

Policy Paper

An ex ante Assessment of Property/Wealth Tax in Bangladesh

Sajjad Zohir
Motiar Rahman
Mohammad Arefin Kamal
Anik Ashraf
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Prepared for
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With financial supports from
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Sajjad Zohir is Research Director, ERG, while M.A. Kamal and Nabil Ahmed are Research Assistants. Motiar Rahman is Joint Commissioner, NBR, and Anik Ashraf is In-Country Economist, IGC. The authors would like to acknowledge the financial support provided by the International Growth Centre's Bangladesh Growth Research Program (BGRP) at ERG

EXECUTIVE SUMMARY

In an agrarian society, ‘property’ included land and a few other agricultural assets. With progresses and economies grew, a vast multitude of new assets emerged. Whereas ‘real property’ refers to real assets (such as land, natural objects on the land and improvements or constructions), ‘wealth’ is a multifaceted concept which includes value of real assets as well as bank deposits, businesses, shares and other financial instruments, personal assets (motor vehicles, furniture, electronics, precious metals), etc. While concepts of real property and property tax remain relevant in the context of local government tax (service charge) administration, at the national level, the concept of wealth is more appropriate since it subsumes real property as well as all new forms of assets in a modern society. Upon reviewing literature and practices in other countries, this paper adheres to the term wealth for all subsequent discussion.

The Wealth Tax of 1963 remained largely unchanged until the amendments made via the Finance Act of 1993. A schedule of tax rates on wealth value recorded in wealth statements of taxpayers was in place for wealth exceeding Rs./Tk. 2.5 million. As property values grew over time, the wealth tax payable was becoming increasingly exorbitant, making enforcement a considerable undertaking. To prevent wealth taxes from rising beyond a certain threshold, the Finance Act of 1993 introduced a ceiling of 30% of current income for aggregate income and wealth tax. This ceiling which coincided with the introduction of VAT, are believed to have changed incentive structure and subsequent reduction in government revenue from wealth tax, with eventual abandonment in 1999.

With rising inequality in the ownership of assets, increasing bias in household portfolio towards non-productive assets, and exorbitant increases in value of real property alluring taxes on capital gains, the proposal to reintroduce some form of wealth tax has been tabled for last few years. Eventually, a surcharge was introduced in 2011, 10% on income tax paid by individuals with recorded wealth exceeding Tk. 20 million (2 crore). It is estimated that 1.05% of current tax-payers (of personal income tax) own wealth worth Tk. 2 crore or more if one goes by the records NBR has from wealth statements. With an estimated number of 1 million active tax-payers, number eligible for paying wealth tax would be little over 10,000. Their average reported annual tax payment is estimated to be Tk. 7.38 lakh and the total collection of surcharge would be around 76 crore taka if assessments were based on gross wealth. One may note that the figure is comparable to the reported collection of Tk. 65 crore under wealth surcharge, which may have been based on reported net wealth. For further probing into choices, informed policymaking and for assessing alternatives in property valuations, the NBR approached researchers at the Economic Research Group (ERG) to carry out an Ex Ante Assessment of Property/wealth taxation in Bangladesh. Accordingly, the researchers collaborated with NBR and availed financial supports from the International Growth Center to undertake the study.

The study included an exhaustive review of literature on property and wealth taxation focusing on: concepts; analytical inferences and empirical evidence on impacts of property/wealth tax on equity, efficiency and revenue productivity; and various methods of property valuation. Several

sources of data were analyzed: (i) limited NBR data analyzed by the team member from NBR revealing the current state of information on wealth as well as on sizes of wealth across different income and age groups; (ii) Several websites reporting data on property/apartment transactions to explain variations in property values; and (iii) a survey of urban properties administered by ERG on 1600 residential units across different wards of Dhaka city and 400+ commercial units in several cities. The survey provided deeper insights on the determinants of property value, enabling distinctions made across location, neighborhood, and property-specific characteristics. In addition, municipality tax imposed on residential, commercial and industrial plots, by wards, were compiled and assessed; and government assessed plot values by mauzas used by the sub-registry offices for revenue collection during transfers in property ownership.

Feasibility of imposing a wealth tax as well as impacts of enforcing a tax on the basis of assessed value of wealth depend on state of information available with the NBR. It is no new knowledge that tax-payers under-report their wealth. Our queries revealed that a large proportion of individuals do not reveal the quantity of gold they own. In large proportion of cases where mentions are made, amount is not reported upon claims that the ornaments were inherited and hence non taxable. Furthermore, the reported value of gold fluctuates widely across years (depending on year of first registration with the NBR) and even within a particular year suggesting that valuation of wealth indeed is an intricate issue and requires clear reference to quantity and/or a commonly applied reference price. The study also notes that despite online banking and share transactions, large quantities of money go unreported simply because fixed deposit accounts and advance income tax payments are not linked to an individual's TIN.

With regards to real property, the wealth statements lack adequate information, such as, on location of property, year of acquisition, etc. Available information does not also permit tracking changes/investments on the property; and in many instances, multiple ownerships established through building of apartments using the service of property developers. Furthermore, the land values reported in the wealth statements are often cited at historical or acquisition cost and hence do not give a clear indication of the current market value. For example, depending on location, land values reported by the Office of the Sub Registrar can be 30-95% lower than the actual market value. Overall, the current stock of information at the NBR is incomplete, which is inadequate to allow effective assessment of wealth/property based on market values. Thus, any attempt to enforce taxes related to wealth based on those information, prior to updating those information and ensuring a suitable mechanism for continuous updating, may lead to further distortions and may unduly tax honesty.

The survey findings suggest that location remains an important determinant of variation in market values of property, justifying the general principle of area-based price and tax assessments practiced by the government. However, current assessed values are gross under-estimates of market values and therefore require revisions, along with possible downward revision of tax rates. For example, values of urban land assessed by the Office of Sub-Registrar for the purpose of taxes and duties are 30 to 95% below current market price depending on locations; and the rents presumed in current tax rates are 29% to 36% lower than market rents. Independent survey of urban properties reveals that the price of apartment increased, on an average, by 8 to 14 percent annually since the year of acquisition, which call for measures of wealth value independent of those recorded with the NBR.

The data also reveal that there are variations within locations, more in some locations in Dhaka city than others. These variations are due to differences in neighborhood characteristics within locations and property-specific characteristics that are closely linked with investments made on buildings and interiors. In limited ways, the study reveals that one may ignore within-location variations for some parts of the city, but those ought to be accounted in property valuation for some of the richer locations.

At the policy level, the government is perceived to face a choice set with three options: (i) no additional wealth tax (not even the recently imposed surcharge); (ii) continue with the surcharge on wealthy people; and (iii) introduce a wealth tax as a proportion of the net or gross value of wealth replacing the current surcharge method. For the practitioners within the government, who translate policies into operational rules, there are additional questions to be addressed, some of which have been addressed in this report.

