estate-in-india.html>



What does the data say about real estate in India?

CITIES	2007 Index	Apr-Jun 2011 Index	Jul-Sept 2011 Index	Oct-Dec 2011 Index	Jan-Mar 2012 Index	Apr-Jun 2012 Index	Jul-Sep 2012 Index	Oct-Dec 2012 Index	Jan-Mar 2013 Index	Apr-Jun 2013 Index	Jul-Sep 2013 Index	Oct-Dec 2013 Index
NIFTY	100	142	124	116	131	131	144	149	142	145	144	159
Hyderabad	100	91	84	79	86	85	84	90	88	84	88	93
Faridabad	100	220	206	218	217	217	216	205	207	202	204	209
Patna	100	146	141	140	129	140	138	151	152	147	150	159
Ahmedabad	100	169	163	167	164	174	180	191	192	186	191	197
Chennai	100	248	271	296	304	309	312	314	310	303	318	330
Jaipur	100	64	65	64	80	78	85	87	112	110	108	105
Lucknow	100	160	154	165	164	171	175	189	183	187	191	185
Pune	100	150	169	184	181	200	201	205	221	219	219	235
Surat	100	149	139	152	144	145	138	150	140	142	145	154
Kochi	100	107	97	82	72	73	80	87	89	86	86	85
Bhopal	100	224	208	211	204	207	206	216	230	227	220	223
Kolkata	100	194	191	190	191	196	191	209	197	189	199	196
Mumbai	100	181	194	193	190	197	198	217	222	221	222	222
Bengaluru	100	92	93	100	92	100	98	106	109	108	107	111
Delhi	100	147	154	167	168	172	178	195	202	199	190	196
Bhubneshwar	100				161	164	168	172	197	195	193	202
Guwahati	100				157	159	158	166	153	147	149	160
Ludhiana	100				163	171	168	179	167	157	150	150
Vijayawada	100				184	186	181	185	184	174	167	161
Indore	100				208	203	196	194	195	184	180	184
Chandigarh	100								194	191	192	188
Coimbatore	100								184	178	178	173
Dehradun	100								183	184	184	186
Meerut	100								191	189	176	171
Nagpur	100								163	168	162	175
Raipur	100								156	155	157	159

- NHB has data for more cities starting 2007
- 7 cities have appreciation greater than NIFTY for 2007 to 2013 period, but most of the gains were before 2011
- Many cities have did not have significant increases in the last 3 years.
- Pl note that 2007 to 2010 were some of the worst years for global stock markets

Real estate prices have & will always go up..

- Let me relate a story
 - There is a small island with 10 families. This island is cut off from rest of the world.
 - There are just 5 assets on the island boats, houses, farms, gold, and steel. All of these are essential for the islanders.
 - The islanders found 1,000 Shells and used it as the currency. Total wealth on the island is equal to 1,000 Shells. (Currency makes keeping count and trading easy)
 - If value of one asset (say boats) goes up, then value of others has to go down as the total wealth is represented by 1,000 Shells
 - Lets say for simplicity that each asset is equally valuable hence worth 200 Shells each. This may fluctuate based on “market forces”
 - When fishing is doing well the price of boats may go up and that of farms goes down. As price of boats go up, price of steel also goes up relative to gold etc.
 - Although the prices fluctuate in the long run they tend to revert to 200 as all the assets are equally important
 - If the islanders add another 1,000 shells to the currency the value of each of the assets would be 400 Shells as now measure of wealth total wealth is represented by 2,000 Shells.
 - The percent of total wealth represented by each asset remains fairly stable (as all of them are equally important).
 - When to prices appear to go up
 - When there is a short term change in value perception (fishing doing better than framing)
 - If some one is looking at just the price and not the percent of wealth the price represents (some one is looking at 400 Shells instead vs. 200 Shells, and ignoring what the numbers mean)

Real estate prices have & will always go up..

- Why is the story relevant to real estate esp in India
 - Lets look at some facts
 - Total wealth in India is about 3.6 trillion
 - 3 major asset classes in India are Real estate (40%), Gold (30%), & businesses (30%)
 - % of allocation of wealth into real estate is significantly high.
 - Business are owned by the super rich
 - Average Indian has about 80% of the wealth in home/real estate
 - Business are productive assets, as they generate value and are creators of wealth
 - Gold is a passive asset and real estate (other than commercial real estate) is fairly passive
 - When some one says real estate prices will always go up they are
 - Just looking at the nominal value (rather than the % of wealth allocated to the asset class)
 - Or they believe that % of wealth allocated to real estate will go up (as either gold or value of business will plummet)
 - Business are creating value and wealth and helping India grow – so this is unlikely
 - Gold may fall in value but will all of the drop in value be attributed to real estate ?
 - Real estate in India represents 40% of the wealth and this is fairly high

Implied assumptions in a purchase decision....

