

ISLAMABAD REAL ESTATE BUBBLE

ANALYSIS OF CDA PRICING MECHANISM

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Introduction

Islamabad is facing a serious shortage of residential and commercial units despite the fact that it is the second most popular place to buy a commercial or residential plot after Lahore¹. The shortage primarily owes to an increasingly greater number of people pouring in the capital city for past several years². However, the problem becomes more intense when the extraordinary rise in the prices makes it impossible for buyers to afford investment in the sectors developed by the Capital Development Authority- the capital territory regulator.

What are the factors behind this price hike? Do prices of real estate in Pakistan reflect true supply and demand?

Capital Development Authority (CDA, or the Authority) is responsible to develop new sectors in the city. CDA also defines zoning and height restrictions for development of land. The developed sectors of Islamabad are sold to general public via balloting and auctioning in which CDA sets a reserve price. The profits generated by the sale of land are then utilised to run the non-development expenditures of the Authority.

The increasing demand and inelastic supply of real estate does not seem to be solely responsible for the prices of real estate in Islamabad. However, it is believed that price mechanism and the resultant speculative investment is somehow responsible for the price hikes in the real estate of Islamabad Capital Territory.

The purpose of this paper is to find out the pricing mechanism by taking CDA as a case study. The paper will investigate the possible effect of speculation on investment and study the impact of price speculation on the demand of real estate. This will attempt to answer this question: how does investment speculation influence effective demand of real estate?

Further, the research will explain whether zoning and height regulations affect supply of real estate for different segments of the actual market in Pakistan.

The paper is structured as follows: 1) Real estate trend analysis; 2) How prices are determined in real estate? And; 3) conclusions and recommendations.

¹ <http://www.zameen.com/commercial.html>

² <http://www.dawn.com/news/740350/islamabads-population-touches-two-million-mark>

Real Estate Trend Analysis

A well-functioning real estate market should efficiently allocate land between supply and demand. A competitive real estate market is also very transparent in terms of pricing.

The internal migration mostly from KP and Karachi has increased the demand for real estate in the capital³. In 2013 alone, the demand for real estate in Islamabad increased by 30-50%⁴. This increase was due to security consideration in other provinces. The supply of real estate increased by only 20% for the same year. Following is the demand and supply side analysis of real estate with respect to Islamabad.

Demand-Side Analysis

There are many factors including population which play a vital role in determining the demand of real estate market. For example income of the consumers, expectation of the investors and price of substitutes. This section will study the effect of these factors on recent/changing trend of demands of real estate in Islamabad.

Market Size or Population

Market size is determined according to employment, population and area of the market under consideration. For example, in case of office space, the market size would be the number of firms or potential firms in that vicinity.

The World Bank's urban population data estimates a 73% increase in the population of Islamabad during the last 10 years. The total population of Islamabad increased to 1.03 million in 2010 from 787,508 in 2005. It further increased to 1.36 million in 2015⁵.

Resultantly, the congestion in the federal capital is increasing due to rise in housing units with 2-4 rooms and significant decline in single room housing unit.

Indices of Congestion in Islamabad (percentage)

	1998	2012-13
Housing Units with One room	16	6.84
Housing Units with 2-4 rooms	67.8	76.55
Housing Units with 5 or more rooms	16.1	16.61

Source: Population Census 1998 & PSLM 2012-13

³ <http://www.dawn.com/news/740350/islamabads-population-touches-two-million-mark>

⁴ <http://www.overseaspakistanis.net/real-estate-business-doing-well-in-islamabad/>

⁵ <http://www.thenews.com.pk/print/53775-islamabad-having-highest-rise-in-urban-population-wb>

The rise in the population and increase in the congestion is creating a high level of demand. But since the supply of real estate is limited in the short run it creates an upward pressure on prices until the supply is relaxed with new construction and development.

Income of Consumer

The wealth of the consumers directly influences demand of real estate. There are basically two types of demand based on income/wealth of the consumer at play in the real estate market; the desired demand which appears when the consumer has not hit the marketplace yet and the effective market demand, which is backed by the financial constraints of the consumer.

