

Land Price, Bubbles, and *Permit Raj*

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Abstract

Even where adequate land is available for urban development, there can be high persistent land prices, and high-rise buildings. Why? Are high prices always related to bubbles? This paper examines these questions. It reconsiders whether high rural land price causes high urban land price or it is the other way round. It is shown that the root cause can lie elsewhere in the Permit Raj in the real estate sector. Dismantling this can make housing more affordable, and increase the economic surplus, providing more room for welfare schemes including those related to land and housing.

JEL Classification: R31, R38, R52.

Key words: Bubble, dead-weight loss, floor area ratio, affordable housing schemes, fundamental value, shadow price, India.

1 Introduction

This paper applies simple, basic and familiar economic theory to understand pricing of real estate. Though the analytical framework is motivated by observations of the real estate market and the legal-regulatory framework in India, the basic ideas apply, in varying degrees, to many developing economies and even several developed economies.

It is true that the amount of land is fixed and that with an increase in population, land per capita has been declining. However, contrary to conventional wisdom, there is hardly any shortage of land for the purpose of constructing urban homes or even for urban development in general (except possibly in

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places like Singapore or Hong Kong).² Why then is the price of urban land high even where land is not scarce?

There is a tendency to view a gap between the market price and the 'correct' value as case of a bubble. This can indeed be the case. However, what if the high price prevails over a long period of time and appears to be stable? Is there a need to look beyond a concept like a bubble?

Real estate is often viewed as a safe asset. High price of real estate is often attributed to the scarcity of safe assets in developing countries (Caballero 2006). However, why is there a scarcity of safe assets in the first place in countries which are by and large politically and even economically stable, and are also fast growing?

Raw land in urban areas is often more expensive than raw land in rural areas. It is not clear why this should be so. Consider an analogy; *the price of cloth is the same whether it is used for trousers or for a blazer*. But this kind of pricing is often absent for land. Why?

Real estate developers often argue that urban homes are expensive primarily because land acquired from rural areas has a high cost. Farmers or their representatives often, on the other hand, argue that since urban homes are expensive, it is only fair that they should get a good price for the land acquired from them for the purpose. Who is right - developers or farmers? Or is it a chicken and egg problem? Or does the root cause lie elsewhere?

There has been emphasis on relaxing regulation on floor area ratio (FAR) to encourage high-rise buildings to alleviate the housing shortage. This is happening even in many developing economies. However, the cost of construction in high-rise buildings can be much higher than that in the case of, what we may call, ordinary homes. How is the emphasis on an increase in FAR justified even where there is hardly any shortage of land for constructing homes?

Besides relaxation of FAR, the usual policies suggested to deal with high real estate prices include various tax and non-tax incentives, lower interest rates, higher status or priority for lending, and 'affordable housing schemes'. However, these policies have not made a major dent on the problem of housing shortage. Why? Is it because these policies have not been adopted on a large scale and with sincerity? Or, is something basic missing in these policies?

We have just seen that there are many puzzles. This paper makes a departure from conventional wisdom to provide answers. The main idea is actually very simple. It is shown that basically these puzzles arise if we have in mind free markets operating under an enabling legal-regulatory framework, or more simply an enabling framework (EF). However, if the urban real estate market

² 'Urban land area accounts for only 2.6% of total land area in the US.' (Shiller, 2009, p. 73). Similarly, 'A calculation shows that even if all of India's population had a dwelling of 1000 square feet per family of 4, this requires only 0.76% of India's land area, assuming a low FSI [floor space index] of 1.' (Ajay Shah, February 7, 2008) Let us look at the problem a little differently. While land per person has been falling in rural areas, there is still hardly any shortage of land in rural areas for housing or other such purposes (this is implicit in studies such as Mukhopadhyay and Rajaraman (2012)). If the availability of land for housing in rural areas is not an issue, it cannot become a serious issue in urban areas (a much larger proportion of the people live in rural areas in a country like India).

It is true that small land owners in rural areas face hardships, which can make diversion of even a small proportion of land from rural areas to urban areas difficult. However, a change in policy can increase economic surplus, which can be used in part to facilitate the transition; we will consider this in subsection 6.3.

functions under *Permit Raj* (PR), then we can resolve the above puzzles very simply. PR is, very briefly, a restrictive policy regime that restricts supply.

This paper will reconsider the effects of minor changes in policies, given PR. We will also consider the effects of a complete switch from PR to EF. This can improve not only housing but it can also positively affect economic development in general, induce some shift of savings from real estate to financial assets,³ raise standards of living beyond providing more affordable homes, and decrease economic inequality; these broader issues are, however, outside the scope of this paper. The policy part of the paper is confined to the effects of a change in policy on economic surplus in the real estate sector and on the scope for a redistributive fiscal policy. We will also touch on the design of ‘affordable housing schemes’, if these are still needed after a switch from PR to EF. The policy suggestions are backed by theory that explains the real world.

We will consider each policy regime in its extreme form. A real life economy can fit in between the two extremes. Also, a policy of liberalization can tilt an economy towards EF. The more the liberalization the greater is the shift towards the extreme version of EF. Finally, a transition from PR to EF can be costly. For simplicity, here we will consider a complete and costless switch from PR to EF.⁴

The next section provides some background on PR in case of the real estate sector in India. Thereafter, we provide the analytical framework for a general analysis (section 3). The main analysis is in two parts. First we consider working of the market under EF (section 4). Thereafter, we will consider the case of PR; this will include a subsection on bubbles and a subsection on ‘farmers union’ (section 5). Finally, we consider policy (section 6). The paper ends with summary and conclusion (section 7).

2 Background on *Permit Raj*

It appears that the real average appreciation in price of urban residential property used to be high in India. This has, however, over the period 2007-14 come down to slightly below zero (Singh (2014); see also Singh (2013b)). So there has been a change in so far as real appreciation rates are concerned. However, there are reasons to believe that absolute prices are high. See Table 1. This shows estimates of the market prices of land in cities.

Now consider another fact. The *maximum* discounted present value of crops (after subtracting costs of inputs other than land) that are grown on an acre of land in India was about Rs. 5.2 lacs in 2010 (Chakravorty 2013); this value may be used as a rough estimate of the *maximum* opportunity cost of urban land. Observe that all the figures in Table 1 are in crores whereas the above value is in lacs (one crore = 10 million, and 1 lac = one tenth of 1 million). There can be some debate on methodology and details (about what to include in costs) but the substantive suggestion from the data is that urban land

³ See Singh (2007).

⁴ A switch from PR to EF can take some time as it is a complex and tedious process. Accordingly, it is unlikely that real estate prices can fall suddenly, if they do, as a result of a switch from PR to EF - more so when the real estate markets are not informationally efficient. Accordingly, there is, in practice, little, if any, risk of macro-financial instability related to a fall in real estate prices over time. This is *a fortiori* true if there is inflation, and there is money illusion so that not many people distinguish between the gradually falling real prices of real estate and the somewhat stable nominal prices of real estate (Monnery (2011), p, 178).

is (possibly significantly) over-priced relative to its opportunity cost in India.⁵ The *basic* reason for this, as we will see, lies in PR. So, we will, in what follows, provide a perspective on this.

India was declared a mixed economy at the time of independence in 1947. Soon after, one important feature of the economy was the use of PR in India; this was part of the more general idea of *planning* for the economy by the government. PR refers to a policy regime in which economic activity is allowed under a license or a permit; this goes beyond meeting the usual regulations in a market economy. PR in the manufacturing sector in India was by and large dismantled in the early 1990s. However, the story is very different in case of the real estate sector in urban India. PR has pervaded and has continued to stay in the real estate sector for another 25 years after it was dismantled in the manufacturing sector.