The study points at the need to distinguish policy choices under regimes of incomplete information, available with the enforcer. While increasing inequality, in spite of contrary HIES findings, cannot be ruled out, one needs to be cautious in using wealth tax as an instrument for achieving equity. The size of tax revenue generated is likely to be small due to meager information the authority has on individuals' wealth. Moreover, problems associated with valuation have been raised. Given the background, the following recommendations are put forward:

- Though the wealth tax is undesirable given the information constraints, the current surcharge practice proves to be a better option. Thus, it is recommended that the current surcharge tagged to stated wealth be continued with a view to improve the information base with the NBR.
- While revenue may be increased by lowering the threshold from 2 crore taka, given the incompleteness in information, such move is bound to discourage honest submission of tax returns (and wealth statements) and encourage rent-seeking within the administration. Thus, no change in the current rates is recommended.
- It is more important to consolidate information base around the current threshold. Over the short term, the objective of the tax policy will have to be reset away from significant revenue generation or achieving equity in the short term, to one of improved information management. With that perspective, few specific suggestions may be made:
 - (i) Redesign the assessment, expenditure and wealth statement forms to get relevant information. One needs to differentiate between land (as a property) and the building and other investments on land.
 - (ii) Undertake PPP initiative to computerize data during submission that can also ensure (gradually improving) consistency.
 - (iii) Establish linkages with other sources of information on tax-payers.

- (iv) Make information on TIN (and NID) mandatory for all BOI accounts that seek claims for tax rebate or any other incentives introduced. The same applies for term deposits with the commercial banks.
- (v) Undertake area-based revaluation of property, moving out of the inertia set by the land registry offices.
- (vi) The above is not exhaustive and it is already a tall order. In order to address these, the research capacity within the NBR needs to be strengthened. It is recommended that research initiatives with in-house data be undertaken with select group of agencies and individuals noting the need for utmost confidentiality on such matters.

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An *Ex Ante* Assessment of a Property/Wealth Tax in Bangladesh

I. Introduction

I.1 Background

Bangladesh's Wealth Tax Act of 1963 was in place till the end of 1990's. Its enforcement was however in suspect, in spite of amendments introduced in the Finance Act of 1993. The revisions in the schedule of tax rates and the imposition of a ceiling of 30% (of income) on the sum of taxes paid by an individual on account of income and wealth taxes, resulted in poor revenue generation prompting the abolishment of the Act by 1999.¹ Despite the National Board of Revenue's (NBR) expressed interest for reintroducing wealth/property tax in one form or another, the issue has received little mainstream attention. The primary motivations for levying a property tax were on the grounds of achieving greater equity, and increasing tax revenue with occasional reference to the efficiency issue in suggestions that a property tax will discourage household portfolios biased towards real estate. There is however resistance - both from within the government as well as outside. The move finally got limited acceptance in the 2011-12 budget that endorsed a surcharge of 10% on income taxes for persons whose value of wealth, as recorded in the wealth statement submitted to the NBR, exceeded Tk. 20 million (2 crore)².

While drafts on Property/Wealth Tax Act have been prepared, the NBR feels that the rationale and feasibility of introducing a new tax should be revisited. More importantly, an explicit demand was placed to the Bangladesh Country Team of the International Growth Center (IGC) at the Economic Research Group (ERG) to undertake a scoping on ways to value properties in urban Bangladesh. Responding to the need, a group of researchers at the ERG collaborated with the NBR official assigned for the purpose to prepare this paper with a view to provide inputs to the preparation of budget for 2012-13. Limited financial support for the study was promised by the International Growth Center (IGC)'s Bangladesh Growth Research Programme (BGRP) at ERG.

I.2 Objectives and Scope of the Study

Two central questions are addressed in this paper: (1) is there a reasonable justification for introducing a property/wealth tax in Bangladesh? and (2) if yes, what may be the best choice in terms of feasibility and desirability?

¹ The 1993 amendment allowed wealth value up to Tk. 25 lakh to remain tax-free, 0.25 % tax on the next 25 lakh, 0.50% on the next 50 lakh, and 1.0% on wealth over Tk. 1 crore (10 million). It also added an amendment to limit the size of wealth tax: "Provided that where for any year wealth-tax is payable along with income tax by an assessee and the aggregate of income tax and wealth-tax exceeds 30 per cent of total income, the amount of wealth-tax payable shall be reduced by the amount by which the said aggregate exceeds 30 per cent of the total income." (published in Bangladesh Gazette Extraordinary, 30th June, 1993). See also Table A.1 in the Statistical Annex for shares of various accounts in total government revenue in 1992. One may also note that the number of wealth tax payers stood at 18,350 in 1994-1995.

² A recent remark by the NBR Chairman at a consultative meeting organized by the Ministry of Finance suggests that additional revenue of Tk. 65 crore was generated by introducing the surcharge. One may note that such surcharges are equivalent to an income tax rate of 27.5% for those assessed in the highest tax rate slab.

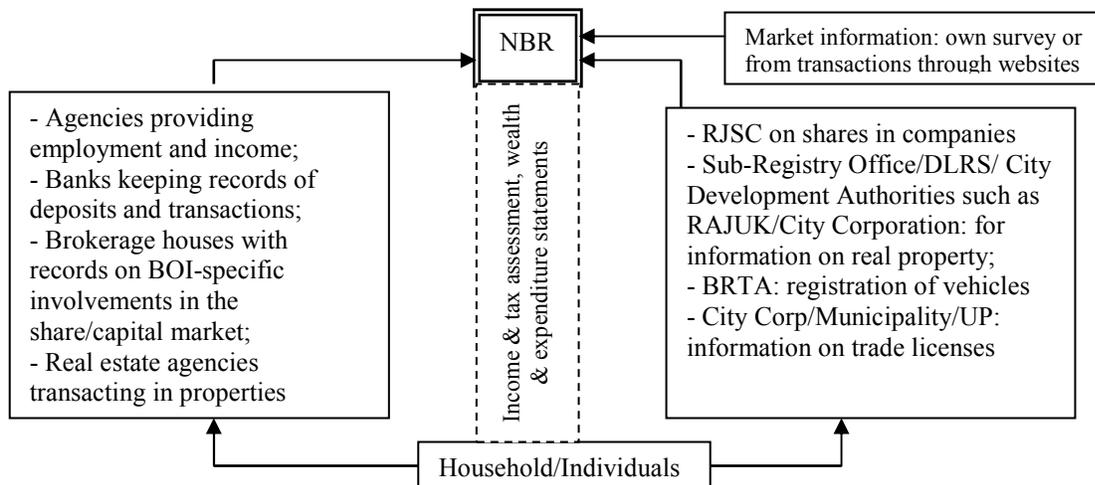
Two additional issues are addressed in this paper. With increased interest in property/wealth tax, several postings on the subject are available in the NBR website. A comparison of the Draft Direct Tax Act 2011 (which contains a reference to ‘wealth’ tax in Chapter X) and the Direct Tax Code 2012 (which devotes a section on property tax in chapter IX) reveal confusions around the two concepts of ‘wealth’ and ‘property’. It is thus imperative to revisit the concepts and clearly define the two analytical categories and how these are perceived to be related. Lastly, be it property or wealth, valuation is an essential first step to allow practical implementation of any tax policy involving such stocks. Thus, in the context of the second question raised, special attention is paid to the options available for valuation and the limitations set by the current availability of information.

