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Housing market in India: A Comparison with the US and Spain

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Abstract

India suffers from a chronic shortage of housing, estimated at 18.8 million units in 2012, mainly in urban areas as per the Government of India. The shortage was mainly on account of congestion (15 million) followed by obsolescence (2 million) and homelessness (1 million). This paper documents the characteristic and business practices prevailing in the Indian housing sector in comparison with US and Spanish housing sectors. The paper discusses the determinants of house prices, role of lending institutions and their policies, drivers of credit flow, credit sources, interest rate regimes, regulators and housing indices of Indian housing market with brief outline about the same for US and Spanish housing market. It also includes a comparative study of housing market parameters across these three countries.

The findings suggest India has experienced rise in demand for housing since 2001, owing to increase in levels of income, younger earning age group, rapid urbanisation and nuclearisation of families. It also points towards existing incomplete information in Indian housing market in terms of lack of data base about mortgages, transparency in transactions, proper laws and robust indices. The government, and major regulatory institutions, NHB and RBI, are taking care to address these issues but substantial gaps continue to prevail in the housing sector.

The study concludes that there is need to undertake extensive research, mainly at the state level, revisit the methodology of calculating shortage, build database on housing sector, examine the utilization of land in urban areas, and consider importing of housing material to meet housing shortage, preferably from countries like Spain and the US where housing markets are sluggish.

Keywords: housing, housing prices, housing prices index, mortgage, delinquency rates, land, non-performing assets, bank credit, housing regulation and supervision

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Introduction

Housing is an important sector for any economy as it has inter-linkages with nearly 269 other industries. The development of housing sector can have direct impact on employment generation, GDP growth and consumption pattern in the economy. To help develop housing in the country, there is need to have a well-developed housing finance market. In India, housing finance market is still in its nascent stage compared to other countries. The outstanding amount of housing finance from all sources accounts for less than 8 per cent of GDP when compared with 12 per cent in China, 29 per cent in Malaysia, 46 per cent in Spain and 80 per cent in the US.

In India, housing finance market is very complex when examined in the context of demand and supply of housing units, especially in the face of scarce land in the urban areas. The demand for housing is increasingly being made by individuals and households given increasing level of income and prosperity. The supply of houses have to come from builders, developers and construction companies scattered widely across the country, both in the private and public sector. The government, both at centre and states, is a facilitator and is assisted by two regulators, Reserve Bank of India (RBI) and National Housing Bank (NHB). The housing finance market is dominated by commercial banks, both domestic and foreign. In addition, there are cooperative banks and housing finance companies, self-help groups, micro-finance institutions, and NGOs. The RBI regulates commercial banks and partially cooperative banks (which are mainly governed by the State Governments under State Cooperative Acts) while the NHB regulates the housing finance companies. The others are not regulated by any authority in the country.

The financial sector reforms initiated in 1985 and 1991 unleashed development forces in the economy. This resulted in higher employment, increased income levels, faster urbanisation and higher demand for houses, especially in urban areas. Therefore, concerted efforts were made by the Government and the Reserve Bank to encourage housing during the 1990s. The long term goal of the National Housing Policy, announced by the Government in 1998, was to eradicate houselessness, improve the housing conditions of the poor and provide minimum level of basic services and amenities to all. Fiscal incentives were also granted, in general, to the housing sector. The government has been initiating as well as strengthening measures to extend housing to the weaker sections of the society. A number of measures were announced from 2001 but a concerted effort was made in 2006 after some fears were expressed that there was a housing bubble developing in India which could eventually burst. It was then recognized that role of housing could be critical in India and therefore measures announced thereafter aimed to improve business environment in the country.

The housing sector has been considered by a number of studies to be an important cause of the recent financial crisis in the US and Europe. Hence, it would be interesting to examine business environment and practices regarding the housing sector in the US and some selected country in Europe. In Europe, Spain lists among the category of countries that have gone through the utmost rise in property prices over and above their long-term average levels. Also, Spain was amongst those countries that had historically been inclined to the sharpest swings in real property prices, as measured by standard deviation. Since 2008, a major correction has taken place in the housing prices in Spain.

This paper examines the business practices in India and compares it with the US and Spain. The material on India, presented in the paper, in view of lack of data series and literature on India, is based not only on published material but also that collected from interaction with commercial banks, real estate agents, builders and select housing research firms in India. The paper is organised in the following sections – In Section 2, a brief review of literature is presented. In Section 3, role of government in India, both centre and states, RBI and NHB is discussed. In India, especially in urban areas, there is severe shortage of housing units, which is discussed in Section 4. In Section 5, flow of credit to the housing sector from different financial institutions is discussed. The characteristic short comings of housing sector in India are discussed in Section 6. The housing markets in the US and Spain are well developed and mature. Salient features of these two markets are presented in Section 7. A comparison of housing markets in the three countries is provided in Section 8. Finally, conclusions and select policy recommendations are made in Section 9.

Section 2: Brief Review of Literature

Housing is an important activity in any economy. Housing related activities in the country like construction, renovation, maintenance and those related to trading, financing, mortgage banks, real estate agents, appraisers, movers and notaries, are generally estimated to account between 5-10 per cent of GDP. These activities are significantly affected by house prices.

A number of empirical studies establish that key determinants of housing prices are income levels, interest rates, supply conditions, demographic changes, number and size of households, maintenance costs, property taxes, and speculative pressures (Poterba, 1984, Allen et al, 2002 and OECD, 2005).

House prices are an important determinant of household sector's gross and net wealth and thereby of consumption and savings. In many countries, including India, house property is the household's largest asset and price developments in housing markets can impact growth directly but mainly through credit channel since real estate can serve as collateral for consumer borrowing (Kiyotaki and Moore, 1997 and Bernanke and Gilchrist, 1999). Furthermore, housing cycles can influence economic activity through wealth effects on consumption and private residential investment mainly due to changes in profitability and the impact on employment and demand in property related sectors.

And if house prices are not aligned with the fundamentals, they can threaten the economic and financial stability of the country mainly because of the macro-financial linkages, as empirical evidence demonstrates. One of the most important causes of financial crises was collapses in real estate prices, either residential or commercial or both (Reinhart and Rogoff, 2009). There have been cases where such collapses have taken place after bubbles in the real estate prices and both, the financial sector and the real economy are adversely affected after the bubble bursts. The current crisis can be taken as an example, wherein decline in the real estate prices led to a drastic drop in securitized asset prices in 2007. Further, the instability which followed impacted balance sheets of many financial institutions as was predicted by Feldstein (2007). The financial crisis then got carried forward to the real sector.

Allen and Carletti (2009) argue that the main cause of the recent wide-spread financial crisis was not that there was a bubble in real estate in the U.S. but also because of them in a number of other countries such as Spain and Ireland.

Housing sector is impacted by both, monetary and fiscal policy, macro prudential norms and labour policy prevalent in the economy (Hilbers et al, 2008). To explain the recent crisis, a generally accepted argument was that the loose monetary policy and excessive availability of credit were the causes for the real estate bubble in these countries. As argued by Taylor (2008) these levels of interest rates were lower than in previous U.S. recessions relative to the economic indicators at the as time captured by the "Taylor rule". The low interest rates encouraged borrowing and buying of houses. While Spain had one of the largest deviations from the Taylor rule, this country also had the largest housing boom (measured by the changes in housing investment as a share of GDP). Sweden's Central bank, the Riksbank is one of the rare central banks that have taken the approach of targeting real estate prices. Policy of the Riksbank is to look at property prices during decisions about interest rates (Ingves, 2007). In comparison with larger countries, the smaller ones have a stronger monetary transmission through the housing channel but a robust financial system is an imperative requirement for such a transmission to be successful.

Cross-country studies indicate that the growth in housing finance depends upon a number of factors such as credit history of the borrower, ability of the financing institution to secure collateral, macroeconomic stability prevailing in the economy and trends in household income (Warnock and Warnock, 2007).

In 2011, IMF observed that shocks to disposable income, mortgage interest rates and prices play an important role in short term consumption. In comparison with equity price busts, housing price bursts involve more serious macroeconomic developments. Housing price booms put forward noteworthy risks. Some of the factors which appear to account for the greater severity of housing price busts as compared with equity price bursts are: (i) Wealth effects on consumption are larger in case of housing price busts than in the case of equity price busts; (ii) In comparison with the equity price busts, unfavourable effects of the housing price busts on the banking system (capacity and willingness of the banking system to lend) were stronger and faster; (iii) Link between boom and bust is more powerful for housing prices, than for equity prices. Probability of housing prices busts being preceded by a boom were higher in the case of housing prices busts; and (iv) Housing price busts were associated with tighter monetary policy than equity price busts. Following Bianco and Occhino (2011), IMF estimated that improved house prices could significantly strengthen consumption. Following Klyuev (2008), avoiding 1 million foreclosures would raise aggregate prices by 3-4 per cent over five years in the US.

Section 3: Encouraging Role of the Institutions

A number of institutions have been instrumental in developing the housing finance market in India. These mainly are the Central and State governments, RBI and NHB.

Government

The role of the Government in recent years has switched from that of a provider of housing units to more of a market facilitator. The Five Years Plans starting from 1951 had assigned housing sector a prominent place in the economy. In the first Plan, construction of houses for weaker sections had been emphasised which has continued over the years. The Fourth Plan stressed on urban housing and slums. In the Seventh Plan, the role of private sector in housing was recognized and encouraged. Institutionally, a number of developments were also initiated in the early years of planning. The National Buildings Organization (NBO) was established in 1954 under the Ministry of Housing and Urban Poverty Alleviation for technology transfer, experimentation, development and dissemination of housing statistics. NBO was further restructured in 1992 and 2006 with the revised mandate keeping in view the current requirements under the National Housing Policy, and various socio-economic and statistical developments connected with housing and building activities. The setting up of Housing and Urban Development Corporation Ltd. (HUDCO) on April 25, 1970 to comprehensively deal with the problems of growing housing shortages, rising number of slums and for fulfilling the pressing needs of the economically weaker section of the society was one of the significant steps in the series of initiatives taken by Government. The National Housing and Habitat Policy was announced in 1988 which had a long term aim of eradicating houselessness, improving the conditions of the inadequately housed and providing a minimum level of services/amenities to all. National Housing bank was established in 1988 under an Act of the Parliament to function as a principal agency to promote housing finance institutions and to provide financial and other support to such institutions. The National Housing and Habitat Policy, 1998 was formulated after a thorough review of the earlier policy. In 2007 another National Urban Housing and Habitat Policy was formulated in view of the changing socio-economic parameters of the urban areas and growing requirement of shelter and related infrastructure. [2]

Consequent to these focussed initiatives, changes in government policies like easing regulations and releasing more land for housing purposes have had a positive impact on the growth of housing finance in India. The central and state governments have been offering tax concessions for the housing sector. Several state governments have passed legislation to safeguard the interest of lessors, encouraging construction of properties for rent. In recent years, rationalization of stamp duty and computerization of land records in many states has been initiated. The government is also considering repealing of the Urban Land Ceiling Act in most states across the country. The government has also opened up the real estate sector to foreign direct investment (FDI), wherein 100.0 per cent of FDI in townships, built up infrastructure, construction development projects and real estate through automatic route has been permitted.

Reserve Bank's policy

The Reserve Bank has initiated several measures in the housing sectors. The Reserve Bank requires commercial banks to lend 3 per cent of the incremental deposits towards the priority sector which includes financing individuals and others, including co-operatives. The Reserve Bank also reckons investments made by banks in the bonds issued by specific housing

[2] The Policy seeks to promote various types of public-private partnerships for realizing the goal of "Affordable Housing for All" with special emphasis on the urban poor. Given the magnitude of the housing shortage and budgetary constraints of both the Central and State Governments, the NUHHP-2007 focuses the spotlight on multiple stake-holders private sector, the cooperative sector, the industrial sector for labour housing and the services/ institutional sector for employee housing. The action plan of the NUHHP-2007 states formation of State Urban Housing and Habitat Action Plan with due support from Central Government for realizing the policy objectives through legal and regulatory reforms, fiscal concessions, financial sector reforms and introduction of innovative instruments, for mobilizing recourses for housing and related infrastructure development at the State/UT level. The Policy envisages specific roles for the Central Government, State Governments, local bodies, banks & housing finance companies, public/parastatal agencies.

companies under priority sector lending. The reporting of data for direct and indirect exposure of the banks to the housing sector has also been initiated. Including investment made by banks in the mortgage backed securities (MBS) since 2004 as flow of credit to housing, assigning lower risk weight to housing and benign interest rate environment has contributed to increase in housing loans. Growth in housing loans has also been assisted by the comfort of relative safety of such assets given the tangible nature of the primary security and the comfort obtained from the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 and the amendment in December 2012.

National Housing Bank

National Housing Bank has been playing an important role in regulating and supervising the housing finance companies. In recent years, especially since 2001, a number of new players have entered the housing finance market with competitive offerings which have helped increase the demand for housing loans. These housing finance companies/banks have been passing on the benefit of lower cost of funds to customers. Most of these financing institutions, besides simplifying the process of availing loans, have also introduced new products and variants targeted at specific customer segments.

Section 4: Increasing Demand for Housing in India

India has recorded increased demand for housing in recent years consequent to the financial sector reforms in 1991. The increased demand is based on increasing levels of income and savings, urbanisation, emerging of a younger earning age group, decrease in the average size of household and nuclearisation of families (Annex-1).[3] This increased demand was facilitated by availability of lendable funds with the banking system.

There was increased demand for commercial and residential space in metro/surrounding areas due to phenomenal growth in sectors like retail, information technology (IT), IT enabled

[3] In view of non-availability of data, the limited available data series has been graphically plotted for 16 cities in the Annex. It needs to be mentioned that for housing prices and CPI, data has been used specific to the city concerned except Patna. In the case of Patna, the CPI for Jamalpur was considered. To proxy the interest rates, GSecs on 15-year bond and Prime Lending Rate (PLR) were considered. These rates are not city specific and therefore a single series was plotted against the HPI/RESIDEX across all the 16 cities. There was a decline in GSecs and PLR in 2009-10 which has been considered while interpreting the trend.

services (ITES) and business process outsourcing (BPO) services. This boom in demand was aided by easy availability of housing finance, and favorable tax regime. The flow of money through foreign direct investment (FDI) and from non-resident Indians (NRIs) also contributed to the growth of the sector.

In 2001-02, the banking sector had surplus liquidity with low credit off-take. On the basis of security available in housing loans, in view of the rising pressure to maintain high quality of credit, banks identified this as a thrust area from early 2000s. The drivers for increase in credit to real estate were low interest rates, increase in property prices, and relatively low inflation.

The increasing demand for housing in the country is reflected in the shortage of 18.8 million units in 2012 declining from 24.7 million in 2007, mainly in urban areas as reported by GOI[4]. The shortage was mainly on account of congestion (14.99 million) followed by obsolescence (2.27 million) and homelessness (0.53 million). However, the derivation of this shortage, including the congestion factor has some shortcomings. The congestion has been estimated on the basis of a few assumptions made by the technical committee but the factors are not explained in detail. To illustrate, it is mentioned that if a married couple does not have an exclusive room in the house, the household is deemed to be suffering from housing shortage and not a ‘room” shortage. Another aspect, the reduction in housing shortage for the weaker sections of the society has not explained by these committees.

The shortage, though declining over the years, is still wide spread across the country except Andaman and Nicobar islands and there are nine states in which the housing shortage was more than one million in 2012 - Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal (Table - 1). In some states, housing shortage in 2012 has increased when compared with 2007. These states are - Arunachal Pradesh, Bihar, Jharkhand, Manipur, Nagaland, Rajasthan, Uttar Pradesh, Dadra and Nagar Haveli, Lakshadweep and Puducherry. The largest increase was recorded in Uttar Pradesh (69 Lakh) followed by Bihar (60 Lakh). The government has been taking measures under various

[4] Report of the Technical Group *on Urban Housing shortage (2012-17)*, GOI (Chairman Dr. Amitabh Kundu) The report does not give reasons for the fall in overall shortage from 2007 to 2012, especially for the economically weaker and low income segments, which account for the significant component of shortage.

schemes to address this shortage and providing affordable houses to the people, especially weaker sections of the society.