City	Lowest Zone	Highest Zone
Mumbai	10.3	252.9
Bangalore	30.6	59.8
Delhi	17.7	73.8
Chennai	10.4	24.5
Kochi	8.2	40.9
Pune	13.0	14.8
Hyderabad	8.6	15.9
Faridabad	7.1	19.7
Kolkata	4.9	21.2
Ahmedabad	1.6	12.1
Jaipur	1.4	19.0
Patna	6.7	11.2
Bhopal	3.5	32.5
Lucknow	4.2	9.2
Surat	4.4	9.3

Table 1: Possible Price of Land in Different Cities in India in Rs. crore/acre, Average 2007-10

Note: 'Possible price of land' calculated using the following assumptions: FSI of 1.5, construction cost of Rs. 1,000 per sq. ft. in 2007-10, and land cost = finished price – construction price

Source: Table A11, Chakaravorty (2013)

Professor Jagdish Bhagwati's classic critique of PR in the 1960s and in the 1970s was in the context of the manufacturing sector (see Bhagwati (1993)). He did not touch on PR in the real estate sector. When economic reforms were carried out in India in early 1990s under various influences, these

⁵ Also, in the state of Punjab in India, the rent for agricultural land varies considerably. It lies between Rs. 15,000 and 53,000 per acre per annum; this is based on a report for two years 2014 and 2015 (Jagga and Chaba, 2015). If we take the *maximum* value and assume that the real and risk-adjusted discount rate is 5% per annum, then the capitalized value of agricultural land is Rs. 10,60,000 (= 53,000/0.05) per acre in 2015. This is again well below the values in Table (even after adjusting the values in the table for inflation). Furthermore, consider an international comparison. Glaeser and Gyourko (2008) shows that the ratios of price to construction cost for 102 metropolitan areas in the United States (US) in the year 2000 are as follows: Mean is 1.46, 90th percentile is 1.85 and the maximum is 4.06. The authors argue that these figures are quite high. However, it appears from anecdotal evidence including commercial websites that the figures for India are even higher (formal data is, however, not available for India). This corroborates the view that there is over-pricing of land in India.

included the conditionality programme of the International Monetary Fund (IMF) in the early 1990s (Sharma 2007); this too did not include reform of the real estate sector. These are some examples to show that PR in the real estate sector has not received much attention from academics and policy makers.

Actually, the main reason behind ignoring PR in the real estate sector (hereafter, simply PR) may well be that the real estate sector itself hardly receives any attention from academics and policy makers. The trend of economic thinking with regard to real estate has not changed much over time. The topic is by and large absent in the writings of economists including those who are prolific writers on Indian economy. Though some economists have carried out excellent work on *land acquisition* in rural (and sometimes in urban) areas, they have hardly linked it to PR and the related deadweight loss in the real estate sector in urban India (see, for example, Ghatak and Ghosh (2011), Ghatak and Mookherjee (2011), Gangopadhyay (2012) and Sarkar (2012)). Real estate is hardly a 'hot' topic of research in universities and think tanks in India. Reports on financial stability issued by the Reserve Bank of India (RBI) hardly consider real estate even though it is the most important asset in India and any serious disturbance in real estate prices can affect macro-financial stability (Singh, 2013a). It is also interesting that PR in the real estate sector is usually ignored in the history of economic thought on the Indian economy (see, for example, White (2012)).

It is true that the home buyers, the public authorities, the media, and the practitioners in the real estate industry have been voicing their concerns about high real estate prices and other such issues. However, these ad-hoc views (even though persistent) are typically treated as grievances and opinions and not matters worthy of serious consideration by academics. It is also true that in the last few years some management institutes in India have started teaching on real estate. However, elsewhere, for example, in the supposedly more respectable discipline of Economics in India, it is still by and large ignored. This has had adverse implications for economic policy making in India.

What is PR and what is its effect? Typically, town planners demarcate some area over which urban development can be carried out; the government provides the basic infrastructure for the designated area. The FAR is kept low. The builders need approvals for development and construction within the approved area; such activity is not allowed outside. These approvals are numerous, effectively discretionary, time consuming, very costly, and available through contacts with officials, politicians and 'godfathers' with the use of bribes or 'speed money' in cash or in kind.⁶ It is all this which is usually viewed as constituting PR. However, this common notion of PR is actually narrow.

The usual view of PR does not raise questions over whether or not the designated area is adequate relative to the needs of the economy. Often the designated area is small. So, even if approvals for development and construction within the designated area are without difficulties, there is a more basic problem.

It is true that there is a provision for permission for *Change of Land Use* (CLU). This can, in principle, provide a way to deal with the small size of the designated area for urban development. However, again this requires permissions, and the permissions are uncertain, time consuming and costly. But equally important, if not more important, the CLUs are typically in the context of an area that is limited in size and that is somewhat close to an already approved area. So the provision for CLUs typically does not apply for expansions that are large and that are lying in, what are perceived to be, far flung areas. There is also a related coordination problem *within* the government. CLUs are

⁶ India is ranked 183 on a list of 189 countries on dealing with construction permits in the *Ease of Doing Business Index* for 2016 (World Bank 2015)

often denied for townships, given that external development is inadequate (internal development is in any case to be provided by the developers). On the other hand, external development is often not provided by the government, given that there is hardly any *prevailing* need for the same in the concerned area.⁷ The bottom line is that the quantity gets restricted and the price of real estate is accordingly high in urban India. The story does not end here.

PR goes alongside black money, uncertainty with regards to the decisions and behaviour of public authorities, irregularities (and even crimes), harassment, time wastage, little effective access to the judiciary, and other such features. All these act as deterrents or barriers to entry for honest and hard-working professionals (it can become unthinkable for many women to enter the industry). So even if there is a large number of sellers, traders and investors, the effective competition is limited.⁸ So there are high costs, low quality, and little innovation. The housing industry suffers as a result. So again the effects of PR are more severe than is often realized. (There are also wider implications related to politics, rule of law, and social harmony; these, in turn, adversely affect economic development in general. These broader issues are, however, outside the scope of this paper.)

As mentioned already, PR goes alongside black money in real estate transactions. Black money has two roles in the real estate sector. First, black money is related to tax evasion.⁹ Second, it can be the source of financing bribes. Observe that the first role of black money is not related to PR *per se*. So the role of black money in PR should not be exaggerated. Also, if there is no black money at all and there are no bribes whatsoever, there can still be a PR that restricts supply and leads to high real estate prices. So the problem of PR is distinct from the problem of black money. This distinction paves the way to understanding that PR can be a problem in some developed countries as well where there is hardly any black money but there are shades of, what is commonly known in the context of a country like India as, PR. This can be the reason why real estate prices are high in some developed economies even when there is hardly any black money there.

It is often argued that there is continuous generation of black money and that a part of this money creates the (additional) demand for real estate. As a result, real estate prices are pushed up. Note that this argument assumes that the supply is somewhat inelastic, which is indeed valid in practice. Now the supply can be inelastic for two reasons. First is shortage of land. Second is PR. We will consider the second case. If PR is dismantled, the supply can become elastic in which case continued investment of black money need not have much effect on real estate prices. So, it is PR that is at the root of the problem of high land prices and not black money in economies like India which have adequate land for urban development.

PR is primarily an urban phenomenon (though there can be other difficulties in rural areas). It is true that land prices in rural India too are high even though there is hardly any comparable PR there. However, PR in urban areas can have effects on land prices in rural areas as well (more on this later).

This section has provided some background and motivation from the Indian experience. Hereafter, the analysis will be general. Much of this paper will focus on the working of the real estate market under

⁷ There is also a *de-jure* or *de-facto* absence of an EF under which the private sector can provide the external development for an altogether new township or city.

⁸ Some improvements have occurred in recent years but there is a long way to go.

⁹ Often, only a part of the price of real estate is disclosed to the public authorities in India; the rest is paid in black money (it means here anonymous currency notes). So, real estate acts as a store of value for black money. This route for tax evasion is typically not available in case of financial assets.

PR. But before that we will consider the analytical framework, and the case of EF as a benchmark for comparison with PR.

3 The Analytical Framework

The analytical framework that follows is in the context of an economy that is politically and economically stable. This section will list a number of assumptions; the purpose is to focus on how the effects of PR can be so different from those of EF (see the next two sections). The assumptions are as follows.

There is no shortage of land for the purpose of urban real estate development (we will later see why the ‘market’ price can be nevertheless high). Also, the cost of construction of an additional floor in a high rise building is more than the cost of constructing a floor in an ordinary home. People are indifferent between living in an apartment in a high-rise building and in an ordinary home¹⁰ (and that they are also indifferent between different floors within a high-rise building and within an ordinary home).