- Lets look at a house
 - ❖ Price 100
 - ❖ Down payment 20
 - ❖ Loan 80
 - ❖ Rent 3 (Rent of 4, less 20% tax makes and 5% maintenance etc.)
 - ❖ Interest 7.2 (at 11%, reducing it to 9 to account for tax break, 9% of 80)
 - ❖ Opportunity cost 1.6 (10% interest, 20% tax makes it 8%, 8% of 20)
 - If one had not purchased the house, then one would have put that money (20) in a bank and got interest.
 - As one is foregoing the interest, it should be counted .
 - ❖ Income = Rent = 3
 - ❖ Expense = Interest + Opportunity cost = 8.8
 - ❖ Expected appreciation in value of the house = $8.8 - 3 = 5.8$
 - ❖ Annualizing this, appreciation in value of the house needs to be a consistent 4% per annum for 30 years, (assuming no inflation), to get the same rate of return as the bank deposit
 - Appreciation in real terms will have to be 4%+ the rate of inflation, this is a very tough ask
 - Especially in India where inflation can be safely estimated at 5%, getting a **9% yearly appreciation for 30 years is fairly difficult**
- **Implied assumption in a house purchase today is about 4% annual appreciation in value (before inflation) for about 30 years.**
 - **This will be 9% for 30 years if we take 5% as the average inflation**

Is there a real demand or speculation...

- Demand for housing is based on the number of people who want to buy or rent
- Assuming there is a scarcity of capital
 - People who have capital can build and rent, they will do so as long as their return on investment is greater than or equal to their next best option
 - Banks will lend capital to prospective owners, banks will do so as long as their interest rate they charge is greater than the long term deposit rate they pay
- When the demand is more than supply, the rentals as well as the prices will increase
- If one sees rentals remain flat and the prices go up this means, some one is speculating on the price rise (as the fundamentals of investment would demand a fair rent)

How to invest in real estate

- Don't rush to buy, build reserves so that you can down pay about 30% of the capital
- When buying, look for properties where the rental return from the property (even if you don't plan to rent it), is about 4% of the value of the property.
 - For a 1 Cr house you should be looking at a minimum of 4 lakhs in yearly rent (33,500 per month)
- Pl be cautious if the rentals are flat and the prices are moving up (as this is an indicator of speculation)
- Make sure your equity in the house at any point in time is about 40% of your total wealth
 - If you have a 1 cr house and have 60 lakh loan outstanding, your equity is 40 lakhs. You should be having about 60 lakhs worth of other assets
- Your monthly EMI for the loan is about 50% of your investable saving, that way you are investing other 50% in other asset classes
- If the value of your property appreciates (and stays high for over 3 year period), then increase your loan duration so that you can invest more of the money in other asset classes (to manage the portfolio allocation)
- If the value of your property depreciates (and stays low for over 3 year period), then decrease your loan duration by increasing your EMI (to manage the portfolio allocation)
- Best if you are living in the house you are buying (this will reduce the tax on the rental income)
 - There are other intangible benefits of owning the house one lives in, the peace of mind it offers from paying rent, flexibility to modify, as you stay long this will be associate with a lot of memories which are priceless.

How to speculate in real estate...

- **Fundamentals**
 - The only source of income in owning a house is rent
 - People invest in houses are expecting the prices to appreciate
 - Rental yield is the annual rent as a percent of the price of the house
 - Cost of capital is the long term return one would get if invested else where, this should be at least the long term bank rate
- **When is one not speculating**
 - If the rental yield is equal to the alternate investment opportunities
 - If bank rate is about 6% and you are getting Rs 6 as rent for a house worth Rs 100 (rental yield is 6%) then it is not speculation.
- **When is one speculating**
 - When the rental yield is less than the cost of capital
 - The greater the difference between the rental yield and the alternate investment opportunity, the greater is the expected appreciation
- **How should one speculate**
 - One should pay down in cash and not borrow to buy (this will reduce interest cost)
 - The higher the expected appreciation, the greater the risk
 - Look at the expected appreciation and see if this is some thing you believe is possible (understand the assumptions)
 - Make sure you are ok if the expected appreciation does not materialize
- **Who should speculate in real estate**
 - Speculation in any product is for people who have capital or expertise in the field in which they are speculating.
 - This is not for someone who is trying to build long term assets or investing
 - Speculating is like going to casino, going to a casino should not be a prudent person's retirement plan
 - It is ok to speculate as long and one understands that it is speculation and not investment (one should not be speculating believing it is investing)

In summary

- Real estate is one the most robust investments and one should try and have 25% to 40% of their wealth in the real estate
- One should try and own ones home if one can afford it
 - People who believe they can not **reasonably** afford to own their home should have exposure to REIT's (Real estate investment trusts, they are being introduced in India)
- Purchase when the rental yields are good
- Purchasing real estate for investment purpose is only true if the rental yield is equal to cost of capital, else one is speculating
- Greater the gap in cost of capital and rental yield, greater is the expected appreciation and greater is the risk
- If one is purchasing based on expected appreciation then one is speculating
- Speculation is for people with capital or experts
 - One should not borrow to speculate (borrowing magnifies both gains and losses)
- Remember real estate prices will not always go up to give a great return on investment (they are at best very modest)
- **Memories built in ones home and the feeling being a house owner can't be quantified in financial terms, buy prudently and enjoy your house...**