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Are India's Cities in a Housing Bubble?

Housing market has become a focal point for most policymakers after the current crisis. The crisis showed how housing market activity is closely linked with both financial and economic cycle. The crisis started with a sub-prime market where housing loans were given to borrowers with low credit scores. The flow of events from a sub-prime housing market crisis to a full fledged global financial crisis took even the most pessimistic economists by a surprise.

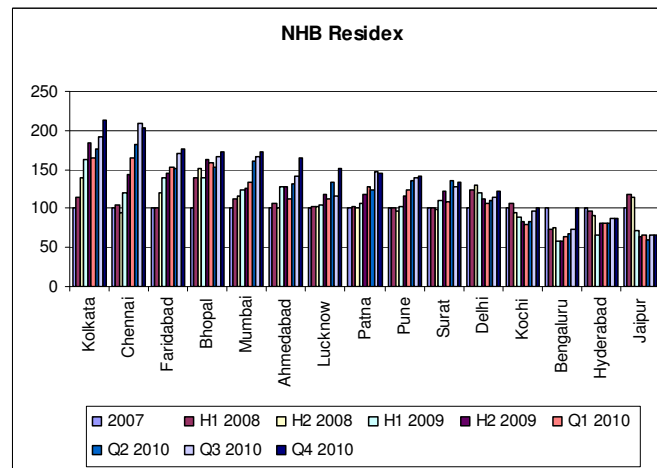
As a result, policymakers including central banks have started to analyse and monitor developments in housing markets with great vigilance. In particular central banks like Sweden's Riksbank have started to host conferences on housing markets and discussing how housing market can be made part of monetary policy. This is a huge shift from the pre-crisis days when central banks did not really focus on housing markets leaving them to the power of invisible hand.

In this context, we look at the housing markets in India. Unlike developed economies, one does not have detailed housing market statistics in India. Since 2007, National Housing Bank (NHB) has been releasing NHB-Residex, an index which tracks housing prices in fifteen key cities of India. We look at the trends in this index (and other indicators as well) to understand residential price trends in the various cities.

I. NHB Residex Trends

NHB Residex recently released data for Oct-Dec 2010-11 quarter (Figure 1)

Figure 1



Source: NHB

The data shows that:

- Compared to 2007 base, prices rose in most cities in H1 2008 except Bangalore and Hyderabad. Prices rose sharply in Bhopal (39%) and Delhi (24%) in the period.
- In H2 2008 as the global crisis started, prices started declining in some cities like Kochi, Chennai, Ahmedabad, Pune, Surat etc. However, cities like Mumbai, Kolkata and Faridabad continued to grow even in the crisis period.

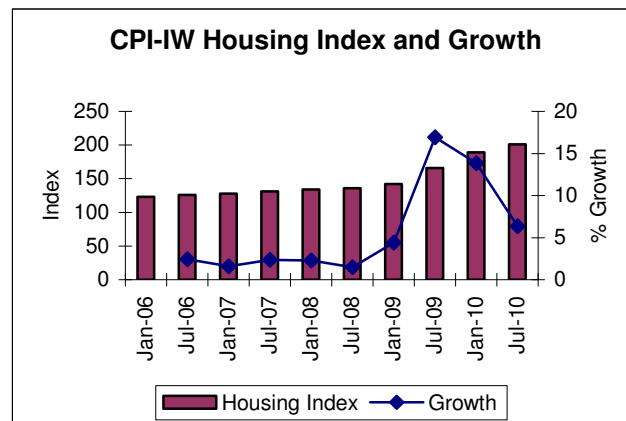


- The market recovered in most cities from H1 2009 with prices rising higher than crisis levels. However, prices declined in Bangalore, Delhi, Hyderabad and Jaipur from H1 2009 onwards. These four markets continue to decline till H2 2009 and then recover gradually in 2010.
- As of Q4 2010, only in Hyderabad and Jaipur index is lower than 2007 base index.
- Bangalore and Kochi have just crossed the 2007 base value. In Bangalore the prices have jumped by 37% in one quarter alone (from Jul-Sep 10 Bangalore index jumped from 74 to 101 in Oct-Dec 10).
- In 4 years from 2007, indices have doubled in Kolkata and Chennai. Chennai so far was rising the highest till Jul-Sep 10 but has slowed a bit now.