Ordinary homes can have one, two or three (or sometimes more) storeys. The marginal cost of constructing an additional floor rises very little in an ordinary home. For simplicity, it is taken that the marginal cost of a floor is constant for an ordinary home. A further simplification is that we consider a single storeyed ordinary home (this is just a matter of ‘normalizing’ population size). It is assumed that ordinary homes are located in ‘gated’ complexes just as high-rise buildings are. The arrangements for maintenance are also similar in the two cases.

Land area in the country is divided into two areas: rural and urban. Furthermore, there is homogeneity within each area. Land in rural areas is used for one purpose only viz., agriculture. It is assumed that the land used for rural housing and other purposes is a negligible fraction of the land in rural areas. So it is, for simplicity, assumed to be zero. Raw land for urban development can be obtained by diverting land from rural areas. This assumption is loaded against our analysis as often land can be diverted from where it is not being used at all or it is being under-utilized (for example, the government and its various departmental and non-departmental undertakings often own considerable amount of land, which is not fully utilized). Land in urban areas has a variety of uses; these include homes, industry, commerce, entertainment and leisure, public utilities, and so on. We assume that zoning laws and norms are in place which avoid or minimize congestion, externalities, and imbalances between different uses.¹¹ Given this assumption, we will abstract from the different uses within urban areas. All urban land in our model is used for one purpose only, say, for the purpose of building homes.

If land is diverted from agricultural use, agricultural production can fall. It is true that if a small proportion of land is diverted, then accordingly the fall in agricultural output can be small as a proportion of the aggregate output in the economy. However, due to inelastic demand, the price of agricultural output can rise significantly as a result of a fall in output. This is indeed true in a closed economy. However, if the economy is open for private traders or for public sector corporations, then imports can make up for the fall in domestic output. Now the fall in domestic agricultural output can

¹⁰ Some people may choose to live in apartments or they may choose to live in an important and dense city which is focused on high-rise buildings; we will abstract from such personal choices of a fraction of the population.

¹¹ See Singh (2004) for the effects of imbalances between different uses of land in urban areas (for residential purposes and for commercial purposes).

be a small proportion of the total world output. So it is reasonable to assume that the world price of agricultural output is immune to any urbanization programme at home. This is, *a fortiori*, true if arrangements are made in advance possibly with the use of standard and non-standard *options* that may be negotiated with corporations or governments abroad.

People who do not stay in homes in urban areas live in rural areas or they use informal urban housing arrangements, which may be legal, illegal or quasi-legal and that may or may not be slums. However, these are relatively cheaper (for more on these aspects, see Kapoor and le Blanc (2008)). For simplicity, we will abstract from these arrangements as the focus is on scarcity of homes and their high prices in the formal sector.

Location matters a great deal within a city; this can affect relative prices considerably. We will abstract from this and hereafter consider the average price. There can be taxes or subsidies that affect the real estate market. We will abstract from these. We will also ignore depreciation or obsolescence of homes.

The market for land is complex. Consider some examples. First, there can be implicit perks that affect demand for real estate (senior personnel can choose to continue to operate in expensive cities for their own and their family members' convenience; so mobility out of expensive cities can be restricted and such cities can continue to remain expensive or can become even more expensive over time). Second, there can be implicit option values in real estate prices (some places can be expensive because it is expected that FAR will rise there). Third, there is sometimes a tendency to view high-rise buildings as signs of modernity; this can increase demand for such buildings. We will abstract from all such issues and focus on the economics of housing for the general public in urban areas in the formal sector.

We will consider the real estate market in an environment of macroeconomic and financial stability. It is assumed that there is no increase in demand for real estate due to a push from housing loans. There is also no over-rating (or under-rating) of financial instruments used in the housing industry. Funding for buyers or for developers is often a reason for the small size or low growth of the real estate sector. We abstract from this possible difficulty. The market for real estate is assumed to be competitive in the sense that there is a large number of sellers and buyers. Though the 'quality' of sellers can be higher under EF than under PR (and accordingly the costs can be lower under EF than under PR), we will, for simplicity, abstract from this aspect. Unless otherwise specified, economic agents are assumed to be rational.

The size of home is, in our model, a generic term that refers to not only the constructed space inside home but also to the space outside and in the immediate neighbourhood for 'leisure' and for other mundane but important utilities. The quality of construction is, for simplicity, uniform and is exogenously given. The size of homes can differ across households. We will consider aggregate demand of homes in square feet of space.

Raw land needs to be developed before it can be used for agriculture in rural areas. We will, for simplicity, assume that this cost is zero.

Home price in a city includes cost of land, external development charges, internal development charges, cost of construction, compensation for those who move in at an early stage of development in a residential complex (hereafter, simply 'compensation'), and normal profits of developers. Internal development charges and cost of construction can be lower under EF than under PR (for reasons explained in section 2). However, for simplicity, we will assume that these are the same under the two policy regimes. Since the focus of this paper is on determination of land price, we will assume that external development charges, internal development charges, 'compensation', and normal profits of

developers are all equal to zero. The cost of construction of ordinary home is normalized at zero. So the cost of construction of a high-rise building is the extra cost incurred, given that the cost per square foot of construction is higher for high-rise buildings. All this implies that in our model,

- (a) the cost of ordinary home is just what is spent on land, and
- (b) the cost of home in a high-rise building is what is spent on land and what is spent on construction that is over and above what is spent on constructing an ordinary home.

Of course, under PR, there can be transfers masquerading as costs in the real estate sector; we will come to these later. Such transfers are absent under EF.

In what follows, we will summarise the main conclusion at each stage of the analysis; we will, for lack of a better alternative, term each such concluding statement as a proposition. We will begin the main analysis by consider the working of the real estate market under EF. Thereafter, we will consider the case of PR.

4 Enabling Laws and Regulations

In what follows, we will provide an outline of an enabling framework (EF) provided by the public authorities for the functioning of the real estate sector. The following assumptions are made.

Property rights are clear and unambiguously enforced by the government. Property records are maintained by the government for a nominal fee, which is, for simplicity, taken be zero. There is no ambiguity about who owns what. There is no encroachment of private or public property. Contracts are enforced by the government and by the government alone. There is hardly any violation of contracts between home buyers and builders. If there are any occasional violations of contracts, then complaints can be meaningfully filed for a reasonable fee; judicial decisions are made in a fair and quick manner.¹²

There is a redistributive policy in place; the rich are taxed (more) and the poor are subsidized. In what follows, we will abstract from this; we will return to this in subsection 6.2 and subsection 6.3.

An effective *Competition Commission* is in place to oversee that potential restrictive practices associated with a monopoly or oligopoly are avoided. There is no insider trading. There is no barrier to entry explicitly or implicitly. This facilitates a competitive market in real estate. There is a regulator for the market for real estate (just as there is a regulator for the market for financial assets). Disclosure norms are imposed on builders and such norms are enforced. There is a clear separation of brokerage contracts from trading contracts.

Besides real estate, people can invest in financial assets (and other real assets). Also, people can stay in owned homes or in rented homes. There is a clear demarcation between owners and tenants. There are clear rights of use with tenants for a pre-specified term. Owners can reclaim use of property after the contract term is over. There is a competitive market for rented properties.

There are minimal approvals needed by the developers from the government. There is hardly any discretion with public servants. If approvals are not provided quickly, there is a credible threat to take the relevant government department or even concerned officials to court, and the latter is able and

¹² This implies that events such as regular and pervasive delays in construction by developers do not happen.

willing to address the complaints in a fair manner for a reasonable fee. Usually, a mere threat is enough so that expected legal costs are close to zero. Assume, for simplicity, that these are zero.

After listing what the government needs to do, let us now come to assumptions on what the government does not need to do. It does not designate land as rural land and urban land *for economic purposes* though it may so designate for administrative purposes once the economic allocation has been determined by market forces. The more the demand for homes, the more land is shifted from agricultural use; this allocation can change over time. There is no permit for *Change of Land Use* (CLU) required for switching from, say, agriculture in rural areas to homes in urban areas (so long as it does not affect larger concerns like security, environment, and so on; there is clarity on these issues). So obviously there is zero price for such a permit for CLU. Though permit for CLU is not required, any change needs to be registered with the government for information (just as births, deaths, marriages, etc. are registered with the government). The government is able and willing to maintain the external infrastructure for existing townships and to carry out the external development for what are becoming urban areas; the builders are required to pay the government for the same. This completes the description of the EF.