I.3 Methods and Sources of Information

The study makes no attempt to empirically assess the various analytically derived outcomes of wealth/property tax using Bangladesh data since there is no memory (electronic data) of earlier wealth tax and since the surcharge tagged to wealth beyond a threshold value was introduced less than a year back. Possible implications of introducing a property/wealth tax are therefore drawn from a review of literature – both model-based inferences and empirical studies assessing current practices across the globe. In this regard, the paper summarizes practices and findings elsewhere to inform policymakers in Bangladesh.

As noted earlier, availability of information is essential for effective administration of wealth/property tax, and an exposition of current state with regards to information and property valuation is deemed necessary. Figure 1 (below) summarizes the current state of information flows pertaining to household-level wealth – tangible as well as intangible.

Figure 1: Sketch of Potential Flows of Information on Personal Wealth



Of the two broad alternative routes to assessing property/wealth tax (see discussion in Section II), one focuses on real property and the other relies on wealth statements provided by those who submit tax returns. Even though the former may associate tax to physical characteristics of a real property, an assessed value of such property is always implicit in determining the size of the tax.

In the latter case that relies on wealth statements, there may be several options, all of which rely upon values reported by a tax-payer. An important segment of the reported wealth deals with real property and one expects the latter to have correspondence with value recorded during property registration. A second important segment deals with financial assets, such as, shares & debentures, bank deposits, etc. While more up to date market-based values of these assets owned by individuals are available in the system, these remain to be matched with taxpayer identification system. The third major segment deals with personal effects whose values are difficult to be tracked except possibly the ownership of reported gold. There is however information available on the registration of motorized vehicles and the payment of Advance Income Tax (AIT) since mid-1990's when the payment was made mandatory with a view to extend the tax net. While the state of current information looks into all these aspects, the study emphasizes on real property and looks into various sources of information to value those. Going beyond, limited attempt is made to assess if location-based valuation practice is adequate for Dhaka city and whether current ordering of government assessed values tally with market-based variations across locations within the city.

There are essentially three sources of property values that are within the domain of government agencies: (i) municipality tax records/assessed rental values, (ii) records with the offices of Sub-Registrar (land and other property registry)/assessed 'market' prices, and (iii) wealth statements submitted, at the end of each fiscal year, by tax-payers to NBR.³ There are several sources of information on current market prices of properties. Several websites emerged in the recent past to facilitate transactions in land (plots) and apartments – these provide a fourth source of information. This was further supplemented by a survey of about 2000 urban dwellings – residential as well as commercial⁴. In addition, the NBR staff in the research team had access to departmental data some aspects of which were computerized and analyzed under the guidance of lead researcher.

I.4 Outline of the Report

The following section reviews three major sets of issues to define the scope of the ex-ante assessment to be done – defining wealth and property, rationale for introducing a wealth tax and alternative approaches to property valuation. Section III presents findings from various sources of data, compiled and analyzed under the present study. The last section summarizes those and resort to reasoning for and against several alternative options. The section also makes several recommendations regarding steps to be taken for introducing wealth tax, on the assumption that this may be introduced at some later date.

³ We have not addressed the issue of financial assets which are stated in income tax submission and wealth statements. The corresponding figures would ideally be available from the RJSC, banking system and SEC/Stock Exchanges.

⁴ The clusters were chosen purposively from different wards in both north and south Dhaka city. A questionnaire, developed through several pre-testing was administered by a group of trained enumerators and field assistants during February-March 2012.

II. Review of Literature and Global Practices

II.1 Revisiting Concepts – Property and Wealth

It is useful to distinguish between stock and flow since incidence of taxation is different for the two.⁵ Both (real) properties and wealth (gross or net) are stocks assessed at a point in time. In the absence of inheritance or gifts, these are accumulated savings in one's lifetime determined by past flows – income minus tax minus personal expenditure. While such savings accumulate, at the least on record, into some form of wealth, real property (as in, land and constructions on the land) is only one form of such accumulation. With transitions beyond an agrarian society, wealth has taken new forms, such as, bank deposits, ownership of business, shares transacted in stock market and ownership of other financial instruments. In addition, there are also the more traditional forms of accumulation in durables, such as, owning motorized vehicle, electronics, furniture and precious metals. A comprehensive understanding of a property or wealth tax policy may not be possible without taking due consideration of the inter-temporal choices, and how various flows are intertwined with accumulation of 'stock's. Thus, strictly speaking, **inheritance and gift taxes should also be within the purview of an (economic) assessment of property/wealth tax**. Other than summarizing the practices in these areas in Annex 4 and 5, the current exercise does not delve into those issues.

There is no clear consensus in the literature in perceiving wealth and property. One may find three different perspectives in the context of taxation. Several studies (and countries) treat the two terms - wealth and property - interchangeably (Kessler and Pestieau 1981, p.309). The latter view considers property to encompass a wide range of tangible as well as intangible assets that constitute a taxpayer's total wealth.⁶ Several studies are restrictive in defining property and include land, buildings and some tangible business assets. Though the range of assets covered under the second view is narrower; the value of property is perceived as a subset of the total value of wealth, and taxation on property is treated as a type of wealth tax⁷. Yet, there are others

⁵ Flow is a quantity measured over a particular period of time. Stock is a quantity measured as of a given point in time.

⁶ The following items come under the heading of property tax in OECD: taxes on net wealth, recurrent taxes on land and buildings, taxes on financial and capital transactions and taxes on gifts and inheritances (Johansson, Heady, Arnold, Brys and Varita, 2008).