Price of Goods and Substitutes

The quantity demanded by consumer is sensitive to price changes. The real estate markets with lesser substitutes would imply less sensitivity of the consumers towards prices. For example, the demand of a 10 *marla* plot in Islamabad increased by 1.31% against the price increase of 1.06% in last three months.

Markets like middle income housing schemes are more sensitive to price changes as a greater number of choices are available in that market.

Effect of speculation on investors

Speculation in this context is closely related with the opportunistic timing of development (Capozza 1976; Mayo and Shephard 2001; Titman 1985). In few cases, speculation is referred to as short-term investors, that is, the ones buying and then selling immediately for profit margins than those who buy and hold. While speculation is considered a demand side phenomenon, the bubble that arises from the speculation is totally dependent on the supply conditions of the market explained in the next session.

Supply-Side Analysis

The real estate supply refers to the quantity of houses, land, units, office space available for supply in different real estate markets. The fundamental law of supply states that the prices will rise with the rise in quantity. However, in terms of real estate, the supply of real estate land is rather fixed, the only fluctuation in the supply is the shift or jump in the overall available land. This mostly occurs with the development of new area in that market.

According to an estimate, the Capital Development Authority has provided around 50,000 units in Islamabad since its establishment⁶.

⁶ <http://tribune.com.pk/story/790122/decent-housing-in-islamabad-an-umbrella-is-the-only-affordable-shelter/>

Provided By⁷	No of Housing Units
CDA (Since establishment)	50,000
Private Land Developers (Last 10 years)	80,000
Unplanned Areas (Bahara Kahu, Tarnol, Golra etc)	70,000
Housing Units Shortage	90,000
Total No of Housing Units	290,000

In 2007, the shortage in the housing units as per demand by consumers was around 50,000. In 2013, while the demand for housing units increased by 30-50% (as stated above), the supply for the units increased only by 20%.

The nature of ownership for housing units in Islamabad for over the decade is:

Nature of Tenure in Islamabad (percentage)

Islamabad	All Areas		Urban		Rural	
	1998	2012-13	1998	2012-13	1998	2012-13
Owned	47.8	50.95	34.7	35.44	74.5	78.87
Rent	39.8	40.61	51.3	56.1	16.3	12.72
Rent Free	12.4	8.44	14	8.46	9.2	8.41

Source: Population Census 1998 & PSLM 2012-13

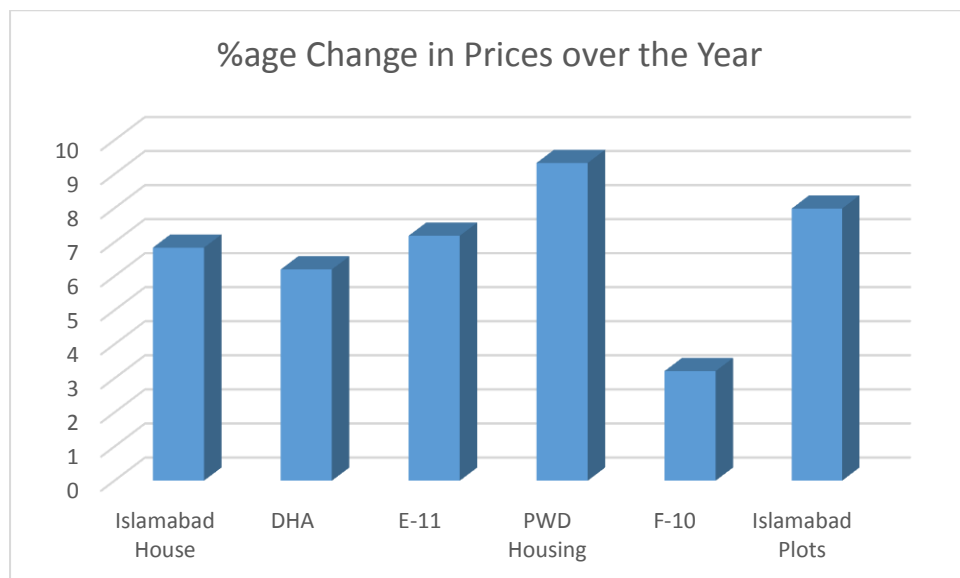
The available stock of real estate is usually fixed due to time constraints in developing new areas. It means that in a given period of time the supply of real estate stock is insensitive to price changes. For example, if there is a 25% increase in the prices of houses or house rents, there will be no increase in stock of the available houses.