What follows from the model in this section is the following:

Proposition 1. *In the model economy, under an enabling framework (EF),*

- (a) the price of (raw) land is equal to the discounted net present value of crops produced on land,*
- (b) the price of raw land in urban areas is equal to the price in rural areas,*
- (c) it is optimal to construct ordinary homes,*
- (d) rent as a percentage of home price is equal to the prevailing interest rate,*
- (e) there is no dead-weight loss,*
- (f) the effect of increase in demand is to increase the number of homes; the price is not affected, and*
- (g) the market equilibrium is stable.*

Let us look at these results closely one by one.

Proposition (1a) states that the price of (raw) land is equal to the discounted present value of crops produced on land (after subtracting the cost of inputs other than land). This is the parallel of the standard proposition in Financial Economics that in an efficient market the price of a stock is equal to the discounted present value of dividends (the counterparts of stock and dividends are land in agricultural use, and net value of crops grown on the land respectively). The proposition holds because there is a competitive market, no insider trading, no irrationality, and no distortions or taxes.

Proposition (1b) states that the price of (raw) land is the same whether it is used for one purpose or another. This is similar to what is commonplace elsewhere. For example, as mentioned earlier in the introduction, the price of cloth is the same whether the cloth is used for trousers or for blazer!

Proposition (1c) states that ordinary homes are constructed. This follows from the assumption that land is adequate for the purpose of urban real estate development, the per square foot cost of construction is higher for high-rise buildings as compared to that for ordinary homes, and people are indifferent between living in ordinary homes and in high-rise buildings.

Proposition (1d) states that rent as a percentage of home price is equal to the prevailing interest rate. This follows from the assumptions that there are no transaction costs or (differential) taxes, and the

market for rented homes is competitive. It is, in a sense, a *no arbitrage condition*. There is no arbitrage between investing in a home and staying in it, and investing elsewhere and using the returns to pay user charges for a rented home.

Proposition (1e) states that there is no dead-weight loss. This follows for the obvious reason that the real estate market is competitive and there are no distortions (or taxes).

Proposition (1f) states that the effect of increase in demand is to increase the number of homes; the price is not affected. To see where this comes from, note that in our model there is no shortage of land. The market price of agricultural land is equal to the discounted present value of crops grown on the land. This value is constant, given the assumptions on use of foreign trade (and *options*) for making up for the small percentage of output lost due to diversion of land from agriculture (see section 3). It follows now that the supply curve of raw land is perfectly elastic. Given the assumptions on other costs, the supply curve of homes is the same as the supply curve of land.¹³ So the supply curve of homes is perfectly elastic. An increase in demand can affect quantity only; the price remains unchanged. Observe that increase in demand for homes can be due to increase in income, wealth, population in general, population of nuclear families, urbanization, rise in black money, etc. *So all these factors cannot affect the price in the model in this section.*

Finally, Proposition (1g) states that the equilibrium is stable in the standard sense in which the term ‘stable equilibrium’ is used in Microeconomics. Relatedly, there is no bubble in the housing market for the simple reason that there is rationality, the price is constant and it is known that the price will remain constant even if demand were to increase in future (see Proposition 1(f)).

The result that a bubble is absent under EF is consistent with the results in Glaeser, et al. (2008). The latter shows that if the supply of real estate is elastic (and there are no factors such as ‘loan-pushing’), there is no scope for a bubble in real estate prices. The intuition is straightforward. In case the price rises above the fundamental value, the supply goes up and this brings the price back to the fundamental value (the meaning of fundamental value will become clear later; see subsection 5.1). So the bubble cannot last if it does arise at all *under EF*.

To understand Proposition 1 more clearly, see Figure 1. This shows the market for homes under EF. The x-axis and the y-axis show the quantity (q) and the price (p) respectively. The supply curve is horizontal; see the supply curve S . The demand curve is downward sloping; see demand curve D . The market equilibrium is at (q^*, p^*) . Note that p^* is not just the price of homes but also the price of land, given the assumptions on costs other than land in case of ordinary homes. The figure also shows comparative statics. The price remains unchanged; only the quantity expands as a result of a shift in the demand curve. See the intersection point of supply curve S and the new demand curve D' .

The above model and its implications may appear to be abstract and unrealistic. However, if we leave aside fluctuations in prices and effects of some taxes, then the above model *mutatis mutandis* does not fit in badly with the long run experience of housing in a country like the US. The real price of homes after adjusting for quality and size has gone up barely by about 1% per annum (Shiller 2009); if we consider ‘compensation’, then the appreciation can get even lower. On the other hand, the quantity has increased substantially over decades (though Glaeser and Gyourko (2008) argue that the improvements could have been more). It is true that in and around the year 2007, there was a crisis in

¹³ If the current value of rural land is low relative to the potential value under a different management of farms, then the relevant rural land price is higher. In any case, the urban land price is equal to the rural land price, whichever is the relevant rural land price. At the margin, the value needs to be the same in different uses.

the US. However, it was a financial crisis and not a crisis related to housing *per se* (White, et al. (2014) and Gjerstad and Smith (2014)).

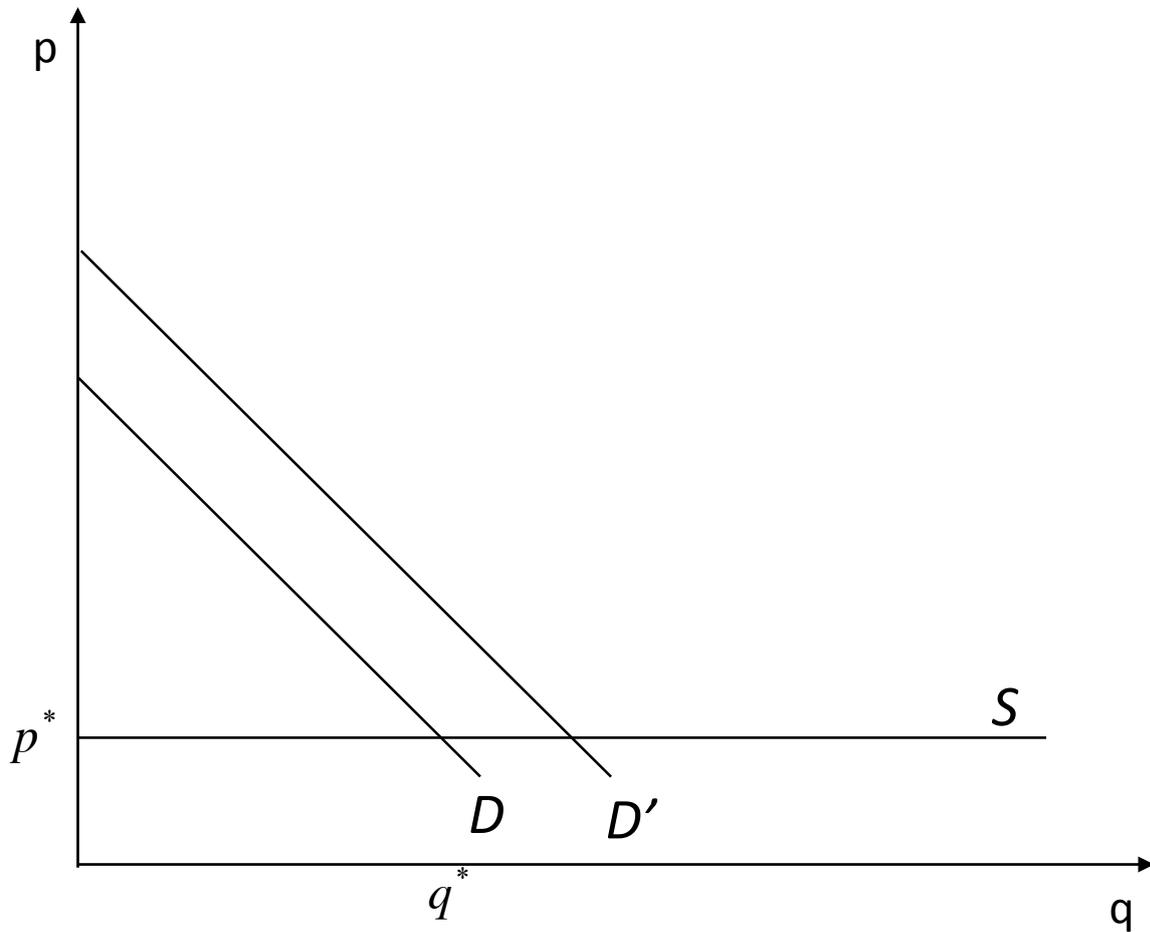


Figure 1: Market under Enabling Framework

This section has outlined the effects of EF on the working of the real estate market. We will next consider the case of PR.