Another data which gives us some indication of changes in housing prices is CPI- Industrial Workers (CPI-IW) inflation data. Housing is a sub-sector in the CPI-IW index. A six-monthly house rent survey is conducted by the staff of the Labour Bureau for collection of house rent data for compilation of house rent index, which is revised in January and July every year. It is strictly not a housing price index but gives some understanding of the housing rents in the country.

The data shows that house rents rose sharply around Jul-09 which is again the same time one sees rise in housing prices as well. Growth in house rents declined in Jul-10 and latest data for 2011 is yet to be released.

Figure 2



Source: Labour Bureau

RBI has also started releasing Inflation Expectations Survey of Households. In the survey, there is a section on households' expectations on housing prices expected 3-month and 1-year ahead (Table 1). As we can see with each month higher number of respondents expect prices to continue to increase. Moreover, more respondents expect prices to rise at a rate higher than current rate in both 1 year and 3 month period. The numbers indicate people are only expecting housing prices to rise going in future. This leads to the same effects as seen in the case of inflationary expectations as well. Expecting higher prices in future, people try and buy homes now leading to higher prices in current times as well.

Options (3 months ahead)	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10
Prices will increase	88.4	89.8	92.4	93.8	96.1	95.2	96.1	96.0	97.0
Price increase more than current rate	49.7	46.2	55.9	64.4	70.8	60.4	70.8	64.6	73.1
Price increase similar to current rate	20.8	26.4	25.4	22.0	19.8	25.4	21.0	24.8	21.3



Price increase less than current rate	17.9	17.2	11.1	7.4	5.6	9.5	4.3	6.7	2.6
No change in prices	6.8	8.3	6.4	5.0	3.4	3.5	3.1	2.8	2.1
Decline in price	4.8	1.9	1.3	1.2	0.5	1.3	0.9	1.2	0.9
<i>Options (1 year ahead)</i>									
Prices will increase	87.0	93.0	93.0	94.9	96.4	94.1	96.1	95.3	97.9
Price increase more than current rate	56.3	57.4	57.6	66.0	73.4	61.0	72.0	65.9	75.5
Price increase similar to current rate	20.2	20.0	22.1	21.4	15.1	21.7	19.1	21.6	19.4
Price increase less than current rate	10.5	15.6	13.3	7.6	7.9	11.4	5.0	7.9	3.0
No change in prices	5.5	5.4	5.8	3.8	2.9	4.6	2.7	3.2	1.4
Decline in price	7.6	1.6	1.2	1.3	0.7	1.3	1.2	1.5	0.8
<i>Source: RBI</i>									

II. International Cases of Recent Housing Bubbles

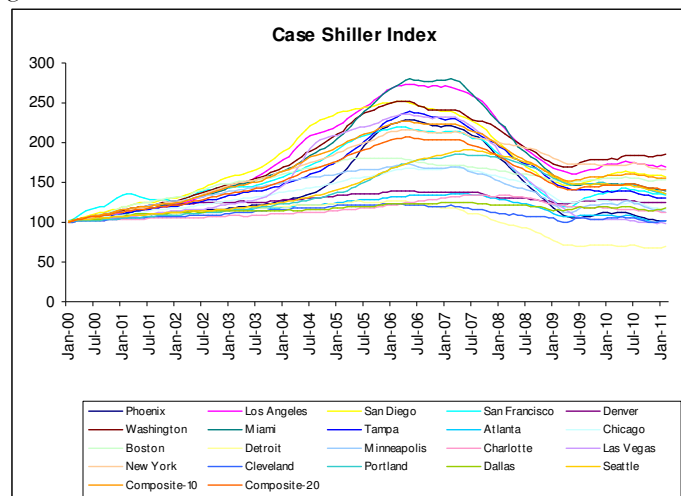
The standalone Indian cities' figures do not help understand whether prices have risen too fast or slow. In its Annual macroeconomic review report 2010-11, RBI said on housing markets:

Asset price concerns remain as housing prices remain firm - Property prices continued to rise in most cities during Q3 of 2010-11, as reflected in the Reserve Bank's Quarterly House Price Index (HPI) based on data in respect of seven cities collected from the Department of Registration and Stamps (DRS) of the respective State Governments. However, the indices for Delhi and Chennai witnessed a decline during this period.

To help understand these trends better, we need to do international comparison. We look at prices in three bubble countries – US, Ireland and Spain.