⁷ Although the US does not have a wealth tax today, prior to the 19th century a tax was applied to all the tangible assets/properties a person possessed. Known as the general property tax, it was applied uniformly and was administered by locally elected officials. In the course of a rapidly changing economic landscape, however, the tax base became narrower, eventually coming to represent taxation mainly on real property. Several reasons underlie this transformation, chief among which was the transition from an agrarian economy, one where wealth was primarily reflected in the holdings of such tangible items as land, machinery and livestock, inter alia; to an industrialized economy characterized by the existence of such intangible assets as stocks and bonds which greatly diversified the wealth makeup of taxpayers. Given the difficulty of assessing intangible items, the tax fell heavily on farmers whose assets were primarily tangible and therefore easier to identify, and lightly on those who held onto intangible forms of wealth. Other reasons for the failure of the general property tax included the tendency of local assessors to value properties at less than their market values in an attempt to get reelected as well as the proliferation of people who had substantial incomes but little wealth, thereby increasing the attractiveness of income taxes as the possession of property did not fully reflect a taxpayer's ability to pay. For a comprehensive review of this topic, see Youngman (1994).

who consider tax on land and buildings to be distinct from tax on wealth in general. This is because property is valued distinctly from wealth so that one is not seen as a subset of the other.

A more pragmatic differentiation is made by Thuronyi (2003) who explains, “Net wealth tax can be distinguished from property taxes due to the fact that property taxes are imposed on the gross amount of property, without any reduction for debts and usually are imposed on certain kinds of property, while net wealth tax is a more or less comprehensive tax on net worth, i.e. the value of property reduced by debt” (p.329). Bird (1991) also distinguishes taxes on real property from a general wealth tax, and the former is stated to be “An impersonal tax on gross wealth held in a specific form such as real estate, which does not take into account the personal wealth position of those upon whom it impinges” (Bird, 1991, p.331). In a similar vein, Youngman (1996) notes, “The tax reaches only one form of property and even that in a generally gross rather in a net form, [often] with no offset for mortgage indebtedness” (p.3).

The review of concepts and the literature on wealth/property tax reveals the following: (i) where observed physical characteristics of real properties get primary attention in assessing tax, the value of such properties underlie fixing of tax (rates); and (ii) when assets and liabilities are valued, (net) wealth may be assessed in numerous ways by changing the subset of items included (or, excluded), and property tax is perceived to be a subset of wealth tax. In either case, the basis of (information base) assessing wealth of an individual by the tax authority is of critical importance. For the purpose of our study, we will use the term **wealth tax**, without identifying any subset of assets and liabilities at this stage

II.2 Rationale: Equity, Efficiency and Revenue Productivity

Arguments for wealth tax are normally made on grounds of equity, allocation efficiency and revenue productivity. The issue of efficiency in resource allocation is quite often linked to growth. In addition, one needs to recognize the need of enormous amount of information to ensure that policy objectives are realized. In other words, all rationale for imposing a wealth tax are contingent upon availability of complete information on wealth of taxpayers and complete coverage of the relevant population under the tax net. Thus, efficiency in tax assessment, as well as the efficiency in tax collection that is shaped by the latter, are important elements to account for while designing a wealth tax policy.

The review presented in this section largely abstracts from incomplete information, but returns to it in the following section. As noted earlier, one may distinguish between two broad groups of factors behind individual's urge to accumulate wealth: (1) holding wealth for non-bequest reasons, and (2) holding wealth for the purpose of passing it down to others. The latter is more appropriately analyzed against the backdrop of an inheritance (and gift) tax, which is relegated to Annex 4. When people hold wealth for non-bequest reasons, they may do so either for consumption smoothing and/or for prestige in which case wealth is seen as an end in itself (Cremer and Pestieau, 2010, p.8). As such, in analyzing the impact of an annual tax on net wealth, the equity and efficiency implications will vary depending on whether wealth is held for consumption smoothing or for the prestige it affords to asset holders. Besides motivation, the effects of taxation will also vary in so far as taxation applies to the stock of wealth or the flow of

income it generates (Lehner, 1998, p.676). This is evident in the literature on optimal tax theory wherein wealth tax is studied as a tax on capital income (Salanie, 2002, p.121).

II.2.1 Equity

When inequality is high and asset ownership is highly concentrated, wealth tax is seen as a way of reducing inequality in the distribution of wealth. The critics however argue that a wealth tax on the income of assets ultimately leaves the distribution of the stock of assets unchanged, while a tax on the assets themselves clashes with the right to property (Lehner, 1998; Schellenbach, 2007). Moreover, the wealth tax redistributes not only from the genuinely wealthy - those who are both wealth and income rich - but also those who are wealth rich but income poor. Similarly, tax shifting and tax avoidance result in the economic incidence of the wealth tax differing from the legal incidence. Implementation practices such as under-assessments and exemptions favor certain wealth owners over others, thereby violating horizontal equity (Cabre and More, 2007); moreover, they also lead to a narrowing of the tax base which, in turn, leads to an increase in the taxes on other properties or an increase in other taxes, both of which generate inequitable and inefficient consequences (Bird and Slack, 2004, p.26). Analyzed as a tax on capital; in the short run with the supply of capital fixed and in the absence of tax shifting, the wealth tax is capitalized into the value of capital, thereby leading to windfall losses for capital owners. However, in the long run, the burden of the tax is shifted onto the domestic workers owing to capital flight (Davies, 1991, p.295)

II.2.2 Efficiency

Against the backdrop of optimal tax theory; the Atkinson-Stiglitz proposition suggests that, given weakly separable preferences and identical utilities among consumers, optimal rate of taxation on capital income is zero. Similarly, the Chamley-Judd theorem also posits a zero rate of taxation on capital income in the long run (Cremer and Pestieau, 2010; Salanie, 2002). In other theoretic settings, annual net wealth tax is shown to exert a negative impact on domestic saving and investment in the long run (Davies, 1991; Burbidge, 1991). Since a wealth tax reduces returns to saving and lower the relative price of current consumption (vis-à-vis future consumption), individuals will increase present consumption and save less for the future. The wealth tax also affects savings adversely by inducing individuals to work less when they are young and more when they are older since the tax lowers the discount factor associated with future wages thereby raising the latter. Along these lines, it is also argued that wealth taxation reduces the incentive to undertake risky investments, encouraging investors to incorporate safer assets in their portfolios-a problem exacerbated by the fact that certain assets are often exempt from wealth tax in some countries, thereby causing imbalance in the spread of savings between various assets (Heckly, 2004). Inevitably, the wealth tax renders holding assets abroad more attractive and, at the same time, renders less attractive the domestic environment to foreign investors. In other words, it leads to capital flight. According to Heckly (2004), "This is the factor that most influenced the Irish and Dutch governments, when they decided to do away with the tax" (p.2).