5 Permit Raj

The meaning of PR has been explained at length already (see section 2; also see section 3). So we will not repeat it here. Recall that PR is for urban areas only; in the rural areas, the market for land is competitive as in the previous section.

The essence of PR is that supply of homes is restricted. For simplicity, we consider the extreme case where the quantity is completely inelastic. Let the quantity be fixed at \hat{q} . For obvious reasons, it is assumed that $\hat{q} < q^*$, where q^* is the equilibrium (and socially optimum) quantity; see the previous section. The new supply curve S' that incorporates the effect of PR has a flat stretch up to quantity \hat{q} at which point it becomes vertical. See Figure 2. Let \hat{p} denote the 'market' price, given PR. This is at

the intersection of supply curve S' and demand curve D . The other demand curve D' is for studying comparative statics.

We will henceforth refer to p^* as the shadow price of homes, given PR. This terminology is often used in the literature on planning wherein the emphasis is on finding a price that reflects the true scarcity of a resource (land here). Note that the cost conditions and the demand conditions are the same under EF and under PR. So, the shadow price of homes under PR is the same as the market price under EF, which is p^* (which is also the shadow price of homes under EF, given the terminology).

What follows from the model of PR is the following:

Proposition 2. *In the model economy, under the Permit Raj (PR),*

(a) the market price of (raw) land in rural areas is equal to the discounted present value of crops produced on land,

(b) the 'market' price of raw land for urban homes is higher than the market price of raw land in rural areas,

(c) only ordinary homes are constructed,

(d) rent as a percentage of 'market' price of homes is equal to the prevailing interest rate,

(e) there is a deadweight loss,

(f) an increase in demand leads to an increase in 'market' price; there is no effect on quantity, and

(g) the 'market' equilibrium is stable.

Let us comment briefly on each part of the proposition.

Proposition (2a) is the same as Proposition (1a) in the previous section. The reason is simple. The PR applies to the urban real estate only; the rural land market continues to be competitive as in the previous section; the market price for rural land is p^* .

Proposition (2b) states that the 'market' price of raw land for urban homes (\hat{p}) is higher than the market price of raw land in rural areas (p^*). This is a direct consequence of PR in urban areas; a limited quantity of land is designated by planners for urban homes; there is no such restriction in rural areas.

Proposition (2c) states that only ordinary homes are constructed. This follows directly from the regulation that it is mandatory to construct ordinary homes. It is true that there are ordinary homes under EF as well but it is an optimal choice there (see Proposition (1c)). Given PR, the urban land price is high which can warrant a shift from ordinary homes to high-rise buildings in the market for real estate but these high-rise buildings are not permitted due to restrictions on FAR under the PR.

Proposition (2d) states that rent as a percentage of 'market' price of homes is equal to the prevailing interest rate. This holds for the same reasons that Proposition 1(d) does; the only difference is that the relevant price is \hat{p} now instead of p^* . Accordingly the rent is also higher under PR than under EF. *In this sense, urban housing is over-valued under PR.*

Proposition (2e) states that under PR, there is a deadweight loss. See Figure 3. The shaded region i.e. triangle NRQ includes the dead-weight loss. This is related to the relatively small market size of the

housing industry in urban areas in the formal sector. Recall that there is no such deadweight loss under EF in the previous subsection.

Proposition (2f) states that an increase in demand leads to an increase in ‘market’ price; there is no effect on quantity. This result is in contrast to the result in the previous subsection that price is immune to a shift of the demand curve and the quantity expands under EF. To see this, consider the effect of a shift from demand curve D to demand curve D' in Figure 1 and in Figure 2.

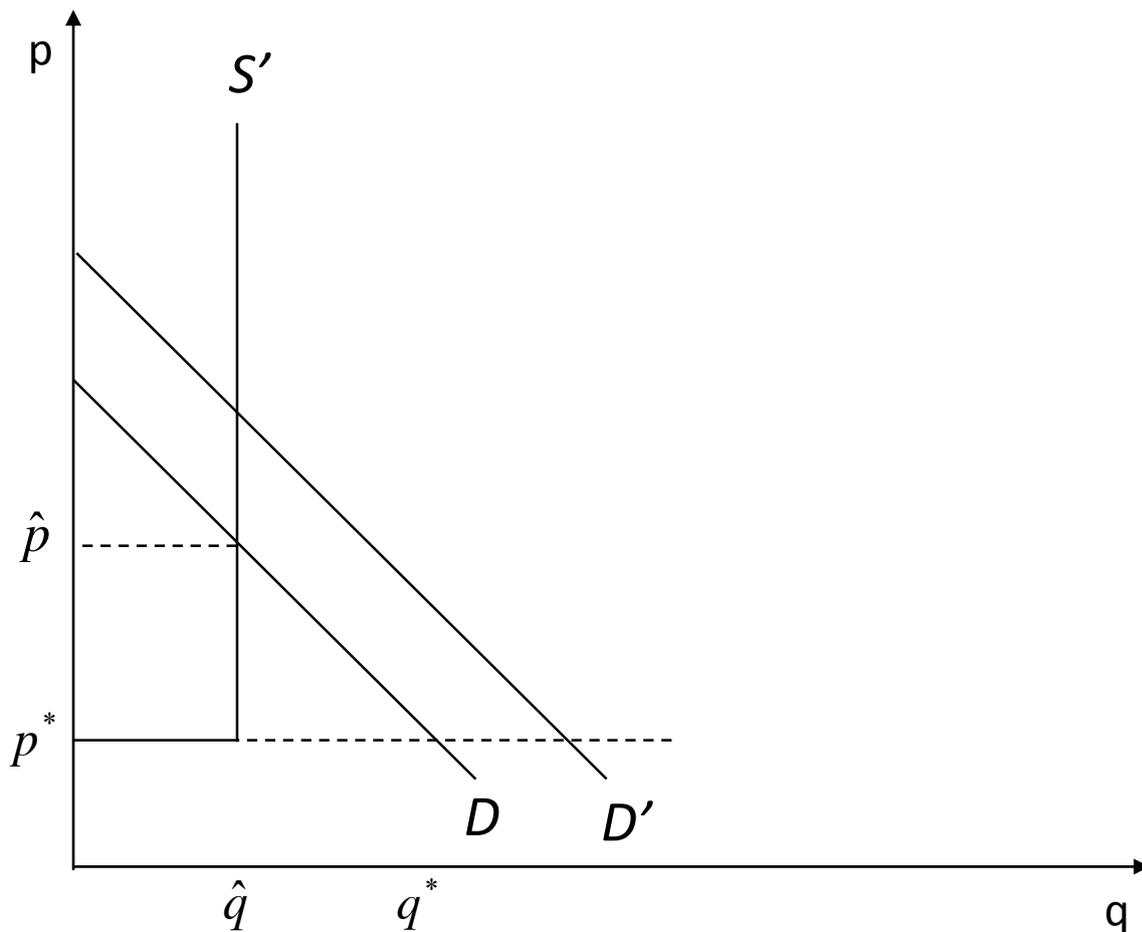


Figure 2: Market under *Permit Raj*

Finally, Proposition (2g) on stable equilibrium is similar to Proposition (1g). The stability property has a significance now. This subsection has shown that high price can be due to PR. Observe that the high price in the model in this subsection is not related to any bubble. So it can be stable equilibrium. *This is contrary to the common view that the high price is necessarily a case of a bubble.*

Over-valuation can be for two reasons. First is PR. Second is a bubble. We have seen the first case in this section. We will next turn to the second case in the next subsection. But before that, we would like to make a few observations on Figure 3.