- **United States:** In US, Case Shiller Index gives the price trends across 20 US cities. Unlike NHB, it also gives composite index for the country as a whole.

Figure 3

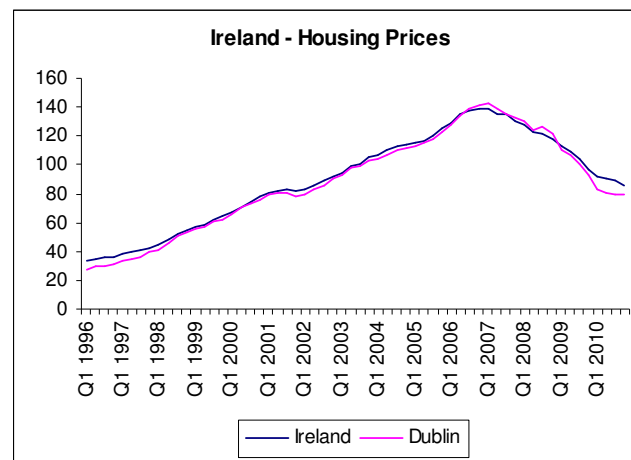


Source: S&P



- One sees the composite 20-cities index at 100.59 in Jan-2000. The index peaks and doubles to 206.5 in Apr- 2006 marking a CAGR of approx. 12.1%. The index has declined by 31.4% since the peak.
 - City-wise differences are significant with likes of Miami and Los Angeles index rising to around 280 in the same period with a CAGR of 17.8%.
 - But prices of Detroit and Cleveland hardly rising at all at with Detroit index at 127.05 in Dec-05 and Cleveland at 123.49 in Jul-06 implying a CAGR of just 3.5-3.9%.
 - Overall, one sees prices peaking in most places around Mar-06 to Jun-06 and then decline from thereon.
- **Ireland and Spain:** In Ireland housing prices index was around 33.6 in Q1 1996 and peaked to 139.4 in Q4 2006, marking a CAGR of 15.3%. It has declined by 38.3% from its peak value. In Dublin, prices had increased by 17.9% CAGR in the same period and has declined by 45% from its peak value.

Figure 4



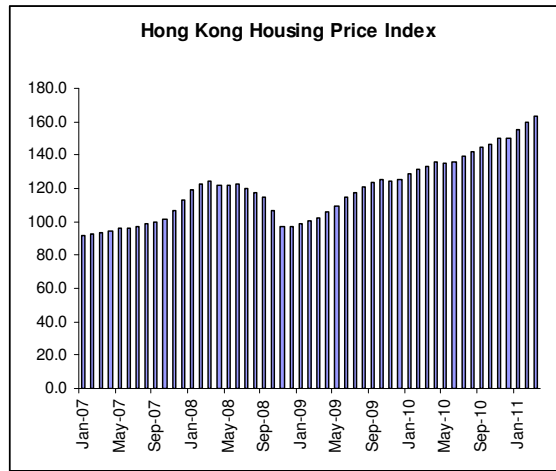
Source: The Economic and Social Research Institute, Ireland

Research shows Spain's housing prices too follow a similar path like US. The index was around 1000 in 2000 and rose to 2800 by 2009 implying a CAGR of 12.5%. It has started to decline but prices are expected to fall further as unlike Ireland and US, the Spanish bubble ended at 2009.

- **Hong Kong** – Hong Kong has been in the news recently for property bubbles and policymakers have taken stringent action to resist the bubble. The prices have surged in HK region post the financial crisis tracking surge in capital flows. Research shows prices have risen at an alarming rate of 25.5% since 2008. Similar growth rates are being reported for China and Singapore as well.