Given that investment is the driving engine behind growth, this inevitably leads to the conclusion that an annual tax on net wealth will harm economic growth. However, empirical research on the

correlation between the two factors is severely limited. As Hansson (2002) notes, “Strangely...it appears that there has been no empirical research of the relationship between wealth taxes and...economic growth” (p.9). The result of Hansson’s empirical study confirms the growth dampening effect of wealth tax: a one percentage point increase in the tax rate reduced growth between 0.02 and 0.04 percentage points. Another empirical investigation finds that whereas corporate income tax has the most distortive effect on growth, the net wealth tax along with the property tax is least distortive (Johansson et al., 2008).

II.2.3 Revenue Productivity

Given the limited scope for tax shifting, tax avoidance as well as portfolio diversification, wealth tax will lead to an increase in revenue in the short term. Although studies have not focused on the short run/long run distinction in analyzing, specifically, the revenue productivity of the wealth tax, the closest that comes to affirming the presupposition about the short run is Bach, Beznoska and Steiner (2011). Examining the revenue and distributional effects of a one-time capital levy on personal net wealth in Germany, the authors write, “If potential taxpayers expect the capital levy will be repeated, this could discourage long-term saving and investment, while encouraging capital flight” (p.7). The study finds that a non-recurrent capital levy will raise enormous revenue even if allowances are high. Thus, if the short run is sufficiently short, it is plausible to argue that the revenue productivity of the wealth tax will be high.

The story in the long term is the opposite. An international survey of the wealth tax carried out by Richard Bird in 1991, covering a number of developing and developed nations for the period 1980-1990, revealed, in the words of the author, that “...wealth taxes are not very important sources of revenue in any country” (p.323). As a percentage of GDP, the share of wealth tax comprised slightly greater than 1% in only 8 out of 86 developing nations. For 23 OECD countries as a whole, the share was 1.96 percent of GDP. Bird also noted how many developing nations had abolished the wealth tax at the time of his conducting the survey: “The tide of recent history is clearly against wealth taxes in developing countries” (p.324). Such countries included Colombia, Mexico and Indonesia, among others. In 1988, Bird reported 11 OECD nations that levied taxes on net wealth: Austria, Denmark, Finland, France, Germany, Luxembourg, Netherlands, Norway, Spain, Sweden and Switzerland. More recent evidence has shown that many of these nations have since repealed their wealth taxes, however. As Schnellenbach (2007) observes, “On the whole, the trend of recent years appears to be that there are more countries that decide to abstain from taxing net wealth than countries that decide to reintroduce such a tax” (P.2). These include Austria in 1994, Denmark and Germany in 1997, the Netherlands in 2000 and recently in 2006, Finland. Capital drain, high management costs and distortion of resource allocations were the primary reasons behind the doing away of the wealth tax in these nations (Heckly, 2004).

II.3 Valuation Methods: an overview

Section I.3 briefly discussed the various forms of wealth owned by legal entities, including individuals and/or families. Four general types of wealth that also surface in a Wealth Statement Form (WSF), expectedly submitted by a Bangladeshi taxpayer at the end of each fiscal year, are: 1) real property, 2) business interests, 3) financial interests and 4) personal property. The WSF

distinguishes between agriculture and non-agricultural land under real property, and does not adequately address the areas of possible overlaps of these with business interests. More importantly, unlike practices in many other countries, the WSF does not distinguish between land and constructions on land. The focus of this section is primarily on urban-based real property, even though the discussion will be couched at a general level.

II.3.1 Three Methods of Valuation

Real property refers to all the rights, interests and benefits potentially accrued on account of owning real assets, where the latter refer to land, natural objects on land, and manmade improvements or constructions and building attachments (such as, electricity, elevators, plumbing, heating etc).⁸ Valuation of real properties is difficult because of the heterogeneity across real estate markets and across individual properties that possess unique characteristics, each providing unique service to consumers. Furthermore, unlike other stocks of wealth, market-based exchanges of real properties are less frequent making it difficult to update value of an individual property on a regular basis. In addition, actual worth of a property (assuming constant market values of components) may undergo frequent changes as additional constructions, extensions, or renovations are undertaken (Das, Senapati and John 2009).

Conceptual discussion on property and wealth tax in Section 1 distinguished between ‘stock’ and ‘flow’, which also provide the basis for distinguishing between three broad types of property valuation that are commonly in use. Where property (as in stock) has a ready market and the market prices are observable, (1) Sales Comparison method may be used. It allows one to infer the value of a property by examining the actual sale (or, buying) prices of similar properties in similar locations.⁹ In the absence of such markets, one may choose from two other alternatives: (2) Replacement Cost approach that takes account of current value of land and all costs that would have to be incurred to set up the current establishment in place on the land¹⁰; and (3) Income Approach that calculates the present value of the net stream of income expected to flow from the property. Three variants may be perceived at the operational level: (i) rental income normally applied to properties occupied by owners or rented, (ii) profit approach applies to situations where the value of the property is linked to its business potential (such as hotels, restaurants, petrol stations). And (iii) residuals approach calculated as the gross development value net of (minus) development cost and developer’s profits.

⁸ International Valuation Guidance Note No.1

⁹ The proxy measure considers factors such as location, environmental factors, plot area, number of rooms, availability of amenities, etc. It is fairly simple to implement but requires adequate, quality sales data which may not be available in economies with underdeveloped real estate markets (See, Principles and Practice of Property Valuation, 2012).

¹⁰ Land value is measured using sales comparison method. The value of improvements is calculated summing costs of labor, materials and soft costs (advertising, financing, realty taxes, insurance premiums, etc). Depreciation of the improvements in terms of economic, physical or functional obsolescence may be deducted from the replacement cost. An accounting perspective would consider the investment at cost and allow for depreciation.

II.3.2 Property Valuation across the World

Property taxes can be levied at the local (as in Brazil), state (India) or central government (Chile, Lithuania and Indonesia) levels. A review of existing practices suggests that more commonly utilized tax bases are: annual rental value (income method), capital value of land and improvements (replacement cost), and land value only (sales comparison). Any one or mixes of the three aspects may be embedded in proxy measures such as by locations. The latter is often identified in the literature as a fourth way to assess property tax, and is called the area-based system.

Rental value as the base is commonly observed in former British colonies such as India, Nigeria, Malaysia, Trinidad, etc. However this system has great difficulty gauging the rental values of vacant lands, owner occupied, industrial or rent controlled properties. Under the Rental value system, flats, houses and residential property prices are imputed via survey data, expert judgments, etc. For commercial or industrial buildings, capital value is estimated using comparative sales data or by estimating the cost of land and buildings. This capital value is then converted to rental value using a specific capitalization rate (e.g. 10% in Malaysia). Rental value can also be estimated as the share of profits to which the land owner is entitled.