First, the economic surplus consists of two parts: triangle MNO and rectangle PQNO. The former accrues to home owners who buy homes at price \hat{p} . This model is silent on who the other surplus

accrues to. It is, however, plausible that it accrues to a variety of people. These include officials, politicians and ‘godfathers’ through whom permits can be obtained. The payments for permits are often viewed as economic costs but they are simply transfers. Figure 3 is a representation of a static model of demand and supply. If we think of a dynamic version that allows for purchases of land and homes at early stages and at later stages, then we have another group of beneficiaries. These include traders and investors; the latter include developers who buy at an early stage to hold ‘land banks’. This is not all.¹⁴

Remark 1. *Beneficiaries of Permit Raj (PR) can include ordinary home buyers who buy at an early stage.*

This remark is interesting because the category of ordinary home buyers is often forgotten in the list of beneficiaries of PR. Home buyers are often viewed as victims of PR. This is true only if we consider buyers at later stages. Buyers at early stages are, in fact, beneficiaries of PR.

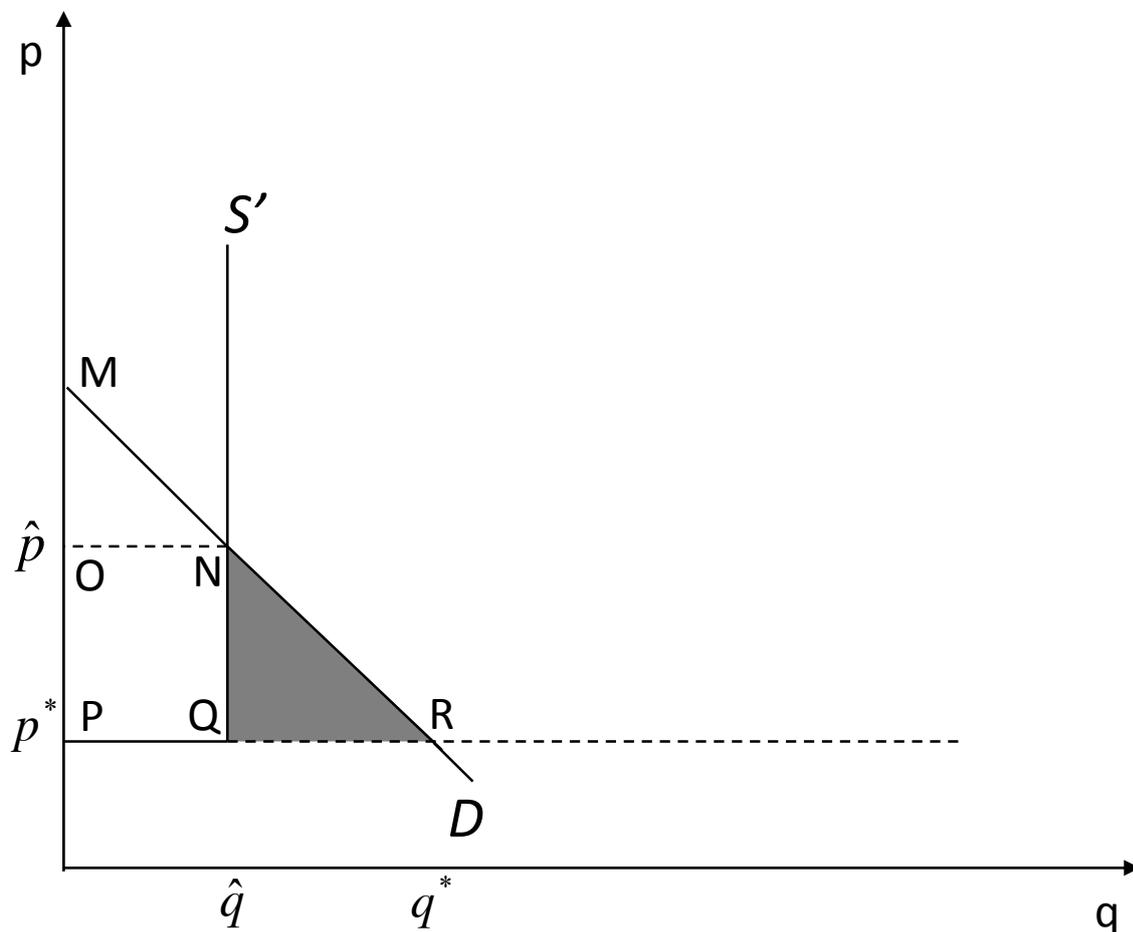


Figure 3: Dead-weight loss under *Permit Raj*

¹⁴ A small part of the economic surplus can also go to various service providers like brokers, advertisers, media houses, and so on; when the going is good, the fees can be generous.

Second, many people who could have stayed in the city at price p^* find the ‘market’ price \hat{p} unaffordable. They are forced to live elsewhere. So there is less (organized) urbanization compared to the case of EF in the previous subsection; urbanization is here measured by the number of (urban) homes.

Remark 2. *Little urbanization can be due to high home price in urban areas.*

The significance of Remark 2 is that this is contrary to the usual view that little urbanization is always due to factors like few jobs in cities, or strong taste for the countryside. Remark 2 has considerable importance for economics of development and for policy making.

We can now turn to possible bubbles in real estate prices.

5.1 Bubbles

In order to understand the effects of PR, we have so far considered a static model and considered comparative static effects of an increase in demand. Though the model is static, we have already used the model in this section as the basis for considering related issues that do not fit into the static framework. We will do so again here. As the well-known British logician, Carveth Read, wrote in 1920, “It is better to be vaguely right than exactly wrong.”

In the static model of demand and supply, there is no scope for a bubble. Let us think now of a dynamic version. In this version, the price rises *over time* if there is increased demand, given the inelastic supply. The increase in demand can be for a variety of reasons. The rise in price can set in expectation that price will continue to rise (and possibly rise at a higher rate than in the past). This can lead to additional demand purely for investment purpose, which can aggravate the price rise further.¹⁵ This can, in turn, strengthen expectations of a further rise in price, and so on. This tendency can get aggravated due to irrational exuberance in the real estate market. The result is that the path of home prices under PR can lie above where it would have been otherwise. The gap is a bubble.

In what follows, we will consider a bubble in a simplified way that makes it comparable to the price rise due to PR. Let $\hat{\hat{p}}$ denote the price that includes a bubble (this case is not shown in any of three figures above as these are not amenable to incorporating bubbles).

We have considered detailed effects of PR in Proposition 2. In what follows, we will focus on the newer elements only.

Proposition 3. *In the model economy, under the Permit Raj (PR), a bubble can arise. If it does,*

- (a) there are two parts of the gap between the observed ‘market’ price and the truly free market price; one part ($\hat{\hat{p}} - \hat{p}$) is due to a bubble, and another part ($\hat{p} - p^*$) is due to the PR,*
- (b) the over-valuation due to bubble can be unstable whereas that due to PR can be stable, and*
- (c) rent as a percentage of ‘market’ price ($\hat{\hat{p}}$) is less than the interest rate.*

¹⁵ The additional demand can take the form of larger sized homes or more homes. These may or may not be occupied.

The analysis in the previous subsection is a special case of the model in this subsection when $\hat{p} = \hat{p}$.

Proposition 3(a) states that over-valuation can be, in general, due to PR and due to a bubble. The over-valuation in this case can be more than the over-valuation in the case of PR alone. It is only the excess over-valuation in this case which can be unstable. See Proposition 3(b). The over-valuation that is directly attributable to PR is stable.

Finally, Proposition 3(c) may be compared to its two counterparts in the previous two propositions viz., Proposition (1d) and Proposition (2d). In the latter two cases, rent as a percentage of price is equal to interest rate. This is no longer the case when a bubble is present.