The shortage at 10.5 million units is maximum for the economically weaker sections (EWS) followed by the lower income groups (LIG, 7.41 million) and middle income group (MIG, 0.82 million). The size of houses for different groups varies between 300 to 1200 square feet.[5] This severe shortage for the EWS and LIG is reflected in the large number of people living in slums. In 2001, nearly 75.3 million people (26.3 per cent of the urban population) lived in slums which were expected to rise to 93 million in 2011.

Table 1: Distribution of Housing Shortage among States and UTs as on 2007 And 2012

(In Million)

State/UTs	State wise Distribution of Housing Shortage 2007	State wise Distribution of Housing Shortage 2012
Andhra Pradesh	1.95	1.27
Arunachal Pradesh	0.02	0.03
Assam	0.31	0.28
Bihar	0.59	1.19
Chhattisgarh	0.36	0.35
Goa	0.07	0.06
Gujarat	1.66	0.99
Haryana	0.52	0.42
Himachal Pradesh	0.06	0.04
Jammu & Kashmir	0.18	0.13
Jharkhand	0.47	0.63
Karnataka	1.63	1.02
Kerala	0.76	0.54
Madhya Pradesh	1.29	1.10
Maharashtra	3.72	1.94
Manipur	0.05	0.08
Meghalaya	0.04	0.03
Mizoram	0.04	0.02
Nagaland	0.03	0.21
Orissa	0.50	0.41
Punjab	0.69	0.39

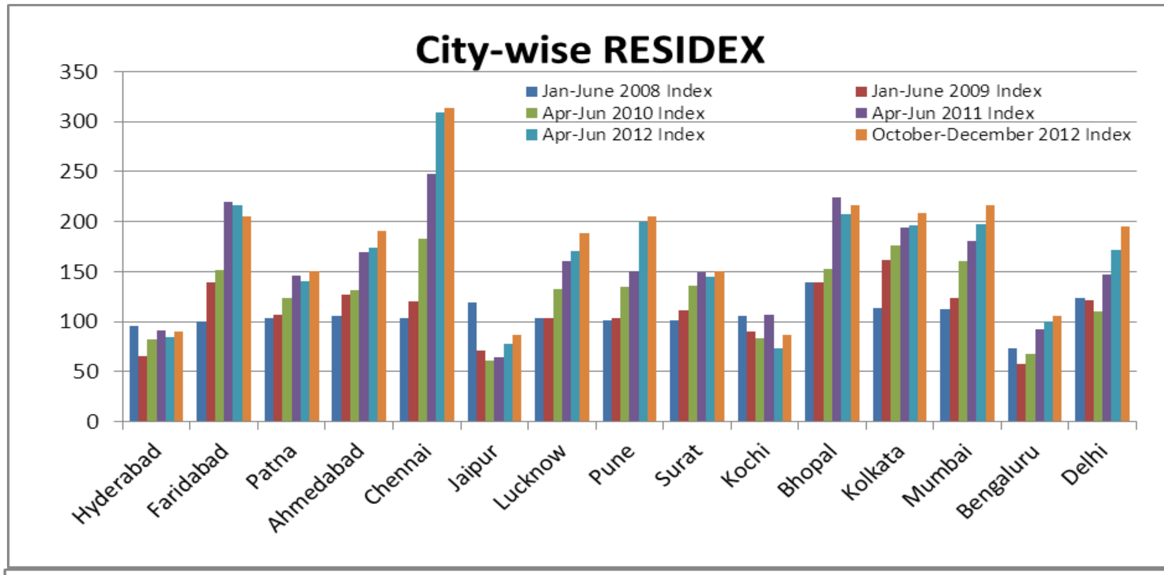
[5] Size of houses for different categories are - EWS - Minimum 300 sq ft super built up area and minimum 269 sq ft carpet area; LIG - minimum 500 sq ft super built up area and minimum 517 sq ft carpet area; MIG - 600-1200 sq ft super built up area and minimum 861 square ft carpet area.

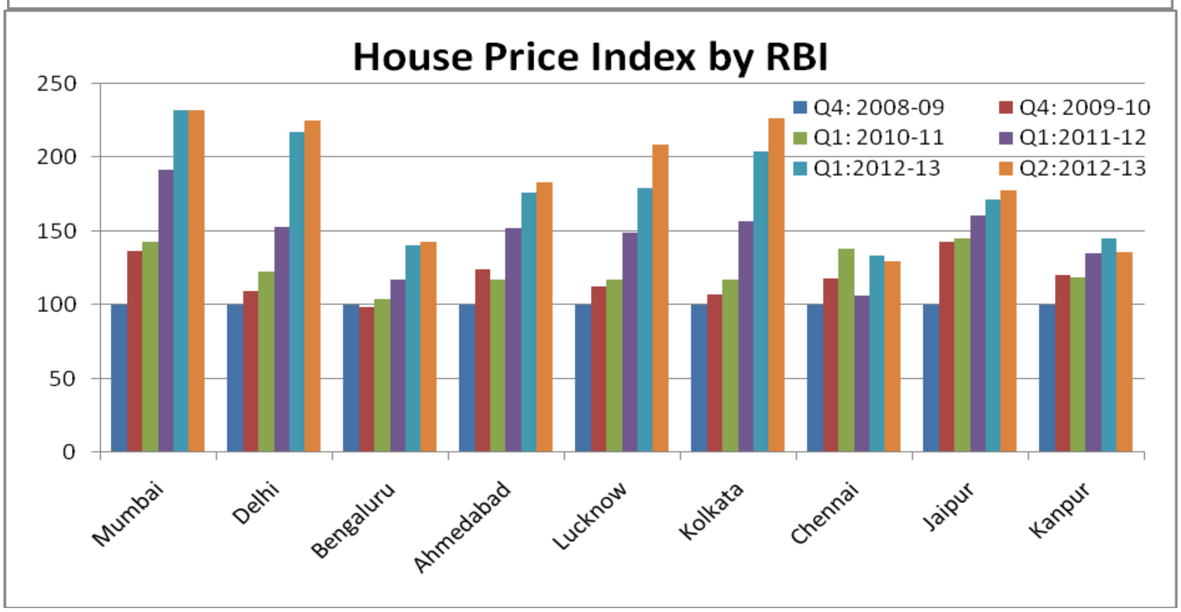
Rajasthan	1.00	1.15
Sikkim	0.01	0.01
Tamil Nadu	2.82	1.25
Tripura	0.06	0.03
Uttrakhand	0.18	0.16
Uttar Pradesh	2.38	3.07
West Bengal	2.04	1.33
A & N Islands	0.01	0.00
Chandigarh	0.08	0.02
D & N Haveli	0.01	0.05
Daman & Diu	0.01	0.01
Delhi	1.13	0.49
Lakshadweep	0.00	0.01
Puducherry	0.06	0.07
All India	**24.71**	**18.78**

Source: GOI.

The shortage of housing is reflected in rising prices as reflected in the indices by the NHB and RBI (Graph1).

Graph 1: Trend in the Housing Prices





Source: RBI and NHB.

The total housing stock in India, according to the latest data available, was about 249 million units in 2001, of which 29 per cent were in the urban areas and 71 per cent in rural areas. The average ownership of houses for India at 79.9 per cent is high, mainly because of high ownership of more than 90 per cent in rural areas, according to the latest data available for 2001. In urban areas, home ownership was mainly ranging between 60 to 70 per cent. In general, for the overall status, Bihar, Haryana, Jammu and Kashmir, Kerala, Manipur, Rajasthan and Uttar Pradesh record more than 90 per cent of home ownership. In places like Delhi and Chandigarh, mainly being administrative headquarters, ownership was low at 45.7 per cent and 67.1 per cent, respectively (Table 2)

Table 2: State-wise housing data as per 2001 census: Housing Ownership

State	Percentage Distribution of Houses by Occupancy Status								
	Urban			Rural			Total		
	Owned	Rented	Others	Owned	Rented	Others	Owned	Rented	Others
Andaman & Nicobar Islands	43.1	41.8	15.1	55.0	12.9	32.0	51.2	22.2	26.6
Andhra Pradesh	56.0	41.1	2.9	90.4	7.9	1.7	81.9	16.1	2.0
Arunachal Pradesh	24.9	31.5	43.6	75.3	8.4	16.3	63.9	13.6	22.5
Assam	55.5	36.6	7.9	90.0	2.5	7.5	85.0	7.4	7.6
Bihar	77.1	18.7	4.2	98.6	0.7	0.7	96.6	2.4	1.0
Chandigarh	47.2	40.4	12.4	33.1	64.7	2.2	45.7	42.9	11.3
Chhattisgarh	64.2	28.6	7.3	94.5	2.8	2.7	88.7	7.7	3.5
Dadra & Nagar Haveli	37.3	61.1	1.5	79.4	18.1	2.5	68.7	29.1	2.2
Daman & Diu	67.2	28.2	4.6	50.9	42.8	6.3	56.7	37.6	5.7
Delhi	66.3	26.1	7.6	77.9	18.6	3.5	67.1	25.6	7.3
Goa	67.6	28.5	3.9	86.9	9.8	3.3	77.3	19.1	3.6
Gujarat	73.2	22.8	4.1	92.7	5.5	1.8	85.1	12.2	2.7
Haryana	78.5	17.8	3.7	95.9	2.3	1.8	90.6	7.0	2.4
Himachal Pradesh	42.3	51.2	6.5	90.5	7.1	2.4	85.0	12.2	2.9
Jammu & Kashmir	82.9	13.6	3.6	97.1	1.3	1.6	93.5	4.4	2.1
Jharkhand	51.1	34.2	14.7	96.2	2.1	1.7	86.4	9.1	4.5
Karnataka	54.6	42.0	3.4	91.2	6.2	2.6	78.5	18.7	2.9
Kerala	87.5	10.2	2.3	94.3	3.3	2.4	92.6	5.0	2.3
Lakshadweep	74.9	23.6	1.5	84.3	14.1	1.6	80.3	18.1	1.6
Madhya Pradesh	69.3	24.7	5.9	95.6	2.3	2.1	88.9	8.0	3.1
Maharashtra	67.2	28.5	4.4	90.0	6.6	3.4	80.3	15.8	3.8
Manipur	90.1	8.6	1.3	95.0	4.0	1.0	93.8	5.2	1.0
Meghalaya	39.8	53.7	6.5	91.7	6.2	2.1	80.5	16.4	3.1
Mizoram	50.3	46.5	3.3	88.2	10.4	1.4	69.0	28.7	2.4
Nagaland	34.6	59.3	6.0	87.5	8.7	3.8	76.9	18.9	4.3
Orissa	53.5	33.2	13.4	95.5	2.3	2.2	89.7	6.6	3.7
Puducherry	60.1	34.8	5.2	84.3	11.0	4.8	68.4	26.5	5.0
Punjab	77.2	18.8	4.1	95.5	2.5	2.0	89.1	8.2	2.7
Rajasthan	78.5	18.3	3.2	96.7	2.0	1.3	92.4	5.8	1.7
Sikkim	22.9	60.0	17.1	68.9	23.5	7.6	63.2	28.0	8.8
Tamil Nadu	58.5	38.4	3.0	91.3	6.7	2.0	77.7	19.9	2.4
Tripura	70.9	26.5	2.6	93.3	3.6	3.1	89.2	7.9	3.0
Uttrakhand	58.8	30.8	10.4	90.5	5.4	4.1	82.7	11.7	5.6
Uttar Pradesh	80.1	16.4	3.5	98.4	0.9	0.7	94.7	4.1	1.2
West Bengal	63.8	31.1	5.1	95.5	1.7	2.8	86.3	10.2	3.5
All India	**60.8**	**32.2**	**7.0**	**86.6**	**9.4**	**4.0**	**79.9**	**15.2**	**4.9**

Source: NHB

Section 5: Flow of Credit to Housing

The need of long term finance for the housing sector in India is catered by scheduled commercial banks (SCBs), financial institutions, cooperative banks, regional rural banks (RRBs), Housing finance companies (HFCs), agriculture and rural development banks, non-banking finance companies (NBFCs), micro finance institutions (MFIs), and self -help groups (SHGs). The largest contributor to housing loans by virtue of their strong branch network and customer base are SCBs, accounting for the major share of housing loan portfolio in the market followed by HFCs.

Housing loans by Scheduled commercial banks

The outstanding housing loans by the SCBs increased from Rs. 15,317 crore on March 31, 2001 to Rs.162,563 crore on March 31, 2006 and to Rs.4,02,678 crore on March 31 2012, including priority sector lending. Significant growth in housing credit in the recent years was witnessed on the back of strong demand for housing as the economy expanded its trajectory of output growth. The share of individual housing loans in total bank credit increased from 6.1 per cent at end-March 2001 to 7.3 per cent at end-March 2012.

The quality of housing loan portfolio is generally robust as NPA levels on an average are low at 2.6 per cent for the housing portfolio though it is very high at 11.5 per cent of housing loans upto Rs. 2 lakh. For the loan slab of above Rs. 25 lakh, NPA per centage is 1.09 per cent.

The commercial banks have been directly lending substantial amounts of loans to the household sector though some portion is lent to the cooperative sector too (Table 3). The largest amount of housing loans by commercial banks are extended on long term basis though the share of medium term loans has also been rising in recent years (Table 4).

Table 3: Outstanding Credit of Scheduled Commercial Banks - Sectors

(Rs. crore)

	March 2001	March 2006	March 2011
Co-operative Sector	3427	39572	11813
Household Sector - Individuals	11890	122990	319295

Source: RBI

Table 4: Outstanding Credit of Scheduled Commercial Banks - Tenor

(Rs. crore)

	March 2001	March 2006	March 2011
Overdraft	0	0	17316
Medium Term Loans	0	201	46249
Long Term Loans	15316	162362	267543
Total Amount Outstanding	**15316**	**162563**	**331108**

Source: RBI

The range of interest charged by the SCBs on housing loans is wide and changes over the years. In 2001, housing loans attracting less than 10 per cent were 4.9 per cent of the portfolio which increased to 41.9 per cent by March 2011. In contrast, share of loans above 13 per cent rate of interest declined from 50.5 per cent of outstanding loans in 2001 to 9.6 per cent by 2011. Thus the bulk of outstanding housing loans in 2011 are between 6 and 12 per cent of interest rates (Table 5)

Table 5: Interest Rate Range-Wise Classification of Outstanding Housing Loans

(Amount in Rs. Crore)

Range in per cent		**Mar 2001**	**Mar 2011**
Less than 6	No. of Accounts	17894	35774
	Amount Outstanding	615	1418
6 and above but less than 10	No. of Accounts	1992	1614687
	Amount Outstanding	132	137220
10 and above but less than 12	No. of Accounts	98462	1949088
	Amount Outstanding	4005	141446
12 and above but less than 13	No. of Accounts	58041	186242
	Amount Outstanding	2825	19128
13 and above but less than 14	No. of Accounts	95745	202250
	Amount Outstanding	4067	15312
14 and above but less than 15	No. of Accounts	15985	95724
	Amount Outstanding	958	7659
15 and above but less than 16	No. of Accounts	14584	56707
	Amount Outstanding	924	4915
16 and above but less than 17	No. of Accounts	16988	16386
	Amount Outstanding	1028	1389
17 and above but less than 18	No. of Accounts	3149	12657
	Amount Outstanding	320	2419
18 and above but less than 20	No. of Accounts	2177	2799
	Amount Outstanding	298	142
20 and above	No. of Accounts	929	1237
	Amount Outstanding	145	59
Total	No. of Accounts	325946	4173551
	Amount Outstanding	15316	331108

Source: RBI

In terms of amount outstanding, housing loans have increased the most for loans ranging between Rs.25 lakh and Rs.50 lakh followed by loans between Rs.10 lakh and Rs.25 crore (Table 6).

Table 6: Size of Outstanding Housing Loans

(Rs. crore)

Amount of Loan	March 2001	March 2011
Rs.25,000 and Less	552	352
Above Rs.25,000 and up to Rs.2 Lakh	9544	14471
Above Rs.2 Lakh and up to Rs.5 Lakh	9233	55214
Above Rs.5 Lakh and up to Rs.10 Lakh	1996	71677
Above Rs.10 Lakh and up to Rs.25 Lakh	1053	103365
Above Rs.25 Lakh and up to Rs.50 Lakh	323	50086
Above Rs.50 Lakh and up to Rs.1 Crore	208	20277
Above Rs.1 Crore and up to Rs.4 Crore	432	17274
Above Rs.4 Crore and up to Rs.6 Crore	198	2499
Above Rs.6 Crore and up to Rs.10 Crore	184	1579
Above Rs.10 Crore and up to Rs.25 Crore	643	1087
Above Rs.25 Crore	1046	8051

Source: RBI

The performance of banks in different regions has varied over the years. The State Bank of India and its associates, and nationalized banks have performed well in terms of both accounts and amounts in rural and semi-urban areas. On the other hand, private and foreign banks restricted themselves to the urban and metropolitan regions (Table 7).