Figure 5

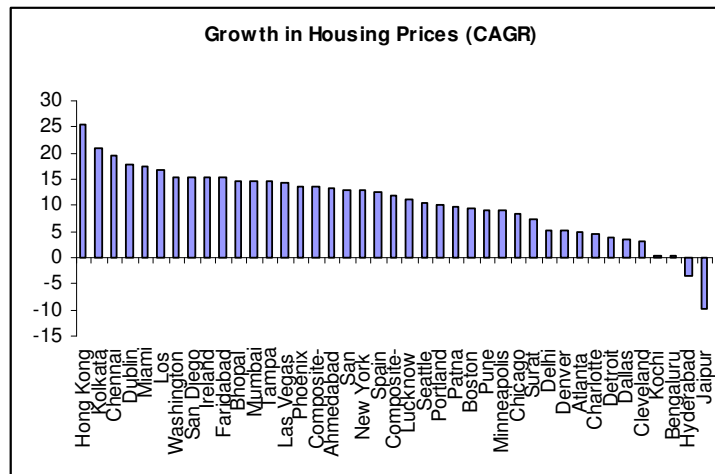


Source: Rating and Valuation Department, HK

III. Comparing India with Bubble Economies

Let us compare the growth in Indian cities between 2007-10 with US cities, Hong Kong, Ireland (Dublin and Average) and Spain in their bubble period (Figure 6).

Figure 6



Source: NHB, S&P, ESRI Ireland, Rating and Valuation Department, HK

- Out of the 15 Indian cities, CAGR is in double digits in 8 of them (including Patna at 9.9%).
- Kolkata and Chennai top the list registering higher growth than even cities/regions seen in three bubble economies of Ireland, Spain and US. Both these cities register higher growth than growth seen in Ireland (Faridabad, Bhopal and Mumbai are very close to Ireland average as well). Though, growth rates are lower than Hong Kong region has seen lately.
- Compared to growth in US Composite 20 Index, growth is seen higher in six Indian cities- Kolkata, Chennai, Faridabad, Bhopal, Mumbai and Ahmedabad. Same cities register higher growth than Spain as well.



- Kochi, Bengaluru, Hyderabad and Jaipur are at the bottom of the list. Prices have risen sharply in Bangalore in the Oct-Dec 2010 quarter. One could soon see these cities join the high growth cities as well.

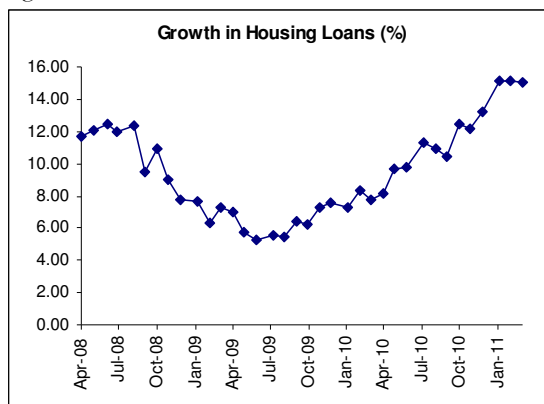
Hence, it is a mixed bag for Indian cities with some registering higher and some registering lower growth in housing prices than the bubble regions of US, Ireland and Spain. However, housing prices in some laggard cities have grown faster in recent months. It will be interesting to see the trends going forward.

IV. Role of Finance

Before we discuss whether there is a case of housing bubble in India, let us also see role of finance in the same. In all the above international cases, one has seen huge growth in bank (and non-bank) finance along with housing prices. The easy sources of finance fueled the bubble.

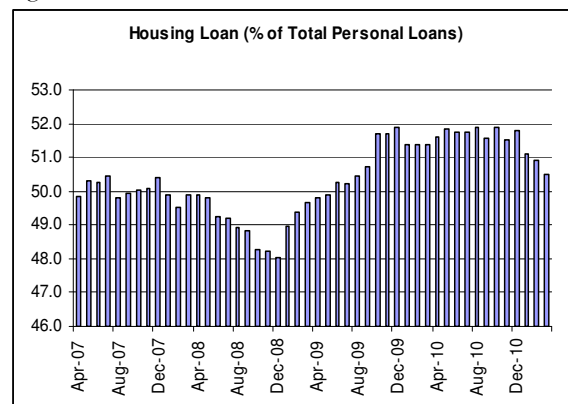
RBI has started giving the data for sector-wise bank credit on a monthly basis. We have data till Mar-11. Data shows that housing loans (part of personal loans) has been growing at a rapid pace. The growth declined post Lehman crisis which also saw housing prices decline as well. Loan growth has picked up rapidly since 2010 onwards which is again a period where housing prices have risen sharply. Banks also started offering teaser home loans in this period which offer low fixed interest rates in first few years inviting more people to take home loans. Share of housing loans as a percent of total personal loan has also risen from 48% in Dec-08 to 51.8% by Dec-10 and declined to 50.5% in Mar-11.