New construction like development of new land or increase in capacity of existing buildings is considered one of the most important factors in analysing the position of real estate supply. It helps in forecasting the possible market changes expected in the future.

⁷ Ibid

How Prices are determined in Real Estate Market?

Prices of residential property in Islamabad (one *kanal*) have increased by 6.22%, plots by 7.99% and houses by 6.84% from April, 15 till March, 16.



Source: Zameen.com

Fifteen years ago, a plot in G-11, Islamabad was worth Rs 2 million before auction, which was finally sold in that auction organised by civic agency in Rs 4 million. Subsequently, other investors in that sector raised the prices of their plot to Rs. 4 million. Similarly, the price of a *kanal* in the sector G-13, was almost Rs. 3 million, which touched Rs 6 million in the market: a 100% rise before it dropped by 20%⁸.

What happened to prices? What factors govern the prices in the federal capital?

The rise in these prices is not attributed to the forces of demand and supply. It is because of the process of handling the land by the authority which will throw some light upon this procedure.

Capital Development Authority

CDA was established in 1960 for planning and development of the capital. CDA was also authorized to perform functions of a municipal committee to provide cleanliness, health, education and supply of food for the inhabitants etc.

CDA generates around 70-75% of its receipts by selling out commercial and residential plots through auction and other measures. The expenditure of day to day operations and staff

⁸ <http://www.lahorealestate.com/pakrealestatetimes/showthread.php?tid=15425>

salaries is met by the selling of plots⁹ and tax collected through different sources. These non-development expenditures account for almost 40% of the total expenditure made by the authority.

CDA Budget

Description		Budget Estimate 2012-13	Budget Estimate 2013-14
I -	Receipts		
A	Government Grant		
i)	PSDP	1,690.63	1,777.96
ii)	Maintenance Grant	1,798.29	1,854.93
	Total 'A'	3,488.92	3,632.89
B	CDA's Sources		
i)	Self - Financing Account	21,423.90	27,174.25
ii)	Revenue Account	4,648.41	6,582.10
	Total 'B'	26,072.31	33,756.25
	Total Receipts	29,561.23	37,389.24

II		Expenditure			
	Description	Budget 2012-13	Estimate	Budget 2013-14	Estimate
1	Development	16,025.07		20,905.66	
2	Non-Development	12,312.86		13,078.67	

The Authority is badly overstaffed and the salaries are paid not by income generation but by selling of residential and commercial plots¹⁰. This creates an urge for the agency to sale more and more plots at high prices in order to generate higher profits. The sale of the plots is done either by balloting or by auctioning.

⁹ http://www.awaztoday.tv/News_Poor-performance-CDA-chairman-to-monitor-plots-auction_1_38017_Political-News.aspx

¹⁰ Interim Report- *Wafaqi Muhtasib*

Balloting: CDA sells out plots and property through balloting in which prices are set in comparison to the nearest developed and under-developed sector including the cost of land acquisition and development cost. The remaining plots are then sold by opening up the bidding.

Bidding: The bidding in the auction is the driving force of rise in real estate prices. The reserve price set for any plot to be auctioned, is not determined via market survey. Instead, they are set on the direction of CDA officials or in accordance to the last auction price.

The motivation behind raising the reserve price is that it helps the authority to generate more funds every time as the final price in one auction serves as base price in the next auction. The price of the auctioned plot automatically rises due to a high reserve price.

Dealers and investors sometimes collude to buy up purchasing rights of new land in order to boost unit prices after which they will walk away with enormous profits from trading and subsequent rise in real estate prices¹¹. For example, the bidders raise the price of a plot to Rs 8 million in a sector where they had already bought some plots of the same size at Rs 5 million. The rise in the auctioned price will then help them in generating huge profits for their rest of the property.

Implications of this Price Mechanism

The imperfect price mechanism causes artificial price hikes and lack of transparency in the pricing system results in the following challenges/problem:

Lack of Investment

Investors and genuine buyer have started losing interest in buying real estate in the federal capital despite the fact that CDA has started approving extended facilities for plots¹².