Table 7: Performance of Banks in Different Regions
(No of Accounts in '00; Amount in Rs. crore)

		March 2001					March 2011				
		Rural	Semi-urban	Urban	Metro	All India	Rural	Semi-urban	Urban	Metro	All India
SBI &	No. of Ac	878	2660	2986	1556	8080	2976	6987	6677	4314	20956
Associates	Credit Limit	779	2623	3345	2230	8976	14424	39371	45725	50450	149971
	Amt Outstanding	681	2298	3001	1999	7979	11289	28611	35210	38361	113471
Nationalised	No. of Ac	1935	2662	3906	3870	12372	3688	5531	8727	8214	26161
	Credit Limit	1547	2561	4138	5876	14123	10766	22138	46286	74254	153443
	Amt Outstanding	1405	2290	3739	5250	12685	9273	18818	39516	63749	131355
Foreign	No. of Ac	0	0	6	348	354	0	0	32	928	962
	Credit Limit	0	0	33	2011	2044	15	32	995	26529	27571
	Amt Outstanding	0	0	32	1980	2012	13	32	549	21500	22095
RRBs	No. of Ac	709	643	581	8	1942	1692	914	535	48	3190
	Credit Limit	305	316	285	15	921	3203	1966	1246	92	6506
	Amt Outstanding	274	280	258	13	825	2617	1647	988	73	5324
Private	No. of Ac	202	1030	470	379	2080	534	1218	2615	4192	8560
	Credit Limit	204	745	508	847	2304	3121	8192	25703	58008	95023
	Amt Outstanding	173	639	397	704	1912	2585	6299	19958	44844	73686
All SCBs	No. of Ac	3724	6995	7949	6160	24828	8892	14652	18588	17698	59831
	Credit Limit	2835	6245	8309	10979	28369	31528	71699	119954	209333	432515
	Amt Outstanding	2534	5506	7426	9947	25412	25777	55407	96221	168526	345931

Source: RBI.

The rate of interest charged on housing loans is generally less than the average interest rate charged by banks on total bank credit, except by foreign banks,. There was however a widening gap between interest rate charged on housing loan and weighted average rate of term deposits between domestic and foreign banks. The gap was minimum for SBI and associates reflecting that interest rates on housing loans are charged with a minimum premium over the costs at which resources are raised (Table 8).

Table 8: Bank Group-Wise Weighted Average Lending Rate and Deposit Rate – Last Reporting Friday

(In per cent)

	SBI and its Associates		Nationalised Banks		Private Sector Banks		Foreign Banks		Regional Rural Banks		All Scheduled Commercial Banks	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Housing Loans (HL)	8.9	9.4	9.6	10.2	10.7	11.2	11.4	12.3	10.5	10.9	9.7	10.3
Bank Credit	10.3	11.3	10.4	11.5	11.1	11.5	11	10.9	11.9	11. 9	10.5	11.4
Weighted Average Rate of Term Deposits (TD)	7.4	8.1	7	8.2	6.8	8.6	4.4	7.3	8	8.4	7	8.2
Gap between HL and TD	1.5	1.3	2.5	1.9	3.8	2.63	7.02	4.8	2.6	2.5	2.7	2

Source: RBI

Housing Loans by the HFCs

HFCs registered with NHB are the second largest players in the housing market. The disbursal of housing loans by 54 HFCs with 1,692 branches spread across the country increased from Rs.12,638 crore in 2000-01 to Rs. 21,869 crore in 2005-06 and Rs.82,221 crore in 2011-12. The outstanding amount of housing loans increased from Rs. 33,250 crore as at end-March 2001 to Rs, 86,155 crore as at end-March 2006 to Rs. 2,22,224 crore as at end-March 2012. The outstanding housing loans accounted for more than 73.7 per cent of the total credit portfolio of the HFCs in the last three years. The main disbursal of housing loans by HFC is to individuals (83.0 per cent) followed by loans to builders (12.6 per cent), and corporate bodies and others (4.4 per cent). Housing loans from HFCs are generally for a period of seven years and above (87.6 per cent) while loans for less than 5 years are less than 10 per cent of the portfolio, as noted in the trend for last three years – 2009 to 2012. Similarly, more than 76.0 per cent of housing loans were above Rs.10 lakh in 2010-11 and 82.6 per cent in 2011-12. In 2011-2012, maximum loans by HFCs were distributed in Maharashtra and Tamil Nadu followed by UP and Karnataka. In the case of HFCs, 71.3 per cent of housing loans were disbursed for the purpose of constructing or acquiring a new house while 26.3 per cent was disbursed for purchase of an old or an existing house. Substantial amount of loans were extended to builders in Maharashtra (Rs. 5,244 crore), Delhi (Rs.1,731 crore) and Karnataka (Rs.1,547 crore) out of total disbursement of Rs.10,371 crore in 2011-12.

Housing Loan by Cooperative institutions

The disbursal of housing loans by cooperative institutions has decreased from Rs.868 crore in 2000-01 to Rs.530 crore in 2005-06 but then eventually rose to Rs. 11,571 crore in 2011-12.

Section 6: Housing Markets in India

Housing industry is important systemically, as it affects 269 industries (ranging large, medium and small like cement, steel, paints, building hardware, etc.), directly and indirectly. A number of efforts were made by different institutions to help develop the market. The guidelines issued by the Reserve Bank encouraged the development of the housing sector – loans extended up to a stipulated amount in the housing sector were included in the priority sector and targets were set for commercial banks to lend to the sector. In this context, HUDCO and also the National Housing Bank were instrumental in developing the housing finance markets. The government also stipulated that Life Insurance Corporation of India (LIC), General Insurance Corporation of India (GIC) and Provident Funds are statutorily required to invest in housing sector.

Banks and Housing Finance Companies (HFCs) are the major players in the housing finance market in India. While Banks are subject to regulation and supervision by the Reserve Bank of India, HFCs are regulated and supervised by National Housing Bank under the provisions of the National Housing Bank Act, 1987 and the directions and guidelines issued thereunder from time to time. The regulatory measures include prudential norms, transparent and standardized accounting and disclosure policies, fair practice code, asset liability management and other risk management practices etc. These measures have helped to ensure the development of the sector on healthy and sustainable lines.

Reserve Bank of India

The RBI mainly regulates the housing loan segment of SCBs by prescribing loan-to-value ratios (LTV) and stipulating various risk weights. The LTV ratio is one of the important parameters which are generally examined by banks, financial institutions and other lenders for assessing lending risk against a mortgage. The board mandated LTV ratio on housing loans, actual LTV at the time of sanction and the effective LTV varies over time. It is observed that the range of board mandated LTV moved over the years from 75-90 per cent in 2001-02 to 25-90 per cent in recent years to accommodate loans in the priority sector.

The risk weights have also been changing over the years and are modulated taking into consideration the RBI's perception of the market. In August 2005, the risk weight on mortgage of residential houses was raised from 50 per cent to 75 per cent. In the Annual Policy Statement of 2007-08, the risk weight on residential housing loans to individuals up to Rs. 20 lakh was reduced from 75 per cent to 50 per cent. In 2011, risk weights were raised to 75 per cent for loans above Rs.30 lakh with LTV of less than 75 per cent and for loans under LTV of greater than 75 per cent to 100 per cent. Similarly, in general, risk weights were raised to 100 per cent for cooperatives, housing boards or societies.

National Housing Bank

NHB regulates the market by extending refinance to primary lending institutions, stipulating risk weights and LTVs for the HFCs and devising different schemes/instruments to develop the housing market.

NHB extends financial assistance to banks, HFCs, and cooperative sector institutions, towards their individual housing loans. Refinance by NHB has increased substantially from Rs. 1,008 crore in 2000-01 to Rs.5,632 crore in 2005-06 and to Rs.11,723 crore in 2010-11. In 2011-12, refinance disbursements reached Rs.14,389 crore of which Rs.5,607 crore were made for the rural housing schemes. SCBs account for a major component of disbursement. Cumulative disbursement by NHB is Rs.85,087 crore by end March 2012 of which 55.9 per cent is to SCBs and 40.2 per cent to HFCs (Table 9).

Table 9: NHB Refinance Disbursements

(Rs. crore)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
HFCs	1085	11889	7055	3544	3309	5302
SCBs	4250	7328	2447	4150	8112	8851
RRBs	0	0	202	185	134	143
Co-op Sector	10	0	0	40	0	93
UCBs	30	70	150	189	168	0
Total	5375	8587	10854	8108	11723	14389

Source: NHB.

The LTV ratios prescribed by NHB are generally similar to those prescribed by the RBI. At present, LTV for housing loans below Rs.20 lakh is 90 per cent and for loans above Rs.20 lakh is 80 per cent. The risk weights vary depending on the amount of loan and the LTV and range between 50 per cent for loans less than Rs. 30 lakh to 125 per cent for loans above Rs.75 lakh, irrespective of LTV. The maximum LTV prescribed for the cooperative sector is 75 per cent.

The Rural Housing Fund (RHF) was set up in 2008, to enable primary lending institutions to access funds for extending housing finance to targeted groups in rural areas at competitive rates. With the advent of the Rural Housing Fund, many housing finance institutions have been persuaded to increase their housing loan portfolios in rural areas. This has resulted in not only a better geographical distribution of housing finance and an increased penetration of housing loans among the under privileged segments of the society, but has also brought a greater understanding of the characteristics and contours of the rural housing finance market, enabling the various players to design better and more targeted products for the rural populace. Disbursements under the Rural Housing Fund have helped in creation of dwelling units for women, marginal farmers, small artisans, members of scheduled castes and scheduled tribes and minority communities.

In May 2007, NHB conceptualized the Reverse Mortgage Loan (RML) and formulated the Operational Guidelines for RMLs. A Reverse Mortgage Loan enables the conversion of the owner's equity in his/her otherwise illiquid house asset. The owner gets a stream of fund inflows throughout his/her lifetime for meeting increased living expenses, while at the same time allowing him/her to continue to occupy the house. The Scheme involves the Senior Citizen borrower(s) over the age of 60 mortgaging the house property to a bank/HFC, which then makes periodic payments to the borrower(s) during the latter's lifetime for a maximum period of 20 years. As per latest data available, as on June 30, 2012, 24 Banks and 2 HFCs, have launched the RML Scheme and Rs. 1,699 crore have been sanctioned to 7430 senior citizen borrowers.

Reverse Mortgage Loan enabled Annuity (RMLeA) was launched by NHB in association with Star Union Dai-ichi Life Insurance Company Ltd., (SUD Life) and Central Bank of India (CBI) in December 2009. RMLeA ensured assured life-time annuity payments to the senior citizens, as against the RML which allowed maximum payment tenure of 20 years. The Scheme sources life-time annuity for the senior citizens from a life insurance company through the Bank/HFC. NHB has formulated RMLeA's Operational Guidelines for implementation by Primary Lending Institutions. The Scheme has been implemented by CBI and Union Bank of India in association with SUD Life.

Mortgage Risk Guarantee Fund under Rajiv Awas Yojana (RAY) was set up in 2011 to enable provision of housing loans to EWS and LIG households. The major objective of this Trust is to provide default guarantee for housing loans upto Rs. 5 lakh sanctioned and disbursed by the lending institutions without any collateral security and/or third party guarantees to the new or existing borrowers in the EWS/LIG categories.

Credit Risk Guarantee Fund Trust for Low Income Housing (CRGFTLIH), managed by NHB, was set up on May 1, 2012 to provide credit guarantee for affordable housing loans upto Rs. 5 lakh and facilitate, catalyze the growth of inclusive housing in the country and to ensure better flow of institutional credit for housing loans to the low income segments.

Central Registry

The Central Registry of Securitization Asset Reconstruction and Security Interest of India (CERSAI), a Government Company licensed under Section 25 of the Companies Act, 1956 has been incorporated for the purpose of operating and maintaining the Central Registry under the provisions of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act). The objective of setting up the Central Registry is to prevent frauds in loan cases involving multiple lending from different banks on the same immovable property. This Registry went operational on March 31, 2011. All transactions involving creation of equitable mortgage by deposit of title deeds, asset reconstruction and creation of security interest made on or after March 31, 2011 were registered with CERSAI. Information furnished to CERSAI includes particulars of the property, nature of encumbrance, institution with which property is mortgaged, etc.

Interest Rates

The interest rates charged on home loans could be fixed or floating but in general HFCs charge higher rates of interest (Table 10). There is no uniform reference rate for floating interest rates across the banks. In most banks, PLR of the bank is the reference rate for the floating rate. In others, whenever there is a review of PLR and/or risk weights, floating rate on housing loans is also reviewed. These rates could be reset based on the cost of funds and repriced on a quarterly/semi-annual/ annual basis. In general, the rate of interest is decided on the basis of cost of funds, operating expenses and profit margin. Approximately, 80-90 per cent of outstanding housing loans are on floating rate basis, however the range varies widely between banks from 60 per cent to 90 per cent, and some banks grant loans to real estate only under floating rates.

Table 10: Range of Home Loan Interest Rates in India-2011

(In per cent)

Category of Lending Institutions	Floating	Fixed (entire tenure)	Fixed (with reset clause)
Public Sector Banks	11.00 - 14.75	12.25	9.75 – 12.00
Private Sector Banks	11.00	11.75	-
Foreign Banks	11.00 – 13.00	11.00 – 14.00	13.25 - 15.00
Housing Finance Companies	10.75 – 17.75	10.50 – 17.00	10.75 - 15.00

Source: NHB

In the case of fixed rate loans, generally, risk premium is added to the floating rate to cover the market risk, depending on the tenure of the loan. Some banks simply determine the fixed rates based on the prevailing floating rates and anticipated behaviour of the interest rates in near future while others take into account the cost of funds, provisioning requirements and peg it at a level where outflow is not affected by the revision. In most cases, fixed rate loans are not really ‘fixed’ and the rate is subject to resets, linking to the prevailing rates, at periodic intervals, e.g., every three or five years.

Tenor of Loans

The maximum tenor for retail home loans sanctioned by banks varies from 20 years to 25 years while the minimum tenor varies between 1 year and 2 years with the average tenor ranging between 8 years and 16 years. A few banks extend loans to housing companies, co-operatives and building societies with a maximum tenor of 10 years. In the case of HFCs, the maximum tenure of loan is 15 years and for the cooperative sector is 5 years.

Interest Payment as share of income

The average share of the principal repayments and interest on account of housing loans in the monthly income of the borrowers ranges between 40.0 per cent and 65.0 per cent, and generally is around 50 per cent of the net carry home income. The norms set by banks are diversified, with the cap ranging between 40.0 per cent and 85.0 per cent of the net carry home income, depending on the income levels of the loanee. Some banks follow a graded system with the cap rising with the increase in annual income. In the case of HFCs, the limit is 40 per cent and in the cooperative sector, generally less than 35 per cent.

Prepayment Clause

The commercial banks generally charged between 0.5 per cent and 2.25 per cent as penalty for prepayment. In the case of HFCs, the maximum prepayment charge is 2 per cent and for the cooperative sector, this is not insisted upon. The Damodaran Committee Report (2011) had observed that foreclosure charges levied by banks on prepayment of home loans were resented upon by home loan borrowers across the board, especially since banks were found to be hesitant in passing on the benefits of lower interest rates to the existing borrowers in a falling interest rate scenario. As such, foreclosure charges are seen as a restrictive practice deterring the borrowers from switching over to cheaper available source. It was felt that the removal of foreclosure charges/prepayment penalty on home loans will lead to a reduction in the discrimination between existing and new borrowers and the competition among banks will result in finer pricing of home loans with the floating rate. Though many banks have, in the recent past, voluntarily abolished the pre-payment penalties on their floating rate home loans, the Committee suggested that there was a need for ensuring uniformity across the banking system in this regard. Accordingly, it was proposed not to permit banks to levy foreclosure charges/pre-payment penalties on home loans on a floating interest rate basis from April 2012 by the RBI. However, banks could continue to charge any administrative costs which range from 0.25 per cent to 0.5 per cent of the outstanding loan.