Figure 7



Source: RBI

Figure 8



Source: RBI

One cannot say bank financing alone has been responsible for rise in house prices. It just points to the procyclicality in bank finance and housing prices. If house prices decline, banks could have more NPAs as seen in multiple events in the past. This rising loan growth period also saw banks market their housing loans aggressively via teaser loans and low interest rates. It will be interesting to see the impact on these loans going ahead.



V. Is there a housing bubble?

One can never say beforehand that there is an asset bubble. Only when it bursts do we know it was indeed a bubble. Economists have now started to discuss fallouts of different kinds of bubbles. For instance equity market bubbles are seen as less damaging to the economy compared to housing market bubbles. 2001 recession was a result of former and hence recession was short-lived whereas 2007 recession was a result of latter and has been deep. Further research shows economies take longer to recover from housing bubbles and it has massive impact of financial industry leading to further slower recovery. In this context, understanding housing bubbles has become the key.

Having said this one cannot ignore that prices have risen faster in six of the fifteen cities at a faster pace than even seen in the bubble economies. However, it is still not a nation-wide rise in housing prices as seen in the other economies. One could argue this case both ways.

1. India is a fast growing emerging economy and with rising incomes, housing prices are expected to only increase. These reasons were given for other economies as well but have proven to be false. If it could not be sustained in developed economies with robust incomes, how can it be sustained in a developing economy with hardly any social safety nets in place.
2. Indian households have high saving rates and research shows higher saving economies are not impacted much from a housing price decline. This is true but as the above data shows households have been increasingly taking banking loans to finance homes. So, overall the impact may be muted but still some pockets could be affected.
3. US and other economies used financial innovations to diversify and transfer risks. This along with very lax lending standards fueled the bubble. All this is limited in Indian context where there is limited financial innovation and strict lending standards. So, there may not be a bubble like situation seen in other economies. One can never really know the impact till the bubble bursts. The same financial system which was praised for its innovation was blamed later on for the crisis. It all boils down to the severity of the crisis.
4. The regulation in US and other economies was poor with hardly any supervision. The same is not the case in India with RBI in particular highly vigilant to the risks. RBI raised provisioning standards before the 2007 crisis which helped prevent the fallouts from the global crisis. However, banks started to offer teaser loans towards end of 2009. Despite RBI expressing discomfort with the teaser loans, banks persisted with the teaser loans. By doing this, banks ignored the lessons from the crisis. In Oct-10 policy, RBI imposed a Loan to Value Ratio of 80%, increased risk weights on housing loans and increased standard asset provisions on teaser loans. Banks have stopped giving teaser loans but overall housing loans volume continues to rise.
5. Actual price rise in Indian cities are likely to be higher than the reported figures. There is a wide acknowledgement that the official housing prices are underreported for tax gains. Prime Minister has suggested looking at reforming the stamp duty transactions in states. In such a scenario, the actual rise is likely to be higher than the above reported figures which change the overall scenario. We could have many more cities showing a higher price rise than seen in US cities.



VII. Final Thoughts

The above analysis looks at the housing price trends in fifteen key cities in India and finds growth has been higher than the cities/regions in three bubble economies which burst in the recent crisis. Some cities are reporting lower growth but those figures could be underreported as explained above. Moreover, the lower growth cities have shown high growth in the last reporting quarter and could join the high-growth cities. Going by the recent international experience, there are concerns in the housing market in atleast some cities which warrant attention.

The rising housing prices throw many other challenges for Indian policymakers. One is seeing prices rising across sectors in India. The country is expected to grow further and if one sees prices rising across categories, it defeats the purpose of high growth as people are unlikely to be better off. Rising prices are going to negate whatever gains are made from rising incomes. And as incomes usually rise disproportionately with top earners earning more income than laggards, inequality widens further.

Housing is a basic necessity and will remain a priority for most individuals. The process of urbanization is only starting in India and more people are expected to come to cities for work and better lives. With this huge demand potential, city planners have a task at hand and need to ensure they balance the demand with the supply. There is an urgent need to overhaul the entire housing market and it should have a regulator which looks at the overall developments in the market. There is a need to develop the statistical system related to housing market in India to analyse the trends better. Our study only looks at housing prices which only explains the markets partially. Housing is also getting linked increasingly to banking and financial system which needs to be watched vigilantly.



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