The second system, Capital Value of land and improvements, is used in Latin American and OECD nations. Countries may value land and buildings together or separately. Separate valuation is carried out in developing countries, such as in Botswana, where land values per unit are estimated by looking at recent sales whilst building costs are calculated on the basis of cost per area discounted by a depreciation rate. Countries like Cyprus and South Africa calculate the total capital value of both land and improvements. McCluskey, Bell and Lim (2010) find that there has been a gradual shift towards capital valuation system since it corrects the issues plaguing the Rental System (vacant land, rent-controlled, etc.) (Bahl, 2009).

Estimated market value of land together with land based improvements such as clearing, grading, and installation of utilities is more common base of property tax in Australia, South Africa, New Zealand, Denmark, Estonia, Jamaica, Kenya, etc. Land value system encourages better, more efficient utilization of land since it makes no distinction between vacant land and those with high value improvements. It is said to encourage land owners to invest in improvements and maximize their returns. However, land transfer data may be subject to underassessment and may need to be supplemented with expert judgments. Since the tax base excludes buildings and improvements, a high tax rate is often resorted to in order to yield sufficient revenue.

Area Based property tax assessment places a specific tax on a per unit area of land and is widely practiced: Central and Eastern European nations, Vietnam, China, Hungary, Kosovo, Slovakia, Slovenia, Czech Republic, etc. The local government is broken into zones, each subject to a different rate depending upon amenities available. Thus the tax liability depends on a basic tax rate and the location value of the property.

Empirical queries into tax base distinguish between capital value (improved and unimproved), annual rental value, original purchase value (acquisition value), and 'non-value' measures (area based and flat rate). In 121 countries considered in McCluskey and Bell (2008), capital value

systems prevail in more than half the countries; and the areas and annual rental value based assessments are next in order. While ‘capital improved value’ is the single method applied to all three countries in North America and is the dominant tax base in countries of South America and Western Europe, three-fourth of East European countries apply area-based tax assessment. In contrast, annual rental value and/or area-based assessments dominate amongst Asian countries.

III. Choice of a Wealth Tax Policy: Findings and their Implications

III.1 Issues for Bangladesh

The empirics involving compilation of secondary information as well as collection of primary data through surveys are presented in this section around several issues that are pertinent to making choices regarding a wealth tax. For the policymakers, the choice has to be made from the following menu:

- no additional wealth tax (not even the recently imposed surcharge);
- continue with the surcharge on wealthy people;
- introduce a wealth tax as a proportion of the net or gross value of wealth replacing the current surcharge method.

For the practitioners within the government, who translate policies into operational rules, there are additional questions to be addressed. The latter include:

- If a wealth tax is imposed, what may ideally be included in the list of wealth?
- Should one depend on reported wealth statement, or should one make use of alternative information sources?
- What criteria should ideally be applied to choose the threshold value of wealth for identifying taxable ones?
- In case of surcharge, is there any need to change the current rate of 10%? Alternatively posed, what may be the ideal rate of surcharge?
- What may be done to value real property? More precisely, is location variable sufficient to capture differences in property values?

One may note that it is a tall order and current availability of information/data may not allow rigorous treatment of the issues. In addition, policy choices critically depend on the nature of enforcement, making an ordered discussion quite difficult. In spite of the limitations and possible disjointedness, empirical observations are summarized in this section with a view to assist informed decision-making by appropriate government authority.

III.2 Policy Choice

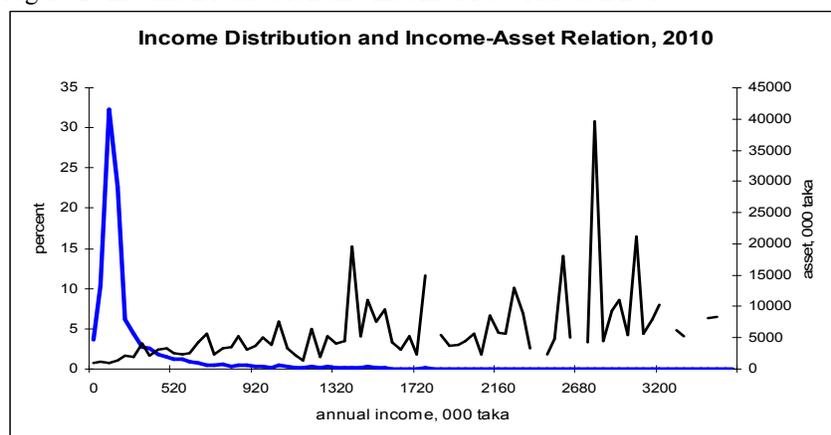
Given concerns for revenue productivity, equity and allocation efficiency, within a short term perspective, one may argue for taxing wealth of particular kinds with a view to either redistribute or discourage tying of resources into less desired forms of assets. Though national level statistics on income inequality is generally obtained from Household Income Expenditure Surveys (HIES) administered by the BBS, one rarely finds those estimates from urban sample dependable.¹¹ It is

¹¹ BBS (2012) reports that urban income Gini Coefficient declined from 0.497 in 2005 to 0.452 in 2010. Many suspect that urban sample fails to include the very rich and the fast burgeoning households.

commonly acknowledged that inequality has increased over the years, assets have accumulated in fewer hands that are not necessarily recorded in the tax records, and increases in prices of real properties at absurd paces brought in capital gains to asset-owners with the government being deprived of additional revenue from such increase. Limited analysis of computerized data done for the current study by NBR analyst reveals that around 8.7 % of tax-payers earn a gross annual income of more than Tk. 6 lakh and only 3.1 % earn more than Tk. 12 lakh (Figure 2). Estimated number of tax-payers reporting ownership of wealth above Tk. 2 crore is around 1.05 %.¹² The figures, if at all indicative of the population, clearly suggest of extremely skewed distribution in income which does not appear to have one-to-one correspondence with asset ownership. The relations are further probed into later.

The argument of allocation efficiency is well-articulated in Ahmed (2011) where current tax rates are shown to be out of line with financial returns from various sectors (see Table A.3.3 in the Statistical Annex). Obviously, high rate of return from capital gains on land biased allocation of household resources against productive investments, and one may argue that tax on such accumulation would discourage such resource allocation. **One may however need to delve into multi-sector linkages to assess if taxing real property alone can influence household choices.**

Figure 2: Income Distribution and Income Asset Relation 2010



Note: Group averages are plotted, which may hide cases crossing asset thresholds.
Source: NBR internal data compiled on request.

Finally, it is merely an accounting exercise to establish that a tax on wealth, which is not readily fungible, will increase revenue. However, the long term implications may not be favorable in an increasingly globalized economy and society where each nation state is vying to attract a part of the ‘global fund’ into its economy.¹³

¹² With an estimated number of 1 million active tax-payers, number eligible for paying wealth tax would be little over 10,000. Their average reported annual tax payment is estimated to be Tk. 7.38 lakh and the total collection of surcharge would be around 76 crore taka if assessments were based on gross wealth and complete. The figure is comparable to that reported, Tk. 65 crore.