Housing Indices

At present, RBI and NHB have developed indices for housing prices.[6] Also, the index is being developed only for residential housing sector. However, at a later stage, based on experience of constructing this index for a wider geographical spread, the scope of the index could be expanded to develop separate indices for commercial property and land, which could be combined to arrive at the real estate price index.

NHBs RESIDEX will cover six new cities from the quarter January-March, 2013. The proposal is to expand RESIDEX to 63 cities, which are covered under the Jawaharlal Nehru National Urban Renewal Mission to make it a truly national index, in a phased manner. It is envisaged to develop a residential property price index for select cities and subsequently an all India composite index by suitably combining these city level indices to capture the relative temporal change in the prices of houses at different levels.

RBI is expected to finalize a quarterly Housing Start-up Index (HSUI) by the end of 2013. It is to be patterned on the Index of Industrial Production (IIP), which indicates industry numbers in the gross domestic product. The other countries which have HSUI are America, Britain, Germany, Canada and Australia. The HSUI would track new residential projects in 31

[6] NHB compiled an index of residential prices to track the price movement of real estate, particularly residential housing in India as part of wide-ranging initiatives to improve the primary market for housing finance. The NHB's RESIDEX was released on July 4, 2007 covering 5 cities viz. Delhi and NCR, Mumbai, Kolkata, Bangalore and Bhopal. RESIDEX was updated up to quarter ended December, 2012 with quarterly update (October-December, 2012). The base year was shifted from 2001 to 2007 and expansion of coverage of NHB RESIDEX to cover 20 cities in a phased manner from 5 cities. The RBI initiated the work of compiling a House Price Index (HPI) in 2007. It now compiles quarterly house price indices for nine major cites (Mumbai, Delhi, Chennai, Kolkata, Bengaluru, Lucknow, Ahmedabad, Jaipur and Kanpur) as well as at all-India level based on the official data received from registration authorities of respective state governments on property transactions with base Q4: 2008-09=100.

major cities and measure the changes in construction activities. The HSUI will cover new residential projects in all major cities including Delhi, Mumbai, Chennai, Kolkata and Bangalore, among others.

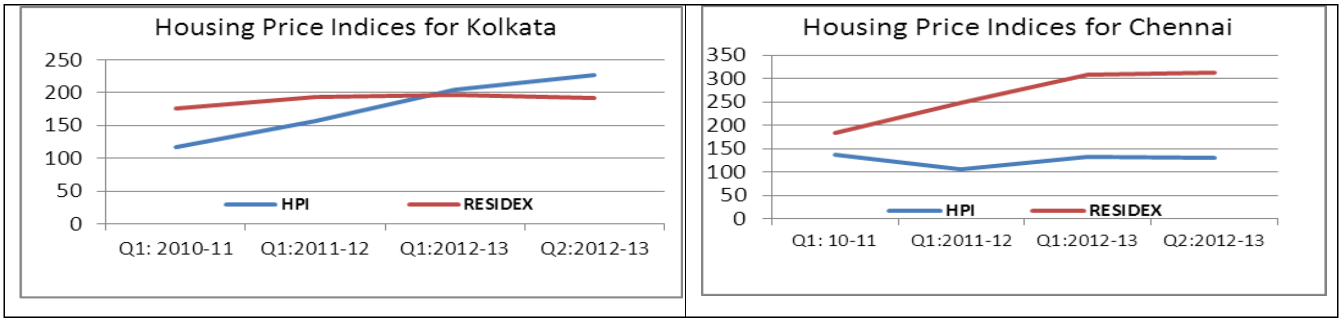
Incomplete Market

Countries with highly developed housing finance systems possess strong institutional arrangements, including well established legal rights for borrowers and lenders (through collateral and bankruptcy laws), well developed credit information system and a relatively more stable macroeconomic environment. The housing market in India is incomplete and is fraught with short comings, some of which are being addressed by the government, RBI and NHB.

There is no available database being maintained on mortgages in the country from where the banks can access information about the existing charge on property. The bank and HFCs officials lack skills to effectively appraise and monitor the home loan portfolio. The country also lacks valuers for the housing property and the banks have to rely on some valuers who are not technically skilled. Lack of transparently available information is a hindrance in this respect. To avoid frauds in such an incomplete market, a number of measures have to be initiated by the lending authorities and regulators which result in delay of sanction of loans and inconvenience to the borrowers.

The indices released by the two regulators sometimes indicate contradictory signals to the market (Graph 2) which probably could be explained by difference in coverage or methodology. The RBI’s HPI based on registration prices has some limitations. There is a perception that registration price is not the actual price paid by a buyer. It is argued that registered prices of houses are in general underestimated due to high registration fees and stamp duty; obligations for the payment of property tax; and time gaps between the actual transactions and registrations also do not always follow the similar pattern across different states. Moreover, registrations of the properties are done taking into account different criteria in different states, which necessitates further work with respect to bringing them into a common format.

Graph 2: Trend in Housing Prices for Kolkata and Chennai



Source: RBI and NHB.

There were a number of difficulties with SARFAESI which hindered realisation of bank funds under dispute. SARFAESI has significantly improved creditor protections for secured bank lenders, but its application is limited to banks and HFCs registered with NHB. Restrictions on how quickly debt can be enforced cause delays; as a result, debtor business is often broken up and sold, instead of being sold as going concern. Access to credit is further constrained by a complex and difficult system for registering security interests. The amendment to SARFAESI in December 2012 whereby banks can purchase the mortgaged property at a reserve price in an auction in the absence of other bidders is expected to further help in the recovery process.[7] SARFAESI's Central Registry does not operate as an effective, efficient notice of security interest. There are many disparate registries (Registrar of Companies, Patents Registry, Trademarks Registry, Motor Vehicle Registry, and Industrial Design Registry). The Central Registry does not replace these other registries. Moreover, registration at the Central Registry is not dispositive; a third party whose interest is registered in one of the other registries maintains rights to the collateral. Thus, a creditor must search several registries to ensure his rights.

Land being an important component of housing is scarce in the urban areas. According to anecdotal estimates cost of land accounts for more than 80 per cent in Bangalore and 90 per cent of the final price of the house in Mumbai. There is a lack of land records, and titling system.

[7] There are some concerns regarding the amendment, especially on the determination of reserve price and the efficiency of the auction system where the bank can itself purchase the property. The RBI has yet not provided guidelines on the risk weights of repossessed property, period for which it can be retained on the books of the banks and the total amount of such repossessed properties that the bank can hold.

There is also lack of appropriate land laws for acquisition for the purpose of housing. In absence of appropriate laws for acquiring land for housing, there have been instances where government agencies have procured land from farmers at low rates and auctioned it to real estate developers at very high rates. This not only adds cost to housing but also leads to protracted litigation and delays.

There is no standardization of the documents that are required for seeking bank finance nor is there any regulator of housing. Consequently, list of required documents for securing loans from the financial institutions varies across banks, and also depends on the city/state and the type of property.

Section 7: Housing Market in the US and Spain

USA

In the US, there are a large number of players involved in the housing finance sector. The US housing finance system has been continually evolving from being an informal institutional arrangement to a complex system within which various intermediaries compete to perform three essential function of funding, lending and servicing adhering to government's objectives of promoting home ownership. The evolution has come in response to economic shocks such as great depression, rising Treasury bill rates in 1960s and innovations such as mortgage products, securitization and risk management tools.

In the post Great Depression period, large scale bank runs, insufficient values of collateral and overall insolvency of the banking system occurred and in response to it Federal Home Loan Banking System evolved in 1932 followed by Home Owner's Loan Corporation (HOLC) 1933 and the Federal Government created the Federal Housing Administration (FHA) in 1934. FHA was entrusted to provide insurance against mortgage defaults and authorise private mortgage insurance companies to issue bonds and buy primary mortgages from primary market lenders. HOLC along with Reconstruction Finance Corporation (RFC) was created to liquidate nonperforming bank loans and bail out insolvent lending institutions.

In 1938, Fannie Mae was created to support liquidity, stability and affordability in the secondary market. The Veterans' Administration (VA) mortgage programs were created in 1944 as a temporary readjustment programs for returning veterans. During mid-60s US economy faced high rates of inflation and interest rates; in 1968 Ginnie Mae (GM) was created to enhance liquidity in the financial market. GM is a government agency to securitize government insured mortgages by FHA and VA. In 1970 Freddie Mac was created as a part of Federal Home loan Bank with an objective to stabilize the nation's residential mortgage markets, expand opportunities for home ownership and affordable rental housing. The market for Mortgage Backed Securities (MBS) was formed during this period. The shift to mortgages being funded by capital markets rather than by depositories continued through 1990s and 2000s. In view of the recent financial crisis, with housing sector in the epicentre, Freddie Mac and Fannie Mae were put under conservatorship of Federal Housing Finance Agency (FHFA) in 2008. Their mandate is to keep money flowing to mortgage lenders and to make sure people can buy or rent housing. They claim to have one of the largest foreclosure prevention operations to help struggling home makers keep making their mortgage payments and avoid losing their homes (Table 11).

Table 11: History of Housing Finance in the United States

Date of creation	Institution	Reason for creation
1932	Federal Home Loan Banking System	Provide funds to building loan associations.
1933-36	Home Owner's Loan Corporation	Acquire defaulted mortgages and reinstate them as fixed rate 20-year amortized loans
1934	Federal Housing Administration	Stimulate housing construction by encouraging mortgage investment via offering home loan insurance
1938	Federal National Mortgage association (Fannie Mae)	Facilitate a secondary market for FHA insured mortgages.
1944	Veterans Guarantee Program	Assist veterans in their transition to civilian life
1956	First modern private insurance company was created	Demand for private insurance was driven by the limitations of the loan size insurance by FHA and the down payment requirements of FHA. Private insurers also provided the credit enhancements required by Freddie Mac & Fannie Mae for purchasing (or guaranteeing) mortgages with loan-to-value ratio above 80%
1968	Fannie Mae was split into the Government National Mortgage Association (Ginnie Mae) and the privately held Fannie Mae was authorised to buy and sell non-government backed mortgages to raise additional funds for mortgage originators.	Liquidity challenges in 1966 which constrained mortgage availability due to rising Treasury yields.
1970	Freddie Mac	Securitize mortgage issued by savings and loan associations.
2008	Federal Housing Finance Agency	Oversight authority for Fannie Mae and Freddie Mac under conservatorship
2008	Government Sponsored Enterprise Credit Facility	Ensure availability or credit for Fannie Mae and Freddie Mac
Sources: Housing and Urban Department US and Tsounta, E (2011).		

In years before the crisis, the US economy experienced a strong cycle in the housing market supported inter alia by particularly large volumes of high risk sub-prime mortgage lending causing prices in certain regions to rise sharply when measured against the yardstick of affordability calculated as the ratio of housing prices to annual income, reflecting a build-up of the asset bubble. Trends show that the median price of a new house in the US was almost five times the median household income. Besides, even as housing prices rose strongly, the rental values continued to remain subdued indicating the presence of speculative forces. The bursting of the house price bubble and the 2007-08 crises left US consumers with record high leverage (ratio of household liabilities to net worth). The soft-touch regulation and supervision of banks by the US Fed was one of the reasons for such irrational exuberance.

Since 2008, numerous measures have been initiated by the US Government and Fed to address the financial crisis. Despite this, there continue to remain important risks to the U.S. financial system and its ability to support the economic recovery. The balance sheets of banks continue to remain fragile and capital buffers may still be inadequate in the face of further increases in non-performing loans. The economy and financial system remain vulnerable to an unexpected weakening of demand, credit quality in the commercial real estate sector, and housing prices. The housing GSEs (Fannie Mae, Freddie Mac, and the FHLB system) have helped both underpins and unhinges the U.S. financial system, but require fundamental reform. These entities were pivotal in developing key markets for securitized credit and hedging instruments, but their implicit guarantee and social policy mandates contributed to a softening in credit discipline and a build-up of systemic risk.

Total assets of these entities have broadly stabilized and their net worth is now roughly zero, but their guaranteed MBS pools have grown dramatically, with the Fed as the predominant buyer throughout 2009. The share of U.S. single-family residential mortgage originations financed (retained) or guaranteed (securitized) by the two GSEs increased from 54 per cent in 2007 to 78 per cent in the first three quarters of 2010, in addition to which they are actively involved in the various government mortgage modification programs. Fed purchases of agency MBSs were terminated at end-March 2010. The GSEs are also among the largest participants in the market for OTC interest rate derivatives, which is another aspect of their systemic importance.

In the face of the crisis, government support for the housing market is extensive, with the housing GSEs as cornerstones. These entities play important roles in maintaining liquidity in the market for MBSs, with their guarantees assuring a plentiful supply of credit risk-free "rates products." Their statutory privileges bestow a risk insensitive funding advantage that incentivizes growth and leverage. Fannie and Freddie's Senior Preferred Stock Purchase Agreements committed the Treasury to providing unlimited capital support to these entities through 2012 and capped but large amounts thereafter.

Housing market continues to be weak, construction activity and sales are low and with a large inventory already in the market, recovery is expected to be subdued over the medium term, though housing is recovering and improving consumption too.[8] The delinquency rate[9] in the US which had peaked to 11.3 per cent in Q1 2010 declined to 10 per cent in Q4 2012. However, housing start-ups have been increasing in recent months (IMF, 2012). In later half of 2011, IMF estimated 2.3 million houses facing foreclosure with additional 1.8 million houses at risk of foreclosure. Several foreclosure mitigation policies – Home Affordable Modification program (HAMP), HAMP-Principal Reduction Alternative (PRA), and Hope for Homeowners (H4H) have indicated limited success as yet. However, these could have a considerable effect on economic activity by avoiding undershooting of house prices. The principal write downs could be pushed harder in HAMP, so as to increase sustainable modifications. In addition to PRA program under HAMP, a plan to bring loan-to-value (LTV) ratios below 100 per cent could be looked at. Attempts are being made in encouraging the government-sponsored enterprises and others to participate in the HAMP-PRA program (IMF, 2012).

In addition, efforts are being made to replace GSEs like Fannie Mae and Freddie Mac in the secondary mortgage market. Also, proposals are being considered for building a new infrastructure that would help in creating a single securitization platform, a standardized pooling and servicing agreement and databases that would increase transparency for borrowers and investors. In February 2012, FHFA set out a strategic plan outlining a strategic goal of maintaining foreclosure prevention efforts through loan modifications, increased focus on short-sales and other foreclosure alternatives, and the implementation of real estate owned initiative.

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[8] Page 1, IMF (2013).

[9] Source: http://www.federalreserve.gov/releases/chargeoff/delallsa.htm

Spain

In Spain, there are two regulatory bodies, Banco de Espana, central bank of the country and Comision nacional Del Marcado de Valores, national securities market commission. The housing finance is mainly raised from banks, both domestic and foreign, while mortgage brokers play an important intermediation role. In addition there are housing cooperatives and housing companies that are active in the housing market. CONCOVI is the confederation of Spanish housing cooperatives collaborating with other social actors to promote housing. AVS, is a national housing association representing public housing companies which construct social housing and are financed by capital markets

The study of housing finance in Spain has to be in the overall context of the OECD region, where between 1970 and the mid-1990s, of the 37 large upturn phases, 24 ended in downturns in which anywhere from one third to well over 100 per cent of the previous real term gains were wiped out. This, in turn, had negative implications for activity, particularly consumption (OECD, 2005).

Historically, as a backdrop to the current housing scenario, the collapse of the real estate market had a significant role in the Spanish banking crisis. Tracing it back to the 1970s, when the financial systems were being liberalised, there were several instances of private banks escalating the growth of their annual accounts, by way of offering advantageous rates to prospective customers and even riskier clients were given undue importance. Late 1970s saw a sharp tightening of monetary policy. The marginal businesses were hit hard due to adverse economic conditions, building activities faced recession and real estate prices had over a 30 per cent fall. Real estate and other high risk projects were areas in which numerous banks had concentrated their risks on and so by 1983, over 50 banks went bankrupt.