Discouragement of Genuine Buyers

It is believed that the auctions discourage genuine buyers and the plot ends up in the hand of investors and dealers, leaving no or very little choices for real buyers. Real buyers and investors have stopped participating in the auctions organised by the civic agency¹³.

For example, in an auction CDA offered 470 plots, but only 37 applications were received out of which just 5 applications belonged to residents of Rawalpindi and Islamabad¹⁴. The civic agency used to receive almost twenty times more applications in the past¹⁵.

¹¹ Background interview with a Real Estate Investor in Islamabad.

¹² <http://tribune.com.pk/story/973579/cdas-revenue-generation-land-auction-no-longer-a-lucrative-model/>

¹³ A background interview with a Real estate dealer and Investor.

¹⁴ <http://www.dawn.com/news/1055406>

¹⁵ *Ibid*

Investors' Confidence

Investors are also shying away due to non-disclosure of pros and cons of a property at the time of auction. Sometimes, after giving the highest bid, investors realise that the plot either lacks basic facilities or houses electricity grid installations¹⁶. This creates an apparent lack of supply in the real estate.

Investors believe that the regulatory authority is working to generate abnormal profits to run their day to day business which explains the price hikes in the prices of real estate and discourages real investment¹⁷.

Transparency

This price mechanism also creates certain transparency issues like manipulation in the balloting and auctions. Further the agency is sometimes buckled under pressure by influential people in selling of plots. In few instances, the balloting software used by the civic agency was found to be mal-functioning¹⁸.

Over Pricing

It is believed that speculation is creating price hikes. For example, the demand for the plots in sector F-17 of Islamabad has increased by 4.88% for the past few months, however, the prices of the plot have increased by 12.46%.

Area	Demand of the Area (%)	Price Changes (%)
B-17 MPCHS, Multi Gardens	1.29	1.35
Islamabad F-17	4.88	12.46
Islamabad B-17	0.61	0.55

Source: Zameen.com-online portal

In such a case the demand for the real estate is not triggered by the actual price increase but expectation of further rise in future prices.

Auctioning is also a major source of rise in prices. Frino *et.al*, 2010, found the impact of auctions on residential prices in Australia. They found that auctions always lead to greater selling prices as compared to private treaty method of sale. A private treaty sale is when a

¹⁶ <http://tribune.com.pk/story/971730/before-land-auction-real-estate-bigwigs-assure-cda-of-support/>

¹⁷ A background interview with a real estate dealer and investor.

¹⁸ <http://www.dawn.com/news/1155185>, <http://dailycapital.pk/nab-approves-opening-corruption-cases-against-raja-pervez-ashraf-rana-mashhood/>, <http://dailycapital.pk/staggering-rs-40-billion-mega-scandal-haunts-islamabad/>

“The CDA failed to hold fair balloting of plots in the past. In 2011, some 624 plots were auctioned by the CDA, but several MPs and influential were declared winners of corner or most priced plots at a housing scheme.” <http://tribune.com.pk/story/820440/plots-balloting-cda-buckles-under-pressure-from-senators/>

property is offered to prospective buyers for sale at a negotiated price. Unlike an auction, the potential buyers do not know what others may be offering for the property.

Building and Height Regulations

The regulatory environment and laws governing the use of available resources or new construction is significantly responsible for supply constraints. Zoning laws in urban areas to mark city centres and suburbs creates a significant divide not only geographically but also in terms of property prices and available amenities.

According to Emiel A. Wegelin, (GIZ Program Coordinator, Cities Development Initiative for Asia, Philippines) who spoke at the international conference on “Framework for Economic Growth, Pakistan” held in Islamabad 13 - 14 July, 2011:

“Overall direction of deregulation and retreating government is required. Let government and the private sector do what they are best placed to do, but do not throw out essential provision of public services with the privatization. The Planning (**compact development, more attention to mixed land use zoning**) and housing (**low income housing space standards; incentives for private sector rental housing**) directions are by and large supported.”

The demarcated main city follows a ‘master plan’ which all developers must comply to before starting construction. This creates an apparent exploitation opportunity for the real estate agents in the main city to raise their prices exponentially.