¹³ Consider for example, the investors’ visa program in the USA and dual citizenship (the so called ‘second home’) programs offered by countries such as Malaysia, Spain, etc. While the revision for this draft was being done, a local daily carried a lead news on “Shady Migration” and transfers made to outside destination by informal routes.

In summary, assuming that (1) information available at the NBR is complete, (2) additional revenue is spent on uplifting the livelihood of citizens who are poor both in terms of income and assets, and that (3) people are encouraged to switch their savings into productive domestic investments without indulging in capital flight, one may argue for some form of tax related to wealth. Accordingly, the next question to consider is: should the tax be imposed as a surcharge in continuation of the current practice? Or, should it be a direct tax proportional to wealth? The sub-section III.4 discusses the latter choice, prior to which, it is necessary to digress into current constraints to proper valuation of wealth.

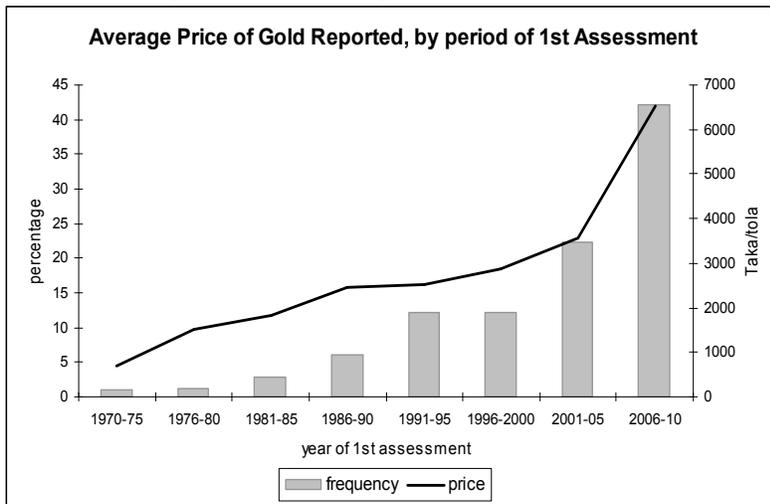
III.3 Property Value and Wealth: state of current information with NBR

Some of the aforementioned assumptions need to be critically appraised before any conclusive case may be made either in favor or against a wealth tax. The most important of these assumptions is the degree of completeness of information. Consider the issues raised in Zohir (2011): if honest reporting to tax authority implies higher recorded wealth on papers, any tax imposed on the basis of those records will be biased against honesty. Such a policy will be doubly jeopardizing – first, it will encourage tax-payers to be dishonest while reporting; and second, the discrepancy between reality and stated figures will give discretionary power to tax collection authority which may erode the values within the institution and make reforms difficult in future. This sub-section reflects on the available information to assess (wealth) tax and identifies the gaps and discrepancies therein.

Consider first the relatively easy case of the most important item in the list of personal effects: gold and other ornaments. Almost a quarter of a large sample of tax-payers was reported to have possessed gold. In all such cases where the quantity of gold is reported, more than two-third of the taxpayers did not report any value! It is learnt that reporting of values is not insisted in cases of inheritance.¹⁴ While ‘*tola*’ is the most frequently used unit of measure, there are instances where other measures are recorded. That the recorded value of an individual’s wealth may vary even for the same quantity of gold owned by two individuals is best exemplified in Figure 3. As one would expect, the value per unit of gold (*tola*) is higher for those who opened their accounts with NBR later. More important to note is the wide divergence in reporting amongst those opening the account in a single year. For example, the average price of gold is found to be close to Tk. 10,000 per *tola* for first-time assesses in 2010, even though some of them reported the price to be Tk. 25,000. Reportedly, there may be instances where gold purchased at market price is mixed with inherited gold (at zero price), thereby reducing the reported weighted unit price. In addition, there may be contrary reasons for the above to happen. If a person is a latecomer into the system and an amount of gold was genuinely procured in the past at a lower price, reporting that price may be necessary to reveal consistent record of wealth build-up. One may also show a lower price (and higher quantity) to hide untaxed money. For a mature first-time assessee, procurement through gift, valued at a high price may also be a tempting option. The example only illustrates the intricacies associated with valuation of wealth without clear reference to quantity and/or a commonly applied reference price.

¹⁴ In all such cases, current wealth statements carry figures, a part of which is implicitly in kind!

Figure 3: Average Price of Gold Reported



It was mentioned earlier that financial data are more readily available since both banking and participation in secondary market for shares are done online and there is enormous data to be utilized for other purposes of governance. However, submission of TIN for each BOI account is yet to be made mandatory, providing TIN of persons against whom AITs are paid is not commonly practiced, and it is also not mandatory for banks to link fixed deposits with TINs, all of which allow wider options for unrecorded money to remain within the system. Thus, in spite of the presence of computerized data in the financial system, apprehension of capital flight and alleged political pressure by interest groups have long allowed the financial transactions to remain outside effective governance and records on financial wealth of individual tax payers can hardly be relied upon without independent information from the financial system.

The most difficult part is the valuation of real property. Matching values of properties reported in NBR records with the acquisition values reported by current occupants, one finds under-reporting by 4%, which is quite nominal. However, one finds information on property locations, possibly only in cases where the reported figures are close to actual transaction value. Only 5.3% of the taxpayers' records showed such information, majority of whom however mentioned owning plots but later improvements on those are not recorded. The latter revealed several interesting insights. The records continue to refer to the original property value referring to that mentioned before, thus, land improvements and changes in its ownership is not clearly reported. Since land prices increased at faster pace, the gains associated with transfers via property developers remain unreported in many instances.

Real Property data is available from individual wealth statements but that is often cited at historical cost/acquisition value and does not give a clear indication of true market value. A similar issue arises with the land registry. Somewhat reliable market information can be collected from the various property sales websites such as www.cellbazaar.com, www.dhnld.com, and www.myrealestatebd.com. Beyond these, the city corporation also imposes taxes on dwellings that are presumed to reflect rental value of respective properties. Table A.3.5 to A.3.7 compare property values from various sources for selected locations in Dhaka city and the observations are summarily listed below:

- values of urban land assessed by the Office of Sub-Registrar for the purpose of taxes and duties are well below market prices (by 30 to 95% of current market price depending on locations) (Table A.3.5);
- Independent survey of urban properties reveals that the price of apartment increased, on an average, by 8 to 14 percent annually since the year of acquisition (Table A.3.6);
- Rental values of residential properties (apartments) have increased and the municipality taxes have not adjusted accordingly. The ERG survey reveals that the rents presumed in current tax rates are 29% to 36% lower than market rents (Table A.3.7).