In Spain, the government encouraged the housing sector through the 1980s by providing substantial tax concessions on ownership of residence. In the 1980s, official subsidised housing represented about 60 per cent of total number of housing starts. Over the 1990s, subsidies represented between 20 to 50 per cent of the final price of housing depending on the region, and income of the recipient. Banks offered 40 year and sometimes even 50 year mortgages. The banking regulator was not insisting on observing some key provisions, norms and other documents for housing registration. The financial institutions were providing finance to individuals, as well as to builders and contractors. In some cases, financial institutions held direct stakes in construction firms, and building developers. The role of foreign banks was also significant accounting for nearly 15 per cent of total credit to housing in Spain (Manzano, 2004). In Spain, asset securitization was initiated in 1981 and mortgage bonds were issued. In 1992, securitization through special purpose vehicles was introduced. In 1998, securitisation procedures were further liberalized and issuance of asset backed securities was accelerated from 2000 when non-mortgage assets were first securitized, and by 2003 synthetic securitization was legally authorised. In 2007, outstanding covered bonds amounted to over 40 per cent of the residential lending and mortgaged backed securities accounted for another 20 per cent. The main holders of Spanish based asset securities were foreign investors.

The house prices rose by nearly 200 per cent between 1996 and 2007 and the mortgage debt to GDP ratio increased from 29.9 per cent in 2001 to 61.1 per cent in 2007. Consequently, in a country with about 17 million families and 23 million houses, the housing bubble was waiting to burst. As of 2008, nearly 25 per cent of the houses were unoccupied. After the burst, home prices declined by about 26.1 per cent by 2011 from a peak in 2008 and are expected to decline further. According to the IMF (2012), housing prices are still high as also the stock of unsold houses. IMF (2013) explains the weak tail of firms due to construction and seeks greater vigilance of supervisors on bank asset quality as banks are holding hard-to-value real estate assets.[10]

In 2011, construction activity and employment, and the growth of new mortgages, have all fallen sharply since 2008, in line with the experience of other countries with housing busts. Construction employment in 2012 was 8½ per cent of total employment, compared with a peak of 13 per cent and an average over the last 30 years of 10 per cent. Despite the large flow adjustment, an overhang remains, requiring further adjustment going forward: house price adjustment seems about two-thirds completed, assuming no overshooting, and the stock of unsold units may take another four years to clear. The government has made plans for amortization of foreclosed assets and higher provision norms for banks balance sheets. In August

[10] Page 18, IMF (2013)

2012, SAREB, a Spanish asset management company, was established to cater to the bad loans on housing and clean the balance sheet of the banks.

The NPL ratio for retail mortgages in Spain remains low relative to the magnitude of house price declines and the scale of unemployment (IMF, 2012). Indeed, at 3.7 per cent at end-September 2012, the NPL ratio for domestic residential mortgages is a mere one-third of the average NPL ratio for all loans. This resilience reflects a combination of several factors, including: full recourse nature of Spanish mortgages, which provides strong incentives for payment; relatively low loan-to-value ratios for mortgages; and significant action to modify loans and foreclose on them (which, as long as loans are sufficiently provisioned for, do not per se indicate any hidden weakness in banks' balance sheets, but rather proactive asset quality management).

Significant differences remain in the institutional features of mortgage markets between the two countries. In a regression for Spain, spanning a period of last 40 years - 1970 to 2010, important determinants of house price index were affordability, working age population, and availability of credit. In contrast, in the US, important determinants of house price index were interest rates (Table 12). In India, according to preliminary data analysis, income levels are an important determinant of housing prices but not interest rates as presented in Graph 3.[11]

Table 12: Modelling House Price Changes

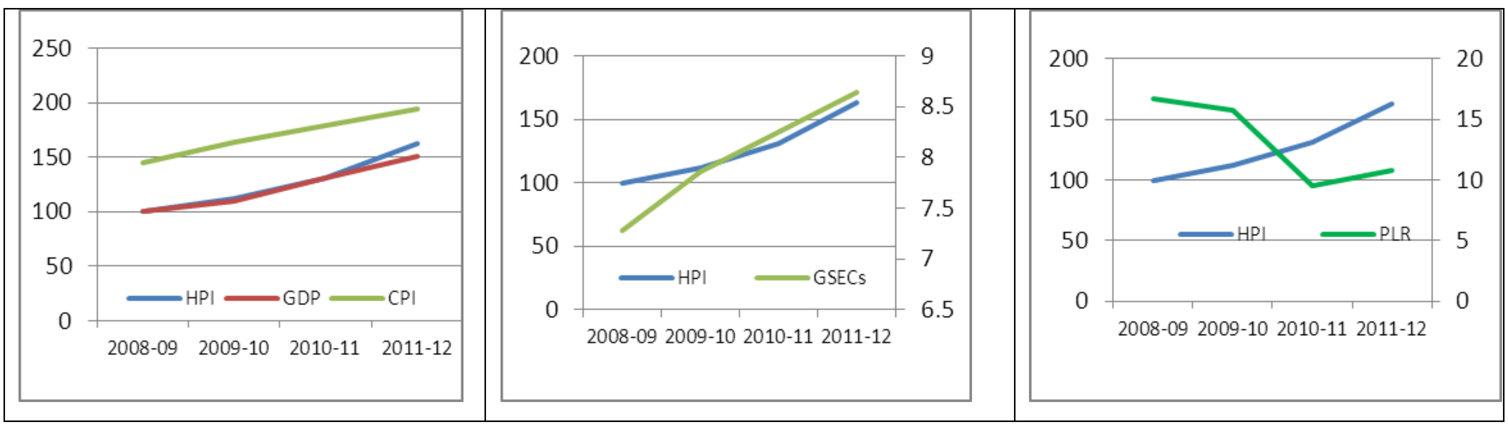
	Dependent variable: House Price index change	
	Spain	**United States**
Affordability, lagged	-0.0650** (0.0117)	-0.0071 (0.0082)
Income per capita, change	0.0764 (0.2940)	-0.0755 (0.1030)
Working age population, change	2.645*** (0.5740)	0.531* (0.2800)
Stock prices, change	0.0013 (0.0093)	0.0108 (0.0070)
Credit, change	0.159*** (0.0383)	0.100*** (0.0171)
Short-term interest rate	-0.0006 (0.0017)	-0.00162*** (0.0005)

[11] The finding is based on simple data plots in Annex 1 for 16 cities.

Long-term interest rate	0.0027 (0.0021)	0.00135* (0.0007)
Constant	-0.389*** (0.0645)	-0.0495 (0.0546)
Observations	95	155
R-Squared	0.56	0.32
Estimation period covers 1970Q1 to 2010Q1. Affordability is defined as the log of the ratio of house prices to income per capita. Log change in income per capita is calculated as the quarter-on-quarter change in the log level. Log changes in working –age population and bank credit to the private sector are calculated as the year-on-year change log levels. Log change in stock prices is calculated as the lagged year-on-year change in the log level. All variables are in real term except short term and long term interest rates. SEs are denoted within parenthesis. ***, **,* denotes Level of significance 1%, 5% and 10% respectively.		

Source: Igan and Lougani (2012).

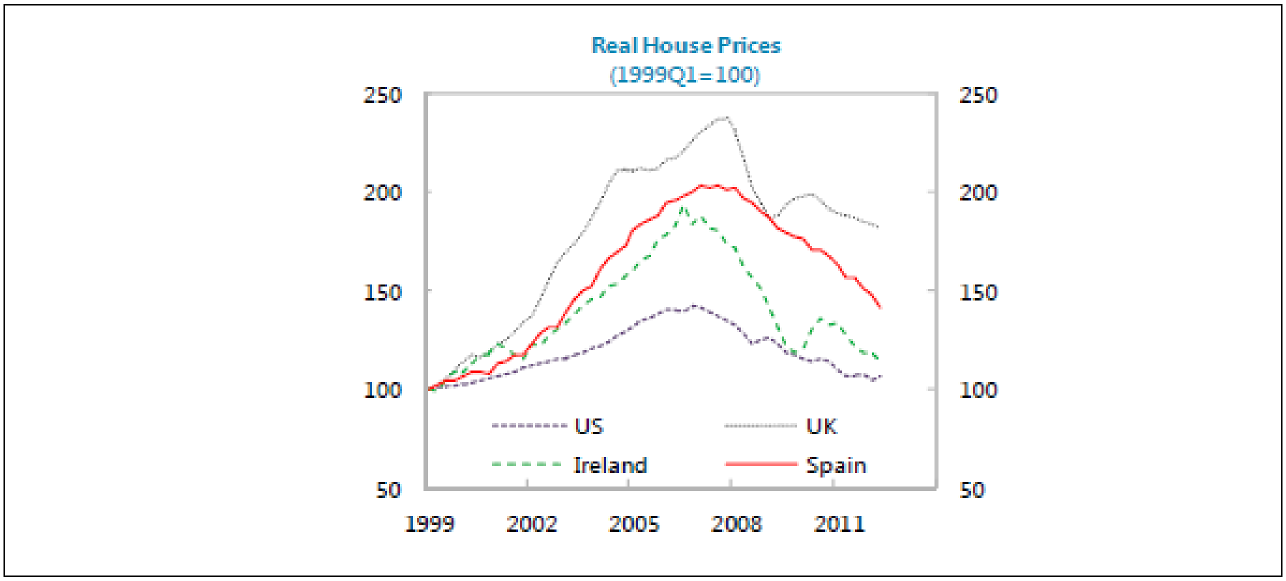
Graph 3: All India



Notes: Annex 1.
Source: RBI and NHB.

The prices in the US and Spain have been declining since 2007-08, a correction that was long overdue. The correction has been substantial in case of Spain but relatively moderate in case of the US (Graph 4).

Graph 3: Real House Prices in Spain and the US



Source: IMF (2012).

The decline in housing prices has a significant impact on macroeconomic variables as was discussed earlier in the section on literature review (Table 13).

Table 13: Macroeconomic Impact of House Price Corrections

Maximum Impact of a negative Shock to house Prices							
Country	Decline of 10%			Decline of 2 Standard deviations of the quarterly change in real house price index			
	GDP	Consumption	Residential Investment	GDP	Consumption	Residential Investment	Shock Size
Spain	-1.76	-2.50	-7.01	-0.93	-1.32	-3.71	5.29
USA	-1.89	-2.78	-20.20	-0.42	-0.62	-4.48	2.22
The VARs are estimated for the period from 1986Q to 2010Q1. Variables as follows: real GDP, real private consumption, real private residential investment, real house prices. Variables are transformed for estimation into log-levels.							

Source: Igan and Lougani (2012).

Section 8: A Comparison between India, Spain and US

The main features of housing markets in three countries are summarized in Table 14. In all the three countries, commercial banks play an important role in mortgage finance.

Table 14: Housing Finance Features

Economy	Main Lenders	Mortgage Funding			Mortgage Loan Features			
		Deposits/Other	Covered Bonds/ Residential Loans Ratio (%)	Residential Mortgage-Backed Securities/ Residential Loans Ratio	Predominant Interest Rate Type	Maximum LTV on New Loans	Typical Loan Term (years)	Prepayment Penalties
India	Banks and Housing Finance Companies	Deposits and capital markets, refinancing from National Housing Board	0.0	negligible	Floating	90	25	Ranging from Nil to 2.25 per cent
Spain	Banks (Commercial and Savings) and mortgage brokers	Some, plus covered bonds and securitization	45.6	24.1	Variable	100	30	2.5% up to yield maintenance.
USA	Banks and mortgage brokers	Mainly Securitization	0.1	64.1	Fixed	100+	30	Up to 5% on Adjusted Rate Mortgages only.

Source: IMF (April 2011) and Authors calculations.

The government has been extensively participating in the housing market (Table 15). Government Participation Index was constructed from a weighted sum of eight types of measures (each taking value 1 if it is present in the country otherwise 0). The index does not quantify the depth of government participation but provides snapshot of the breadth of its presence in the housing finance market.

Table 15: Index of Government Participation in Housing Finance Markets, 2008

Country	Government Support Categories and weights									
Category Weight	Category (A)-(D) 0.25			Category (E) 0.25		Category (F)-(G) 0.25		Category (H) 0.25	Category (I)	Category (J)
Subcategory Weight	0.0625	0.0625	0.0625	0.0625	0.25	0.125	0.125	0.25		
	Subsidies to First-time or other Buyers Upfront	Subsidies to Buyers through Savings A/C Contributions or through Preferential Fees	Subsidies to selected Groups, Low and Middle Income	PF early withdrawal for House purchases	Housing Finance Funds, Government Agency provides Guarantees, Loans	Tax Deductibility of Mortgage Interest	Capital Gains Tax Deductibility	State-owned Institution Majority Market player in Mortgage Lending> 50%	Index of Government Participation (higher weight to subcategory) (H)	Alternative Index of Government Participation (equal weights to the eight subcategories)
India	1		1		1	1	1		0.63	0.63
Spain		1				1	1		0.31	0.38
United States			1		1	1	1		0.56	0.50
Note "1" indicate the existence of the government participation measure; Column (I)= 0.0625*{(A)+(B)+(C)+(D)} +0.25*(E) +0.125*{(F)+(G)} +0.25*(H); Column (J)=0.125*{Sum of (A)-(H)}.										

Source: IMF (April 2011).

The development of the housing markets is reflected in the availability of housing data, which is most extensively available for the US (Table 16). In the US, the value of construction statistics are published since 1960, which entails dollar value of construction work, cost of labor and materials, cost of architectural and engineering work, overhead costs, interest and taxes paid during construction, and contractor's profits. Construction Price Index is also computed; the data is available from 1959.[12]

[12] United Census Bureau - http://www.census.gov/construction/c30/c30index.html

Table 16: House Price Data Availability

Country	Definition	Source	Original Frequency	Time Span
India	Residex, 15 cities HPI – 9 cities	National Housing Bank and Reserve Bank of India	Semi - Annual Quarterly	2007- 2008-
Spain	Perico medio del m de la vivienda, mas de un ano de antiguedad	Banco de Espana	Quarterly	1971-
USA	Nationwide single family house price index	Office of Federal Housing Enterprise Oversight/Federal Housing Finance Agency	Quarterly	1970-

Source: IMF (2011) and Authors calculations.

In the case of all the three countries, given the importance of housing markets, corrective measures were introduced to contain the impact of crisis which has been considered successful (Table 17).

Table 17: Crisis Measures

Economy	Year	Measures
India	November 2006-10	Loan-To-Value ratio limited to 80 per cent for residential loans; increase in risk-weights of housing loans (above Rs. 7.5 Million) to 125 per cent.
Spain	2007-10	Reduction of fees for changes in mortgage conditions; increase in public guarantees for certain mortgage securitizations; temporarily deferred loan payments for unemployed; strengthening in credit institutions provisions for nonperforming loans.
USA	2008-10	From a supervisory perspective, tightened real estate evaluation and appraisal guidelines, enhanced disclosures for home mortgage transactions and implemented registration requirements for mortgage loan originators; adopted policy supporting prudent commercial real estate loan workouts; and created an independent Consumer Financial Protection Bureau. From a housing support perspective, expanded scope of Community Reinvestment Act regulation to support communities affected by high foreclosures level; and introduced programs to promote sustainable loan modification. The Federal Reserve also purchased $1.25 Trillion of agency Mortgage Backed Securities to reduce the cost and increase the availability of mortgage credit. From a financial stability perspective, injected capital and placed Fannie Mae and Freddie Mac in conservatorship.

Source: IMF (2011) and Authors calculations for India.

In all the three countries, government levies tax on housing capital gains (Table 18). In India, if property sold within 3 years, short term capital gains treated as income and taxed at marginal rate for individual but if property sold after 3 years, then capital gains tax of 20 per cent is levied.

Table 18: Tax on Housing Capital Gains

Country	**Tax in Place**	**Tax Rate (Max)**	**Remark**
India	Yes	20 per cent	There is a stipulation, if proceeds from sale invested in another property.
Spain	Yes	18 per cent	No taxation if reinvested in new primary residence or sale after age 65
USA	Yes	25 per cent	Exemption if owned-occupied during 2 of the 5 years with upper limit ($ 250000/$500000)

Source: IMF (2011). Authors Estimates for India.

The tax exemptions for owner occupied houses that are owner's main residence varies across countries and generally are very liberal (Table 19).