Remark 3. *A low ratio of rent to price can be used as an indicator of an over-valuation of real estate in case of a bubble but not in case of over-valuation that is simply due to PR.*

The significance of Remark 3 is that this highlights the possible error that is frequently made in using the ratio of rent to price as a valuation metric. It can be an appropriate valuation measure if there are good reasons to believe that PR is absent. However, this is often not the case even for some developed economies. This is not to say that the metric cannot be useful in general. It can be for used in general for another purpose, which is to examine whether or not there is arbitrage between investing in and staying in an owned home, and investing elsewhere and using the returns to stay in a rented home.

Returning to bubbles, these are more familiar in the literature on stock prices than in the context of the real estate market (though this has been changing in more recent times). Let us see what we can learn from the stock market. The bubble component in price in the context of the stock market is usually viewed as gap between the observed market price and the fundamental value. Accordingly, in the context of the real estate market, we may say that \hat{p} is the fundamental value when the market price is \hat{p} , given Proposition 3(a).

There is a need for perspective at this stage. We have considered three cases so far:

- (1) enabling framework (EF),
- (2) *Permit Raj* (PR), and
- (3) PR and presence of a bubble in the market.

In line with the terminology used so far in the paper, we have

market price (p^*) = fundamental value (p^*) = shadow price (p^*), in case (1),

market price (\hat{p}) = fundamental value (\hat{p}) > shadow price (p^*), in case (2), and

market price (\hat{p}) > fundamental value (\hat{p}) > shadow price (p^*), in case (3).

In case (1), there is no overvaluation due to a bubble or due to PR. In case (2), there is overvaluation due to PR but there is no bubble. In case (3), there is over-valuation due to PR and also due to a bubble.

In each of the three cases covered so far, land is acquired from farmers in rural areas for urban development. Observe that the plight of the farmers is the same in all three cases. The farmers who

sell land for the purpose of building homes in urban areas get a price equal to the discounted present value of crops grown on land (after subtracting other costs), and this value is the same in all three cases. Pricing in urban areas does not affect farmers in all three cases above. This is due to competition among the farmers who are large in number; each farmer owns a small amount of land.¹⁶ In the next subsection, we will see how this can change.

5.2 Farmers' Union

Assume now that farmers are organized to ask for a higher price for the land that is acquired from them. This can take the form that some political party or some activist group takes up their cause. The political party or the activist group here may be viewed as farmers' union. The latter insists in legislative bodies or 'on streets' on a higher price of rural land (though the benefits could take a variety of forms). Suppose the farmers' union manages, *ceteris paribus*, to take the price of land acquired from them from p^* to p^F (say). The result that follows may be stated as follows.

Proposition 4. In the model economy, given that the farmers' union can take rural land price to p^F ,

- (a) if $p^* < p^F \leq \hat{p}$, it is a case of redistribution, and
- (b) if $p^F > \hat{p}$, it is a case of redistribution, and a further rise in 'market' price of urban homes.

This proposition is self-explanatory. The price of land for farmers goes up due to the intervention of the farmers' union but the exact price is indeterminate; this will depend on bargaining power of the union. The more the bargaining power, the higher is the price for the farmers (and accordingly lower is the share of other 'stakeholders').

It is interesting that in Proposition 4(a), there is no increase in 'market' price of urban homes due to a rise in the price of rural land. It is only when the price rise goes beyond \hat{p} that it is attributable to the farmers' union. See Proposition 4(b).

In the context of Proposition 4(a), the farmers gain at the expense of 'urban' beneficiaries of PR. On the other hand, in the context of Proposition 4(b), the farmers gain at the expense of 'urban' beneficiaries of PR and at the expense of *new* urban home buyers.

It is interesting that often only a small fraction of rural land gets acquired for urban development. Also, most farmers are, in practice, reluctant to sell their land. So a higher price for land actually does not matter for many of them. If they have to raise their voice, it is more likely that they will ask for a higher price for their crops (and for a lower price for their inputs); they may also ask for other benefits like education, health, etc. Such benefits affect almost all of them. So they would ask for other benefits and not insist on a higher price for their land, if they have to choose between what to ask for. And yet, it may be seen that farmers ask for a higher price for their land. Why is this so?

It appears that the farmers are making an attempt to get a share of the 'benefits' of PR, which would otherwise go to 'city people' only. In that case, it is also plausible that the price will be pushed up to

¹⁶ It is true that some individual farmers can have a potential power to 'hold up'. However, this power can be limited in practice for poor farmers for a variety of reasons in general and in rural areas in particular.

\hat{p} and not beyond this. If so, it implies that the farmers' union is not in the picture in causing a high price of urban homes in which case it is PR and PR alone that causes a rise in the price of urban land. In other words, case (a) is more plausible than case (b) in Proposition 4.

Given Proposition 4(a), we may say that the causality runs from high urban price to high rural land price. This is the opposite of the usual view that urban homes are expensive because the land acquired from farmers is expensive.¹⁷

Some economists may dispute the above view. It is, however, interesting that whether we consider case (a) or case (b) in Proposition 4, the root cause of high urban home price lies in the policy regime PR. Recall that under the other policy regime EF, there is no scope for high price of urban homes (or for a farmers' union). There are no intermediaries under that regime between the ultimate sellers of land in rural areas and ultimate buyers of land in urban areas; the term intermediaries here means all those involved in receiving benefits of PR.

In this section, we have considered how prices are determined and how the gains are possibly shared, given PR. Let us next consider policy to improve efficiency and distribution.

6 Policy

Two policies that directly pertain to the real estate sector and that are often used to meet housing shortage are relaxation of FAR and 'affordable housing schemes'. This section will show that there is a need to go well beyond these policies.

6.1 Floor Area Ratio (FAR)

So far, we have considered PR that includes a regulation on maintaining a low FAR. Suppose now that the government retains much of PR but it relaxes the regulation on FAR.

A relaxation in FAR has the effect that the price of home (or apartment) falls for the simple reason that more construction can be carried out on a given piece of land. This is useful, given (the rest of) PR. Observe, however, that the price cannot fall all the way to p^* (the equilibrium price under EF).

The reason is simple. Recall that p^* is the lowest price possible when there is choice between ordinary homes and high-rise buildings, and no FAR is imposed. This is possible under EF. We have seen that the market equilibrium under EF is that only ordinary homes are constructed (see Proposition 1(c)). So it follows that a relaxation of FAR cannot take the price down to p^* . The reason lies in the higher cost of construction for high-rise buildings.

¹⁷ In India, *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013* (LARR) stipulated that farmers must, in future, get a higher price for the land acquired from them. It was felt by many that this will push up urban land prices but that may or may not happen. See Proposition 4.

Proposition 5. *Given PR, relaxation of FAR is useful. However, it is second best policy as it raises the cost of construction. The first best policy is to dismantle the PR; this obviates the need for high-rise buildings.*

If PR is dismantled completely and EF is put in place, then the outcome is as shown in Proposition 1 (see section 4). In particular, the price can be as low as p^* . Recall that this leads to the maximum economic surplus.

Note that in equilibrium, we will have ordinary homes only (and no high-rise buildings), once PR is dismantled. This last statement may seem surprising. However, recall that we had made a few assumptions in our model. First, there is, *ceteris paribus*, no preference for high-rise buildings vis-à-vis ordinary homes. Second, high-rise buildings are not viewed as signs of modernity. Third, senior managers/administrators do not use their position to stay on in expensive cities for their own convenience so that there is no compelling need to have high-rise buildings. Now if we relax such assumptions, then we can indeed see high-rise buildings in some parts of the country even when land is adequate for urban development in the economy. But that will not be the norm for the general public under EF.

Note that Proposition 5 only says that dismantling of PR obviates the *need* for high-rise buildings. If these are chosen by some, it is always possible to have these as well to the extent that they are in demand.

In this subsection, we have seen that there is a need to go beyond relaxation of FAR. In the next subsection, we will reconsider ‘affordable housing schemes’.