According to Zoning Restriction 1992 and 2005, Islamabad Capital Territory has been divided into different zones. The zoning was first delineated in the Master Plan in CDA Ordinance 1960. The zones define and restrict the ‘mixed use’ of the land. For example, the commercial areas defined in the master plan cannot be used for the residential purposes or vice versa as per the demand and supply condition of the real estate.

Government laws and policies sometimes hinder new construction in real estate market. For example, the building permits in different real estate market obstructs the optimal utilisation of the available land to generate increased supply.

Similarly, the investors hesitate to fall in to the procedural bottlenecks, complicated policies like height and building restrictions and slow pace of development by CDA, for example, it can sometimes take up to 2-3 years just to obtain a NOC for building¹⁹.

The approval process is also generally pretty slow. It has been reported that CDA has approved only 13 buildings in the last three years, while 130 illegal buildings have been constructed apparently without its knowledge.

Pollakowski and Wachter (1990), Green (1998), Evans (1999) and others have found a strong relationship between regulatory environment and real estate prices. Excessive regulations

¹⁹ Background Interview with a CDA official.

tend to restrict supply stock of real estate and increase prices, resulting in a market that is more volatile where a sudden increase in demand shoots up the prices. At some point government does respond to the rise in prices and inelastic supply of land which results in a one-time or occasional shift in supply of the stock.

On the other hand, the markets with lesser regulations have relatively moderate boom and bust cycles with elastic supply of real estate stock.

Commercial plots in CDA are allocated according to planning parameters. It is mentioned at the time of auction that how many storeys are allowed for a specific plot. The practise of increasing storey's afterwards has been abandoned now, according to which CDA used to calculate the cost of previously allotted storeys and current increase in the building plan and then it costs the builders the difference between the previous and the current cost.

Currently, the original allotted plan is being followed without making any changes. The original plans and allotment is based on the zoning ordinance and town planning done in 1960's which was based on plot viability, services and costs and benefits it can provide. The height restrictions vary from plot to plot.

If a builder today wants to build a multiple storey building different from what was initially allotted, he then has to²⁰:

- a) Refer to the original plan of CDA
- b) Present his working plan and design to CDA and obtain a 'No Objection Certificate'
- c) Obtain an authorisation from Civil Aviation Authority himself for height restrictions

²⁰ The procedure was explained in a background interview with a CDA official.

Conclusion & Recommendations

The prices of real estate skyrocketed in the capital city of Pakistan over the past few years. The city is facing the highest rents and purchasing rates in contrast to other parts of the country. However, the increasing demand of the land in Islamabad is not solely responsible for the price hikes.

The Capital Development Authority develops and sells land through auction and balloting to generate revenues. The auction and bidding procedure increases speculated investments from large investors. It tends to create price hikes and discourages genuine buyers to invest. This is especially true where supply of land is inelastic.

The policies of building height and zoning restrictions in Zoning Regulation 1992²¹ tend to increase the cost of investment. It then creates real estate bubble and subsequent collapse.

The civic agency should focus on reforms like:

- Rezoning of current areas which are facing significant demand pressures from commercial to residential or to be characterised as “mixed use”.
- The agency must develop an independent and transparent pricing mechanism where prices can adjust themselves according to the demand and supply needs of the consumers. For instance, the land can be sold at open auctions instead of fixing an uncompetitive reserve price.
- The authority must consider downsizing its number of employees to a financially desirable extent and to devise an alternative source to finance its non-development expenditures.
- The existing zoning laws are outdated and unfriendly in terms of promoting investment in the real estate sector. Construction guidelines should be amended as per need of the project which may be residential or commercial. For instance, the construction laws for low income housing projects should not include compulsion of wider roads etc. In fact, cities should be made hubs of economic activities by relaxing zoning and building regulations²².
- Changes in building and housing regulations especially the height restrictions will expand the supply of affordable rental housing. CDA must encourage a construction boom by allowing high rise and mixed use development for living & work places.

²¹ In exercise of the powers conferred by section 51 of the CDA Ordinance 1960 (XXII of 1960), read with section 11 thereof, the Capital Development Authority introduced the Zoning Regulation 1992.

²² http://www.pc.gov.pk/feg/PDFs/2012/FEG-Final-Report_2-1-2012.pdf

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