Table 19: Mortgage Interest Payments Tax Deductibility

Country	**Tax in Place**	**Tax Rate (Max)**	**Remark**
India	Yes	Varies. Can be as high as 60 per cent	Exemptions are regularly awarded for a year or extendable to two years in some cases; and generally announced in the Union budget.
Spain	Yes	43 per cent	From January 1, 2011, there is no deduction for tax payers earning over € 24,107 per year. Full deduction is available for incomes of up to € 17,700 per year (15 per cent of the annual amount paid on mortgage chargers up to a maximum of € 9015) and some deductions is available for in between incomes.
USA	Yes	35 per cent	Tax deductibility up to a limit on the amount of mortgage principal ($1 million)

Source: IMF (2011). Authors Estimates for India.

In the mortgage market, equity withdrawal is permitted and mortgage interest tax relief is partially offered (Table 20). Home ownership in Spain is highest amongst the three countries.

Table 20: Characteristics of Mortgage Markets

Country	Mortgage Equity Withdrawal	Refinancing	Mortgage Interest Tax Relief	Share of fixed rate Mortgages (%)	Home Ownership Ratio (%)	Residential Mortgage Debt Outstanding (% of GDP)
India	Yes	Mixed	partially	5	80	7
Spain	Partially	No	Partially	7	82	46
USA	Yes	Yes	Partially	65	67	80

IMF (2006) and Igan D, et al (2009). Authors calculations for India.

The business cycle variations can be attributed to differences in the countries' financial system and housing markets such as the share of mortgage debt, owner-occupation rates and pervasiveness of variable rate mortgages (Igan et al, 2009). In particular the possibility of mortgage equity withdrawal and refinance is likely to fasten and strengthen the transmission of house price shocks to household consumption and bear on the monetary transmission mechanism, with changes in interest rates having a stronger effect on household's cash flow, consumption and output. In the US, mortgage equity withdrawal is permitted as also refinance. The average typical term of loan is 30 years (Table 21). Mortgage Market Index, as expected, shows that housing market are more developed in the US than in Spain (IMF 2009).

Table 21 :Institutional differences in National Mortgage Markets and Mortgage Market Index

Country	Mortgage Equity Withdrawal[1]	Refinance (fee-free Payment)[1]	Typical Loan to value Ratio (%)[1]	Average Typical term (years)[1]	Covered Bond issues (% of residential loans outstanding)[2]	Mortgage backed securities issues (% of residential loans outstanding)[2]	Mortgage Market Index [3]
India	Yes	Mixed	80	20	Neg	0.1	
Spain	Limited	No	70	20	11.1	5.7	0.40
USA	Yes	Yes	80	30	0.0	20.1	0.98

Sources: IMF (2011). Authors calculations for India.

Section 9: Conclusions and Policy Recommendations

The housing sector plays an important role in any economy. As extensively documented in empirical literature any shock to the housing sector significantly impacts consumption and economic growth. Spain and the US are classic cases where the crisis erupted from the housing sector and even after half a decade, economic recovery though started, continues to be sluggish.

In a matured economy like that of the US, institutional arrangements to facilitate a well-developed housing sector were planned nearly a century ago. It is probably because of these institutional arrangements that despite such a severe financial crisis, the US economy has been able to withstand the shock of a great recession. Therefore, decline in housing prices during the recent financial crisis has been less than that in some countries of Europe, including Spain. However, in both the cases, given that commercial banks were the major players in the housing market, one factor that emerges clearly is the soft touch regulation of the banking system.

In India, there is a big gap in the housing finance market which is being addressed mainly by the Central government. In recent years, financing to the housing sector has been liberalized by the government and RBI. There are a number of players in the housing market and each player has a unique niche. These are commercial banks, housing finance companies, cooperative banks and non-bank finance companies. And then there are builders, developers and contractors, both in the private and public sector. Some of these market players are not covered by any regulator or supervisor while the financial aspects of many, but not all, are regulated by the RBI and NHB, who have been making concerted efforts to strengthen the housing market. As the non-financial aspects which could vary across states are not under any dedicated regulator or supervisor, at the Centre or States, housing is developing in an ad hoc and unplanned manner across the country. Consequently, a situation has emerged where 62 per cent of the newly constructed houses between 2007 and 2012 are unoccupied.

Housing generally embodies lifetime savings of many individuals and therefore the government, state and Centre, needs to be sensitive to housing sector. In the absence of any regulator/ supervisor for the housing sector, many practices in the housing sector, including financial, are non-transparent. There is need to bring parity in the housing market by having similar rules and regulations governing these players, and standardization of the products, including lease agreements that are being finally offered to the consumer. Housing, being a state subject, there is a need to make and strengthen the new and existing laws, preferably, at the state level. Thus, this would also imply that there is a need for a regulatory and supervisory body on housing sector both at the Center and States.

In view of the fact that housing is a personal wealth, its demand is closely related to socio-economic strata of the population. For instance, in some parts of India, joint family may still be preferred while in other parts, nuclearisation of family may be in vogue. Similarly, housing requirement, in terms of size and construction material, is dependent not only on the size of the family, but also climatic and geographical conditions in the region; the type of house required would vary across different regions in India. Therefore, there is need to undertake in-depth research on housing for each specific state, assessing the housing requirements in different regions, climate and socio-economic strata of the society.

The housing shortage determined by factors like congestion, obsolescence and homelessness needs to be revisited to effectively decipher the variations across states and effectively mitigate them. A number of housing committees constituted by the central government have concluded that urban areas suffer from chronic housing shortage, which was estimated at 18 million houses in 2012 having declined from 25 million houses in 2007. These estimates are mainly based on an assumption of a specific and uniformly applied nation-wide congestion factor. But there seems to be no specific survey undertaken to solicit the views of the general population in different regions/cities, by the Committee or the government, both State and Centre, of on the basis of which this one congestion factor has been computed. In the estimate presented by GOI, no adjustment has been made for different cultural practices in different segments of the population spread across different climates and geographical terrains of India. The congestion factor, as computed by Committees, is mainly based on the assumption that a married couple did not have an exclusive room to itself in the house. Therefore, what is being called as a housing shortage could, probably to a significant extent, be a “room” shortage. The public announcement of the housing shortage of 25 million houses in 2007 has led to an atmosphere of ‘artificial’ scarcity, impacting the house prices with direct consequences for land prices. The house prices are rising rapidly in almost all the cities across the country.

Illustratively, at present there exists excess supply of luxury housing while still there continues a substantial shortage of EWS and LIG housing. When planning for EWS and LIG housing, it may be necessary to consider the climate and rural-urban divide. In some states like Kerala the rural urban divide is not defined clearly while in Punjab the divide is sharp. Therefore, a standardised uniform across-the-country land area requirement for EWS and LIG may not be the right approach to address the issue of congestion. Thus, there may be a need for adopting a survey based approach to understand the intricacies associated with requirements and preference of mode of residence across various socioeconomic levels and geographical regions before computing all-India figures of housing shortage.

In case, such a substantial shortage is established, then India needs to consider various ways to meet the needs for substantial amount of cement, iron and steel, sanitary ware, plumbing material, wood and other materials, including raw materials and energy, in terms of electricity. The country does have some installed capacity but it would be far too short to meet the demand for such a huge expansion of housing stock in the country. India, probably, could consider other options and can take advantage of the grim economic situation in housing markets of Spain and the US, and import necessary material for undertaking such expansionary housing projects. In view of the prevalent economic situation in these countries, there is unutilized capacity in their industry and idle shipping capacity across the world. India could consider import at lower prices or subsidized rates, substantial amount of raw materials, pre-fabricated walls, doors, windows, ceramic products, and plumbing material through easily available shipping. In addition to raw materials, India could also consider importing wooden fittings, given that India has poor forest cover. India can also import technology and know-how to build 1,000 apartments in one building with centralized facilities, even if necessary, including air conditioning. The US also has experience in building affordable housing for the poor and India can take advantage of that too. This scheme can help in spurring growth in our economy as well as enable the US and Spain to spur their industrial production. Probably, pursuing a Housing Treaty with the two countries could also be very productive at this juncture of political economy.

In India, urbanization has been progressing rapidly from around 11 per cent in 1901 to 31 per cent in 2011 and is expected to reach 41 per cent by 2030 or a little more than 600 million persons in 2030 from about 360 million persons in 2011. It is in this context, that India will have to examine the use of scarce land in urban areas in terms of expansive cantonments in the heart of expanding cities, old and unused airports and large prisons, all of which were originally designed to be on the outskirts of the urban centres. As this is a State subject, state governments will need to be active in urban and town planning, to avoid unplanned growth and damage to natural and ecological balance specific to each state. To ensure planned urbanization, there is a need for active town planning, undertaken at the state and town level and aggressively implemented across the state, to avoid congestion, traffic problems and slums; allocate land for recreation, parking facilities, and garbage disposal; facilitate arrangements for sewerage, and sanitation; help design buildings, both residential and office, which are environmentally friendly and conserve energy; ensure allocation of land for schools and colleges; higher occupancy of houses for EWS and LIG; and optimal use of land in terms of roads, parks and green cover.

The housing price index is being released by NHB and the RBI. The index prepared by the NHB is more extensive though it comes with a lag. While the Index prepared by the RBI has an All-India figure which NHB does not release. The problem is that the trend indicated by the indices released by the two institutions is not always similar and therefore, the usefulness to the consumer is impacted. There probably is a need to have a housing index by a single authority, like the wholesale price index which is released faster than the Consumer price index and is indicative of the price trend.

As land is the most important cost factor in the construction of a house in India and though the prices of land have been rising rapidly across the country, there is no data base on the same available in the market. The housing prices reflect land prices which probably get captured in the housing price index but a separate Land Price Index would bring transparency in the housing industry and also help in understanding the trend in prices of land. To build such an index, there would be a need to modernise land records and property registration and also undertake full land mapping with ownership details. As issues related to land are under the jurisdiction of the state, it will be important that there is close coordination between the Center and state governments to generate such indices. There also remains a significant gap in terms of reforms in law related to rent control, urban land ceiling, property rights, and real estate regulation bill and would also need the attention of state governments.

Finally, as housing is an important issue for the citizen and the national economy, there is need to strengthen Housing related institutions like NHB and NBO and encourage them to undertake extensive research and build supporting infrastructure like historical data base of builders, developers and housing contractors, and data base on construction costs across the country as is readily available for many advanced counties like the US. To encourage research, NHB and NBO could conceive a Handbook of Housing Statistics, providing long term data series on various parameters related to housing, which could be made available on their websites and otherwise in hard copy. Also, all housing related reports, and official documents and circulars on housing sector can be made available on a convenient location for not only a researcher but any interested citizen. The central and state governments need to encourage research on housing sector as a healthy housing sector can ensure a strong national economy.

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Annex-1
Determinants of Housing Demand in India
IA: Summary Statistics – 2008-09 to 2011-12[13]

	States/Cities	GDP /GSDP Index [14]	GSECs[15]	PLR[16]	Consumer Price Index [17]
House Price Index	All India	+	+	No	+
	Bangalore	+	+	No	+
	Lucknow	+	+	Mixed	+
	Kanpur	+	+	No	+
	Jaipur	+	+	No	+
	Kolkata	+	Mixed	No	+
	Chennai	Mixed	Mixed	No	Mixed
	Mumbai	+	+	Mixed	+
	Delhi	+	+	Mixed	+
	Ahmedabad	+	+	Mixed	+
RESIDEX [18]	Hyderabad	+	Mixed	Mixed	Mixed
	Surat	Mixed	+	Mixed	+
	Pune	+	+	Mixed	+
	Faridabad	+	+	Mixed	Mixed
	Patna	Mixed	Mixed	No	Mixed
	Kochi	No	Mixed	No	Mixed
	Bhopal	+	+	Mixed	+

[13] It needs to be mentioned that for housing prices and CPI, data has been used specific to the city concerned except Patna. In the case of Patna, the CPI for Jamalpur was considered. GSDP is the income at current price for the state in which the city is located, converted to an index with 2008-09=100. To proxy the interest rates, GSecs on 15-year bond and Prime Lending Rate (PLR) were considered. These rates are not city specific and therefore a single series was plotted against the HPI/RESIDEX across all the 16 cities. There was a decline in GSecs and PLR in 2009-10 which has been considered while interpreting the trend.

[14] GSDP at current prices figures are published by CSO. (http://mospi.nic.in/Mospi_New/upload/State_wise_SDP_2004-05_14mar12.pdf).

[15] GSECs (Government dated securities) statistics are obtained from RBI website. (http://www.rbi.org.in/scripts/PublicationsView.aspx?id=14543)

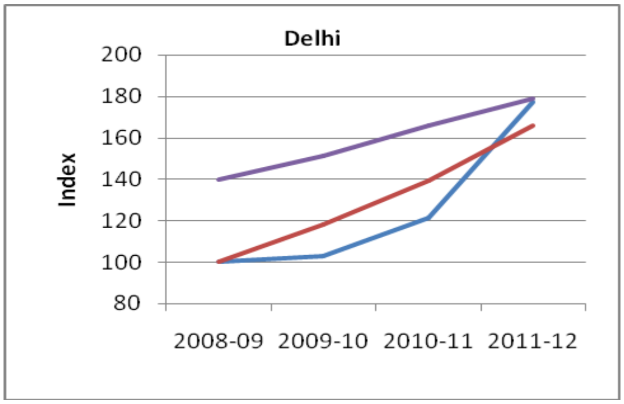
[16] PLR data obtained from RBI website.

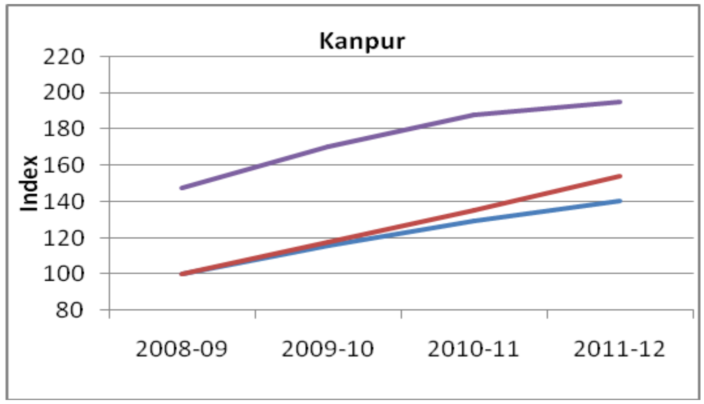
[17] Consumer Price Index for Industrial workers on base 2001 data extracted from Labour Bureau, GoI Statistics. (http://labourbureau.nic.in/indtab.html), it has been annually averaged for the states and cities for which RESIDEX and HPI figures are available.

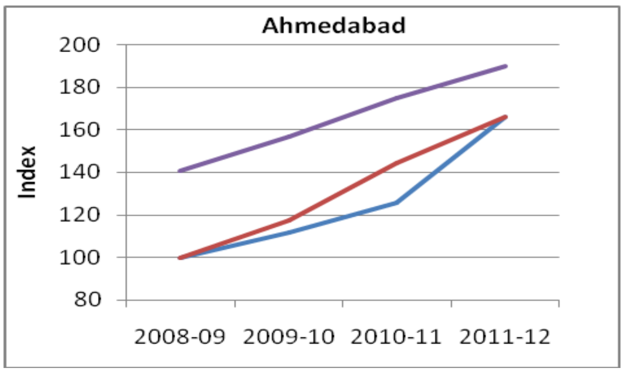
[18] HPI and RESIDEX are obtained from RBI and NHB websites, respectively.