6.2 Affordable Housing Schemes

Under ‘affordable housing schemes’ (hereafter, simply ‘schemes’) the government provides or facilitates provision of small and cheaper homes with an explicit or implicit subsidy. These are useful for those who get homes under the ‘schemes’; for others who are eligible but do not get such homes, the ‘schemes’ have little meaning. Moreover, these ‘schemes’ have a fiscal cost for the government. There is also an administrative burden for the government. Also, corruption and unfair allotment tend to enter because the market price can be well above the price at which allotment takes place, and checks and balances are often not in place. It is interesting that while the ‘schemes’ do take care of the buyers' problem to whatever extent they do, the ‘schemes’ do not do anything to reduce the cost of homes. In other words, these ‘schemes’ are in the nature of redistributive schemes, given the inefficiency in allocation of resources associated with PR. What is really needed is a policy that can improve allocation of resources, can reduce costs of homes, and make these affordable for buyers.

Observe that ‘schemes’ are often in the context of the high price of homes, which is a result of PR. So the policy required is to switch from PR to EF. This switch lowers home prices and makes housing more affordable for all within a group of people who have similar income or wealth (so there is no lottery for selecting beneficiaries). A low price can remove the compelling need for ‘affordable housing schemes’.

It is true that even under EF, the (truly free) market price too can be high relative to incomes of some people. In that case, there is indeed a need for considering ‘schemes’. These can be ‘financed’ given

that the economic surplus is increased due to a shift from PR to EF (see Proposition 1(e) and Proposition 2(e)).

It is important that ‘schemes’ are considered as a part of the other social welfare schemes for the simple reason that the government faces a trade-off between different welfare schemes, given a budget even if it enhanced by higher taxes related to generation of additional economic surplus.

Next consider the design of ‘schemes’, given that these are needed. Under the assumptions that there is no shortage of land for the purpose of urban development and that the market price of land is low once PR is dismantled, planners need to provide adequate space for homes and for various amenities under its ‘schemes’.¹⁸ Let us summarise the result.

Proposition 6. *A switch from PR to EF*

(a) makes housing in general and space in particular more affordable,

(b) increases economic surplus,

(c) provides more room for welfare schemes including ‘affordable housing schemes’ if these are still needed, and

(d) paves the way for more spacious homes under possible ‘affordable housing schemes’.

One possibility is that ‘schemes’ take the form of *housing voucher schemes* that use public subsidy alongside freedom to choose in a competitive market; this aspect is, however, outside the scope of this paper.

This subsection and the previous subsection have dealt with policy to deal with difficulties faced by urban home buyers. In the next subsection, we will consider policy to deal with small land owners in rural areas from where land is acquired for urban development.

6.3 Small Land Owners in Rural Areas

We have so far seen that the first best policy is to switch from PR to EF. This can lead to lower land prices in not only urban areas but in rural areas as well for reasons that were spelt out earlier (subsection 5.2). This can hurt land owners in rural areas. However, it is important to have a perspective. In this context, consider three factors.

First, the fall in price is relevant only for those farmers who actually sell their land in rural areas. It is by and large notional for others who retain their land for cultivation. It appears that the proportion of farmers who actually sell their land is very small. Though this likely to rise with a switch from PR to EF, it is not likely to be huge. So, the possible adverse effect is on some farmers only. Second, the fall is from a price that is artificially inflated to begin with - thanks to PR. So it is not clear that the previously prevailing high price is an appropriate benchmark or basis for correct pricing. Third, if urban real estate development and construction per acre of land are at least as labour intensive as agriculture (and related occupations) in rural areas are (and there are reasons to believe that this is indeed true), then the jobs created in the aggregate can make up for the employment lost in rural areas; this aspect is however outside the scope of this paper. All this suggests that the potential

¹⁸ This is the opposite of what many governments tend to do in practice under the constraint that the ‘market’ price is high. Under EF, this constraint gets relaxed.

difficulties of small land owners in rural areas, *which are related to the dismantling of PR*, are often exaggerated.

Though it is important not to exaggerate, it is true that small land owners in many countries face serious difficulties. So there can be a strong rationale for welfare schemes for them. The analysis in the paper has suggested that there is a need to switch from PR to EF on grounds of efficiency. The removal of PR increases the economic surplus (see Proposition 1(e) and Proposition 2(e)). As seen in the previous subsection already, this increased surplus can provide room for welfare schemes for the small land owners in rural areas.

Proposition 7. *A switch from PR to EF can lead to an increase in the economic surplus providing more room for transfers for small land owners. These transfers can go alongside the process of removal of PR.*

Help to small land owners can be a part of the social welfare schemes in general. There is a role for a fiscal redistributive policy. It can be assuring if this policy is put in place alongside the policy to switch from PR to EF.

The basic idea behind Proposition 7 may be restated as follows. Given that small land owners are in distress, there is a need for a redistributive policy to help them all. This can be better achieved through maximizing the economic surplus and using part of it for their welfare instead of distorting the real estate market, artificially inflating land prices, and helping only a few who actually sell their land (and leaving the others with no benefits related to pricing of land).

7 Summary and Conclusion

This paper has a very simple thesis. The thesis is, *on the whole*, quite different from conventional wisdom on the subject. It is hoped that the thesis has not become difficult for that reason. The thesis is, in brief, as follows.

In many countries, there is hardly any shortage of land *for urban real estate development*; this paper is about such economies. In such places, the long-term effect of demand side factors like economic growth, rise in population, migration to cities, inflation and absence of meaningful inflation-indexed bonds, and black money can substantially affect the quantity but not the price of real estate in urban areas. But often the opposite happens in practice. The basic reason lies in the policy regime that prevails for the real estate sector in urban areas - *Permit Raj (PR)*. This causes an inelastic supply of homes and a dead-weight loss.

Since the high price of real estate can be due to PR, it is not always a case of bubble. However, the two are not unrelated. The scarcity due to PR can be conducive to the formation of a bubble. It is interesting that though the possible additional price rise due to a bubble can be unstable, the price rise due to PR can be stable.

The price of raw land for homes in rural areas is usually similar to the price of raw land for agriculture. However, the price of raw land for homes in urban areas tends to be higher than the price of raw land for agriculture. The reason lies in PR.

It is plausible that the high price of land in urban areas leads farmers to ask for high price for land in nearby rural areas and thereafter in other rural areas. So the causality can run from high urban land price to high rural land price. Even so, the root of the problem lies elsewhere; it lies in PR.

To meet housing shortage, governments often opt for a relaxation of the regulation on floor area ratio (FAR). This step can be useful, given PR. However, it raises the cost of construction compared to that in ordinary homes. This is particularly bothersome in developing countries. The first best policy is to remove PR and replace it by an enabling legal-regulatory framework, or simply enabling framework (EF). This is not just about removing permits for development and construction in approved areas. It is also about approving adequate areas for urban development in line with the changing needs of the economy.

For simplicity, this paper considered the extreme case of PR and the extreme case of EF. The reality lies somewhere in between. Also, a switch from PR to EF can be interpreted more broadly as a matter of degree rather than as a complete shift to the extreme case of EF. The more the shift, the greater are the positive effects (this is assuming that the transition is managed well).

Within EF, this paper has considered the extreme case in which the supply of land from rural areas is perfectly elastic. This is again for simplicity only. The basic idea is that supply is elastic enough to avoid jumps in prices due to continued increase in demand. It is true that the supply is, in practice, often quite inelastic but that can be a man-made problem – thanks to PR.

A switch from PR to EF can lead to a reduction in urban land prices. This can, in turn, have three effects. First, it avoids the *compulsion* to have high FAR even where land is not scarce. Second, it lowers the benchmark relative to which rural land prices tend to be set in practice. Third, it simplifies the law and economics related to real estate; this helps.

With the proposed policy, market prices of land (and wealth as measured by market prices) can come down. However, the economic surplus in the real estate sector can go up. This can provide room for redistributive welfare schemes including transfer schemes to help small land owners. It can help if these schemes go alongside, if not prior to, the dismantling of PR.

With dismantling of PR, we can discover the truly free market price. If an affordability measure like the ratio of the price to income indicates that the price is still high, then there is indeed a case for considering appropriate ‘affordable housing schemes’ among other social welfare schemes.

Given that a switch from PR to EF reduces land prices, there is no compelling need under ‘affordable housing schemes’ to focus on economizing on space. Then there can be less of cramped homes in dense locations even in developing economies and even for the lower middle class and weaker sections of the society; the economizing can be more in the size and nature of the constructed part of home.

This paper has focused on the economics of land price and PR. This can be the basis for resolving possible political issues involved.

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