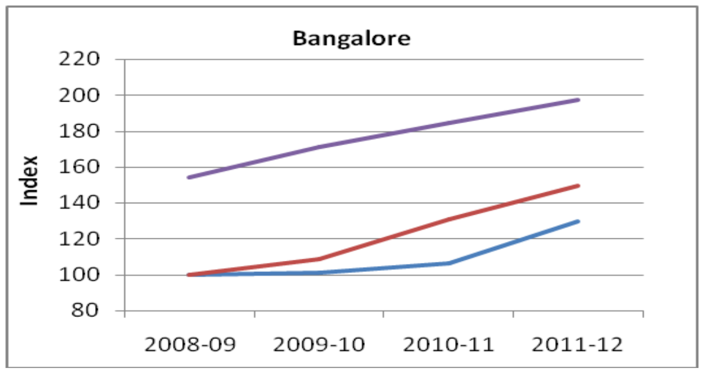
Annex-IB: Indices- Housing price, Income and Prices

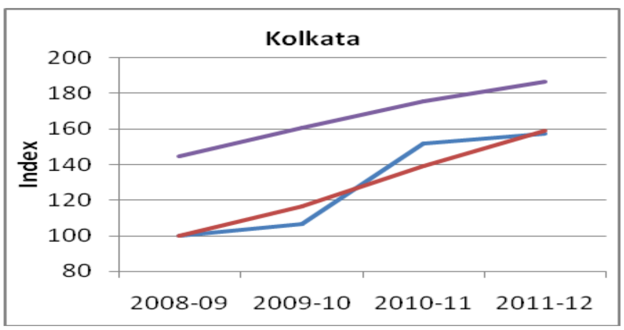
HPI/ RESIDEX GSDP Consumer Price Index

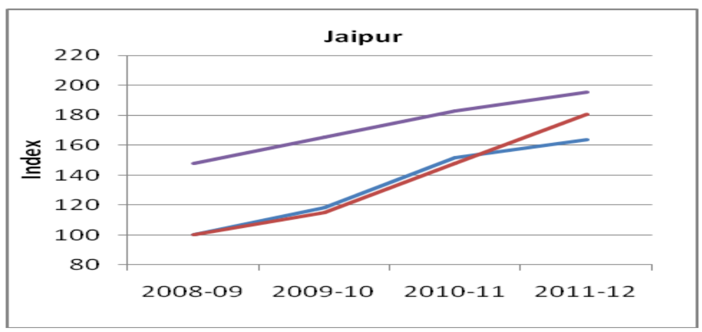


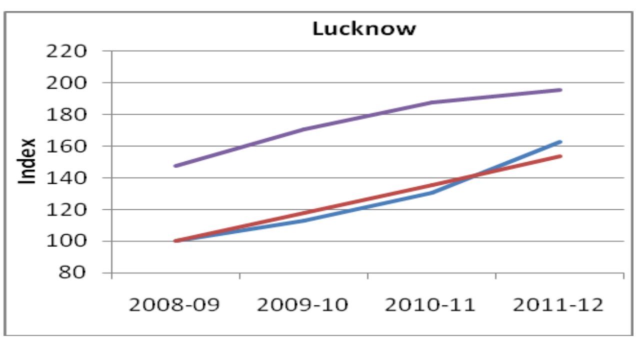


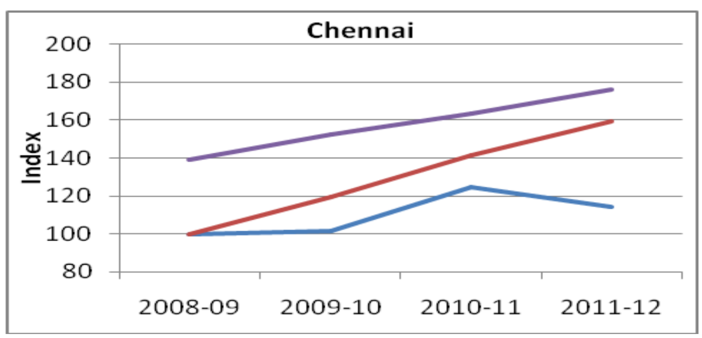


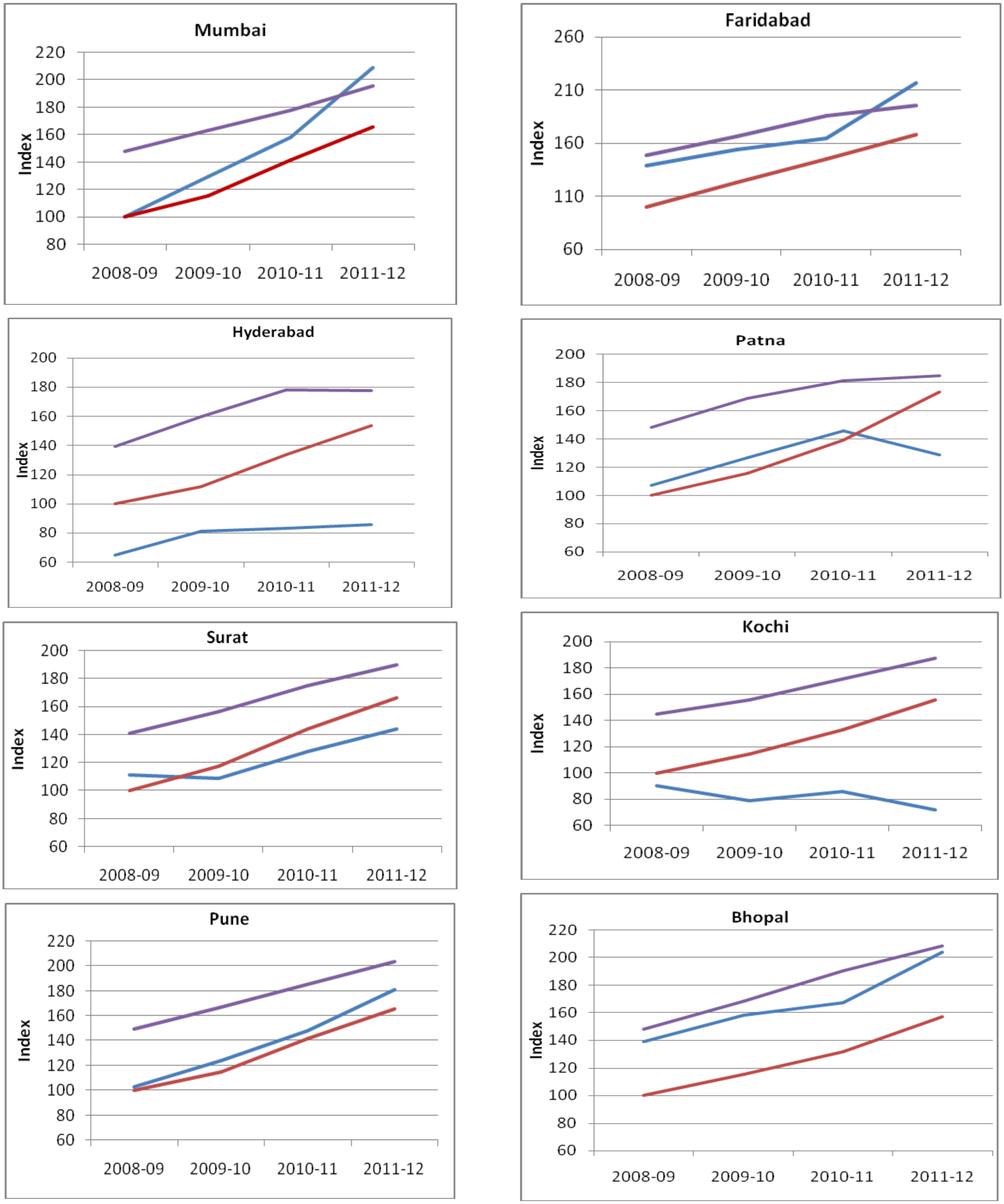






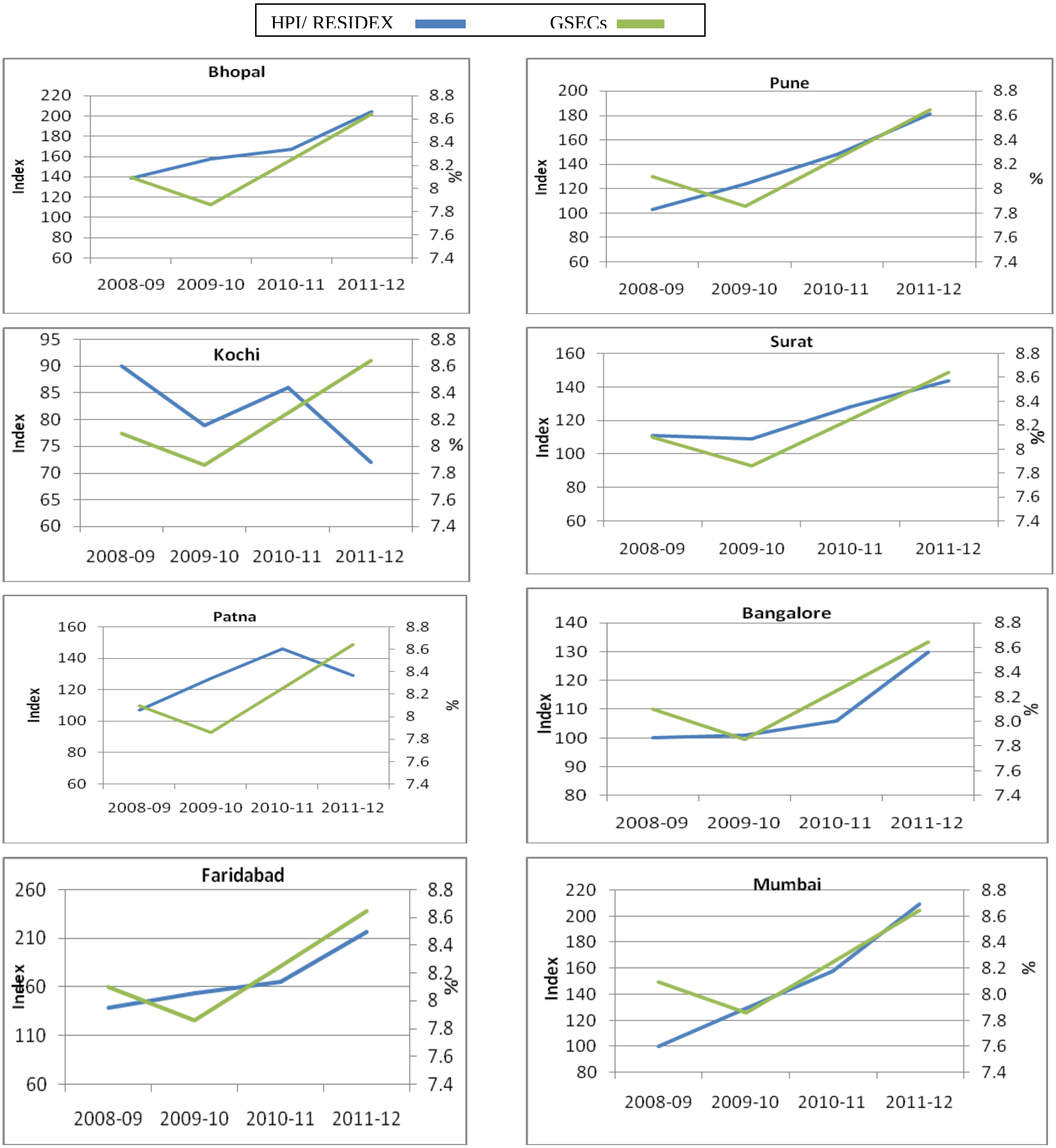


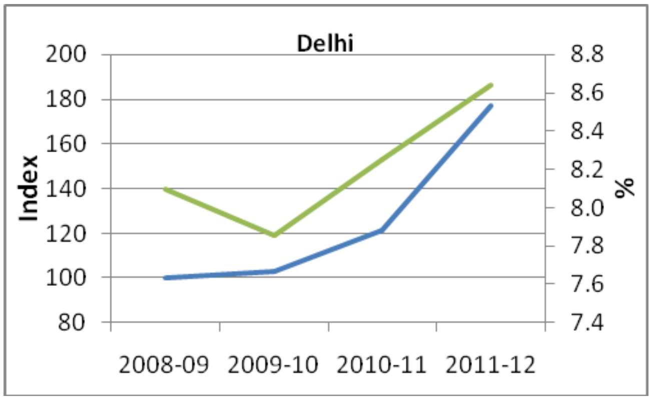


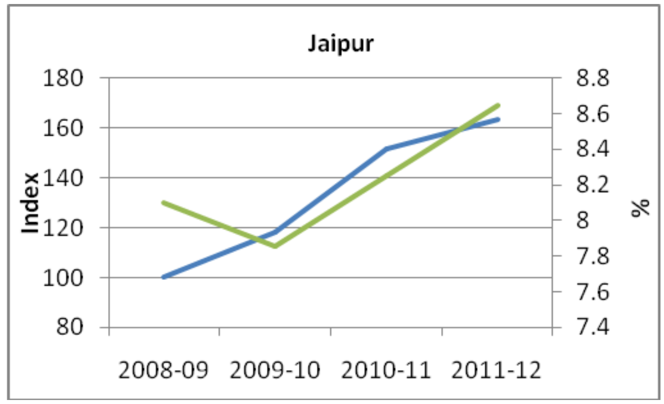


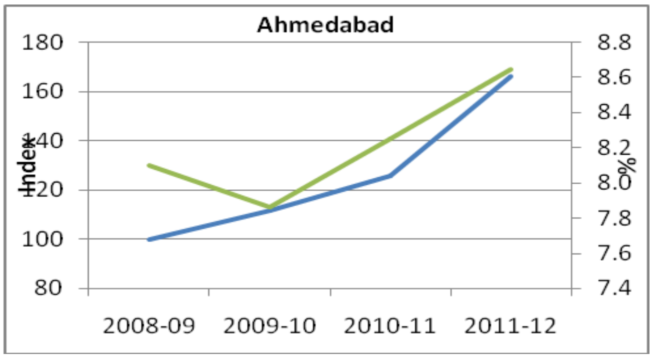
Source: RBI, CSO and NHB.

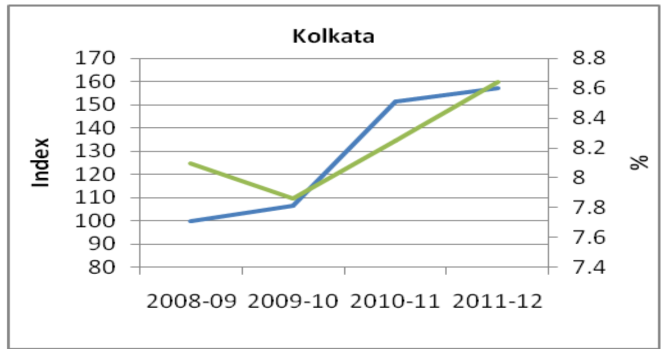
Annex-1C: Housing Price Indices and Yield on Government Securities

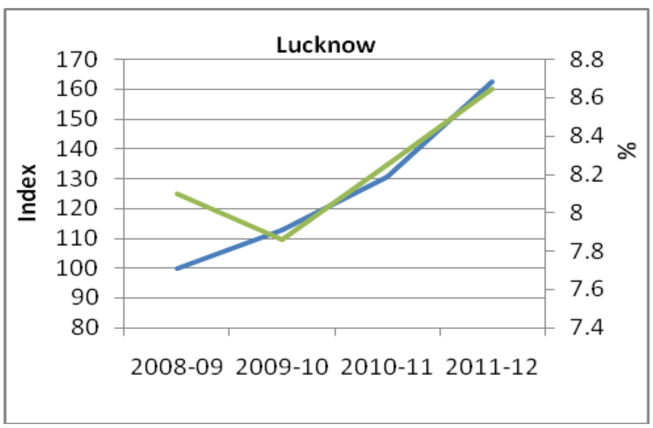


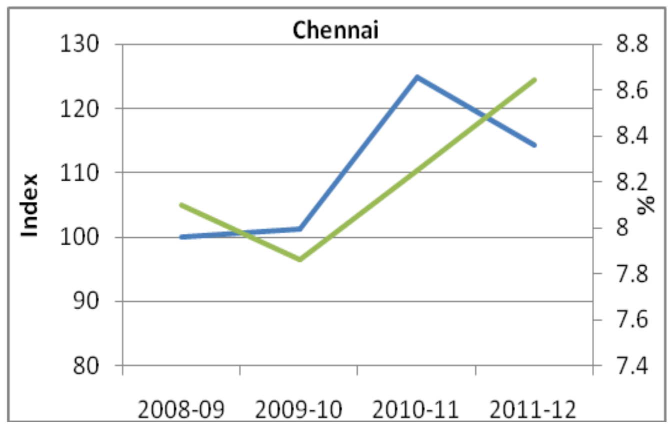


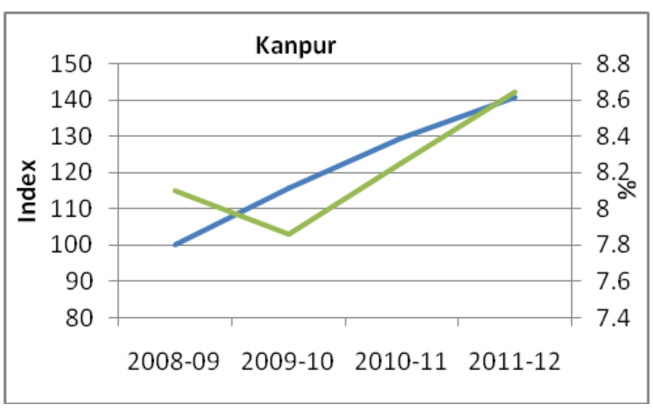


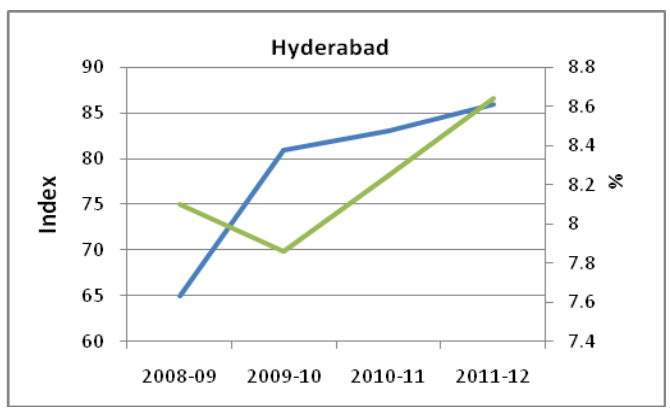








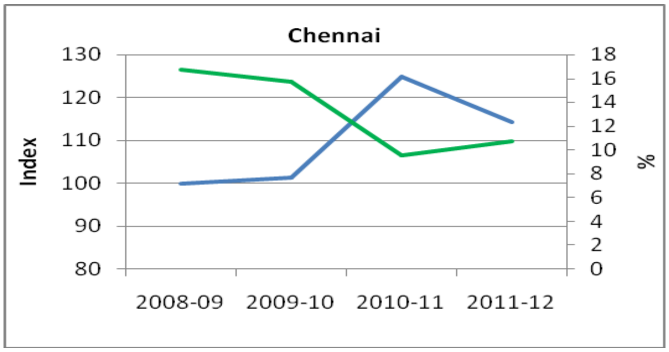


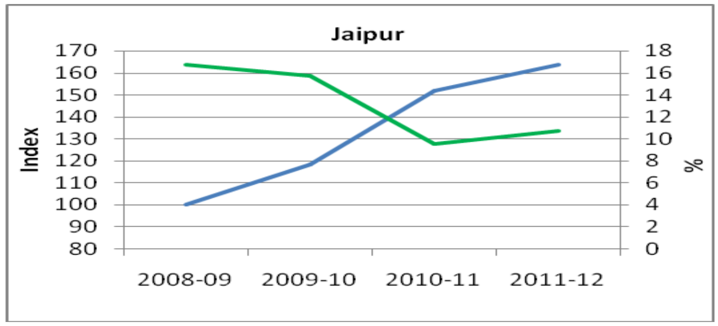


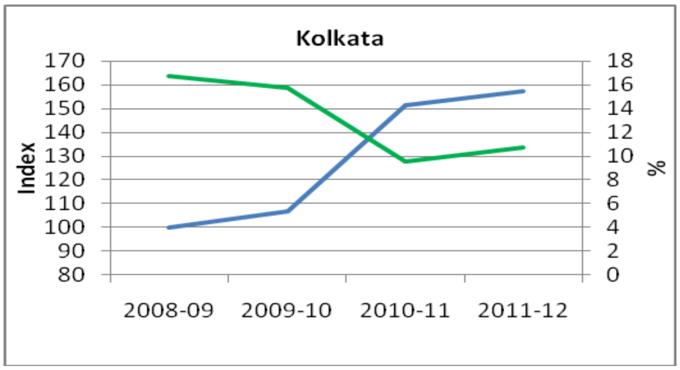
Source: RBI and NHB.

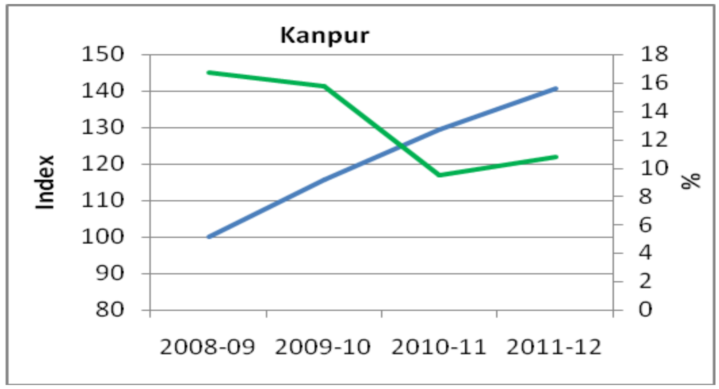
Annex – ID: Housing Price Indices and Prime Lending Rates

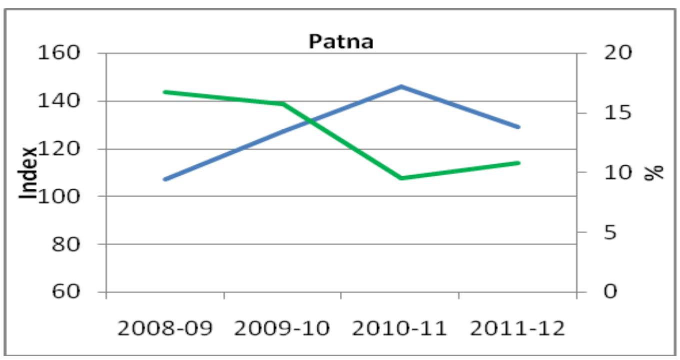
HPI/ RESIDEX   Prime Lending Rate

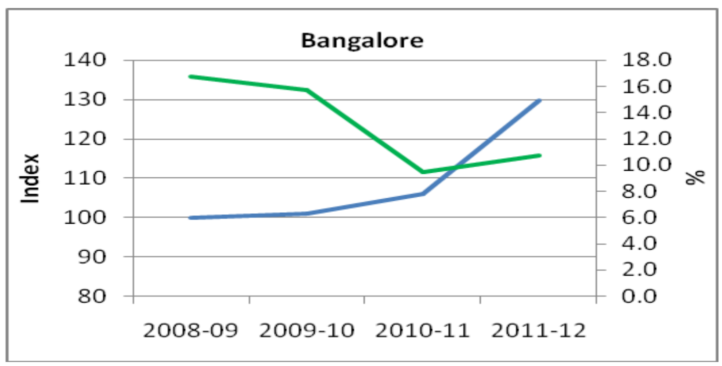


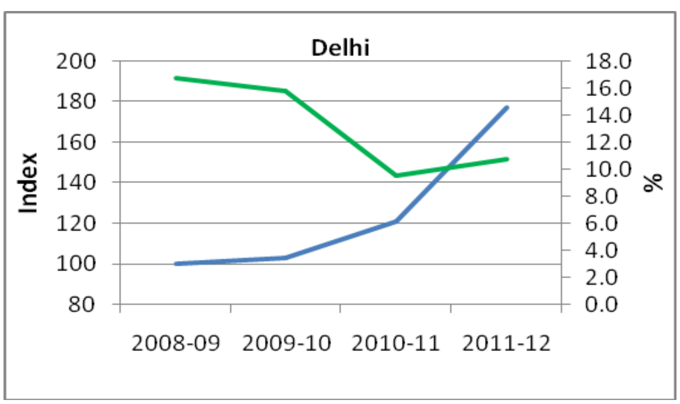


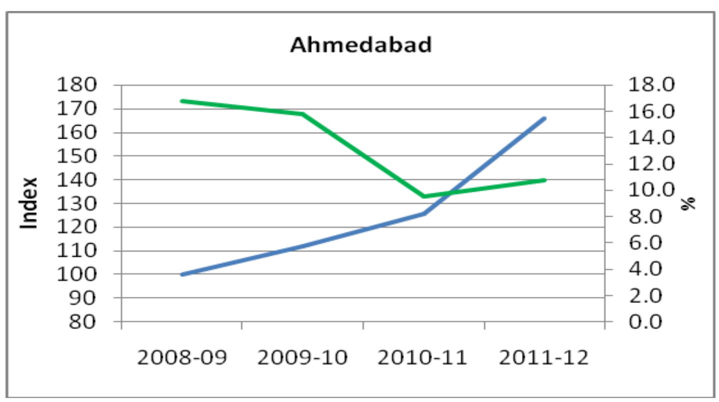


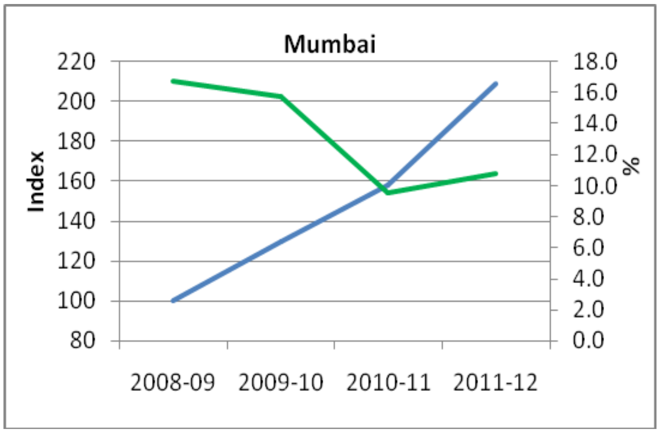








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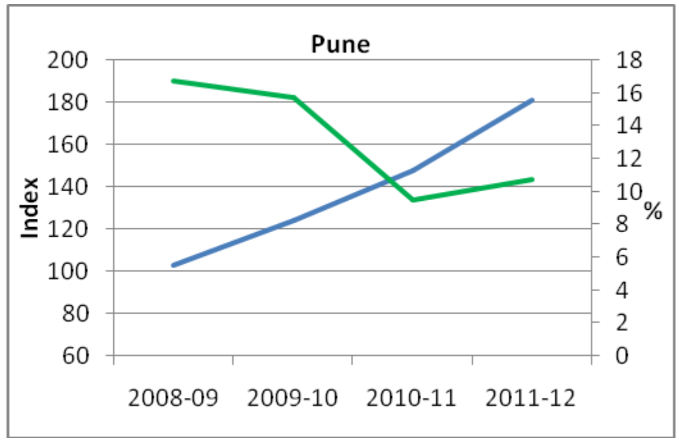
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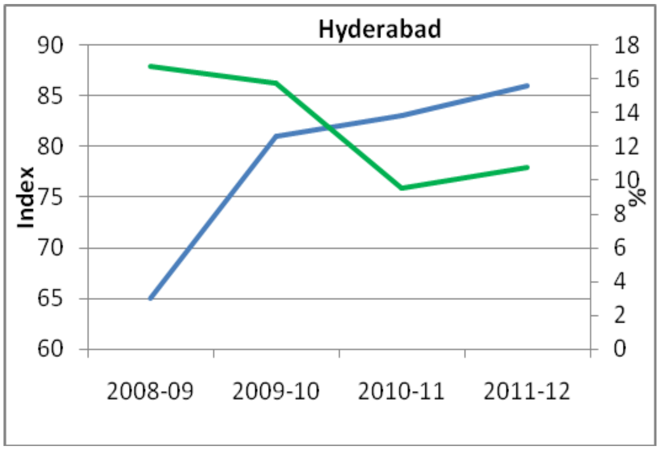
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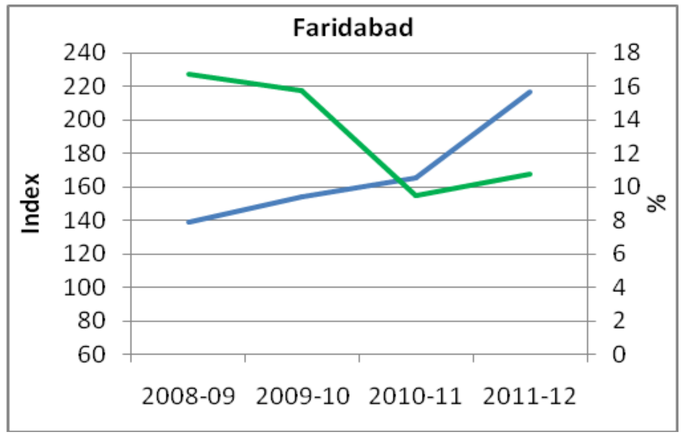
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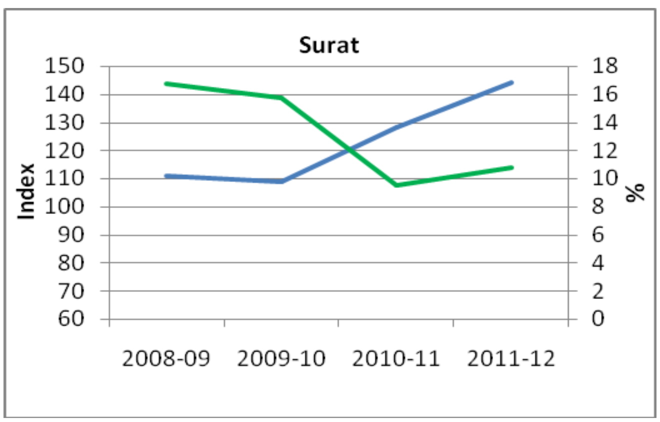
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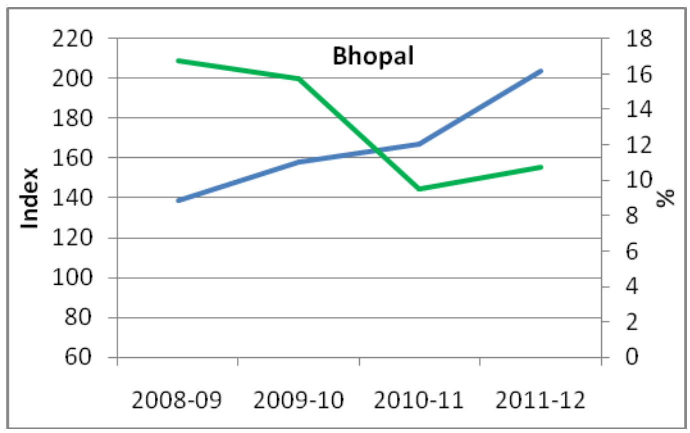
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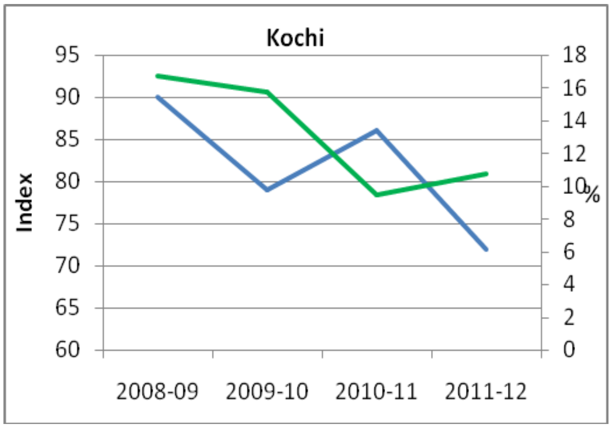

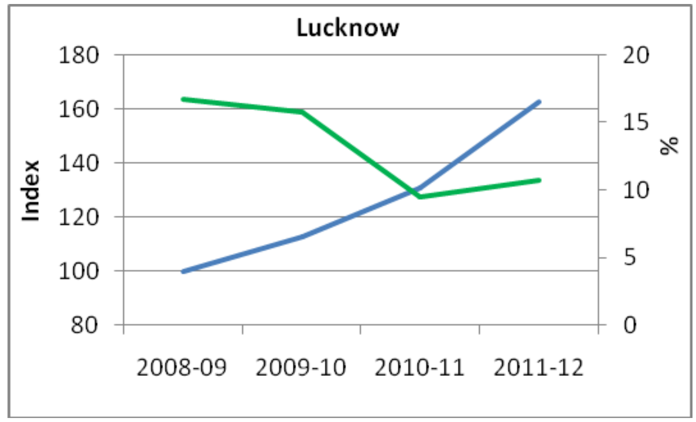

Source: RBI and NHB.