Current incompleteness in recorded information clearly calls for caution in relying on assessing wealth tax, drawing upon those information, in order to achieve equity and efficiency. It is argued later that one way to improve the information base is to start with a limited variant of wealth-related tax, and not a tax on wealth.

III.4 Choice between a surcharge and a direct wealth tax

Information available with the NBR does not permit imposing a property tax; and without prior reforms in land administration and digitization of land ownership (and use) data, such options are effectively non-existent. At the most, one can update the rates of municipality taxes, which however continue to be perceived as service fees and not as instruments of achieving efficiency and equity. Of the two choices left, there are at least two reasons as to why a surcharge as practiced now is a better choice (given all the constraints) compared to a tax proportional to wealth. This section attempts to explain the proposition.

In a society that fails to protect its members with social security, individual initiatives to secure their own future cannot be put under threat by making savings (and accumulation of assets) more expensive compared to current consumption. The following two regression equations were estimated by NBR researchers and the results shared with the team are summarized in Table 1.

$$\text{Ln (wealth)} = \alpha_1 + \beta_1 \text{Ln (income)} + \gamma_1 \text{Ln (age)} + \varepsilon_1 \quad (1)$$

$$\text{Ln (tax payable)} = \alpha_2 + \beta_2 \text{Ln (income)} + \varepsilon_2 \quad (2)$$

Reported value of total wealth is found to be increasing more than proportionately with increases in age of tax-payers and less than proportionate to income increases. This clearly suggests that there will be relatively a higher proportion of old age people and their livelihood may be jeopardized if a direct wealth tax is imposed. In contrast, a surcharge applicable to regular taxes on current income is more sensitive to such odds since the average current income of the old-age population is likely to be lower. The exercise finds the average age of the asset-rich group to be significantly higher than that of the asset-poor ones, with the former having a larger coefficient of variation.

Table 1: Regression Estimates: Asset accumulation increases with Age

| Dependent variable | Ln (asset value) | | Ln (payable tax) | |
|-------------------------|------------------|--------------|------------------|-----------------|
| | 2010 | 2011 | 2010 | 2011 |
| Constant | -0.515 (1.57) | -1.28 (0.66) | -15.913 (85.29) | -12.885 (19.67) |
| Ln (income) | 0.750 (41.18) | 0.846 (7.73) | 1.969 (132.22) | 1.731 (33.69) |
| Ln (age) | 1.407 (23.91) | 1.498 (3.83) | | |
| Adjusted R ² | 0.43 | 0.41 | 0.84 | 0.81 |
| Observations | 2798 | 114 | 3368 | 271 |

The second reason has to do with the incompleteness of information. With scopes for arbitrary decisions and rent-seeking, incompleteness in information is likely to perpetuate. Instead, the process of accessing and organizing information may be initiated with the newly introduced surcharge practice. While this remains in place, management may choose to improve its enforcement by getting more information to increase the number of tax-payers who would then be eligible to pay surcharge on account of higher wealth. Some such actions may involve:

- improving the structure of wealth statement form;
- ensure submission of complete and consistent wealth statements, if necessary, allowing time beyond the deadline for submitting tax returns every year;
- establish unique ID, or both national ID and TIN to establish links between personal data from various sources;
- make TIN submission mandatory for BOI accounts and during submission of *chalaans* for AITs; and
- encourage tax officials with non-financial incentives to engage in working with computerized data on tax-payers.

III.5 Indirect Valuation of Properties in Dhaka

Assuming that information on land and other real properties are recorded with completeness, distinctions are introduced between land and building/construction on land, and assuming an effective institutional set up is in place to constantly update information, one will need to deal with valuation of properties. Current practice at the office of the Sub-Registrar is inadequate and wealth statements, even when truthfully revealed, will report land values as assessed under the registration practices. Hence, the value of a property, especially under current market price, on which to assess a tax remains largely unknown. On the other hand, property values vary widely across and within locations, defined over a broader area. One could argue that under such circumstances the tax can be assessed based on a constant coefficient and be differentiated by locations. However, it is also possible that property values do not depend on only locations but also other characteristics that differ *within* locations. This calls for an indirect method of property valuation and thus the tax, based on some observable factors.

Two independent sets of data were analyzed to assess if area (location)-based valuation is adequate for the purpose or not. The first dealt with data compiled from apartment transactions

reported in several websites while the second is based on a survey administered by ERG on a sample of about 1600 urban properties in Dhaka city.¹⁵

The web-based data reflected actual transactions and quite expectedly had more observations in the new parts of the city, Dhanmondi being the oldest of the clusters considered. Moreover, there were fewer variables to capture property and community-specific information. The results summarized in Figure 4 and Table 1 suggest that location variables are important determinant of property value, but the latter behaves differently in different locations. For example, wide price variation in Adabar/Agargaon, Basundhara and (partly) in Uttara within a limited range of size variations indicate property and neighborhood-specific characteristics to be important within those locations. In contrast, these characteristics may be of less importance in Gulshan/Baridhara and Dhanmondi where properties fetch a premium only because of the location (area). Badda/Banasree is a third variant where (possibly) poor characteristics of the larger area dominate and therefore not much variation in property value (per square feet) is observed.

The survey data however contained more details and allowed a deeper look into the property characteristics and prices. Detailed analysis of the survey data are presented in Annex 6 and this section briefly discusses some of those issues. Regression based analyses on the effect of various characteristics on property prices indicate that a property value not only depends on the location of the property, but also on other neighborhood characteristics, as well as on building-specific characteristics. Among neighborhood characteristics, better garbage collection systems prove to fetch higher price while very high level of sound pollution has the opposite effect. Similarly, the closer a property is to a police station, shopping mall, a park or a bank, its value is more likely to be higher. Moving on to more property specific characteristics, an independent house fetches a higher price (per-square-foot) than a regular apartment, but the price falls with the size of the building (total floor space and number of apartments). Buildings with greater number of facilities, such as elevators, security guards, garden, etc. also fetch higher prices.

In summary, the survey data reveals that certain neighborhood characteristics, as well as several building-specific characteristics are important determinants of property value once the influence of location/area is controlled. Graphs on the survey data, provided in the Annex 6 also show that these characteristics vary widely both *across* and *within* locations. While area-based assessments capture significant portion of variations in property values, the findings call for distinguishing investment on land (such as, buildings and other facilities) from the land plot.

¹⁵ The survey was administered on buildings in several clusters in a number of purposively selected wards under the Dhaka City Corporation (both south and north).

Figure 4: Size-Price Relations, Dhaka City Apartments in Different Locations

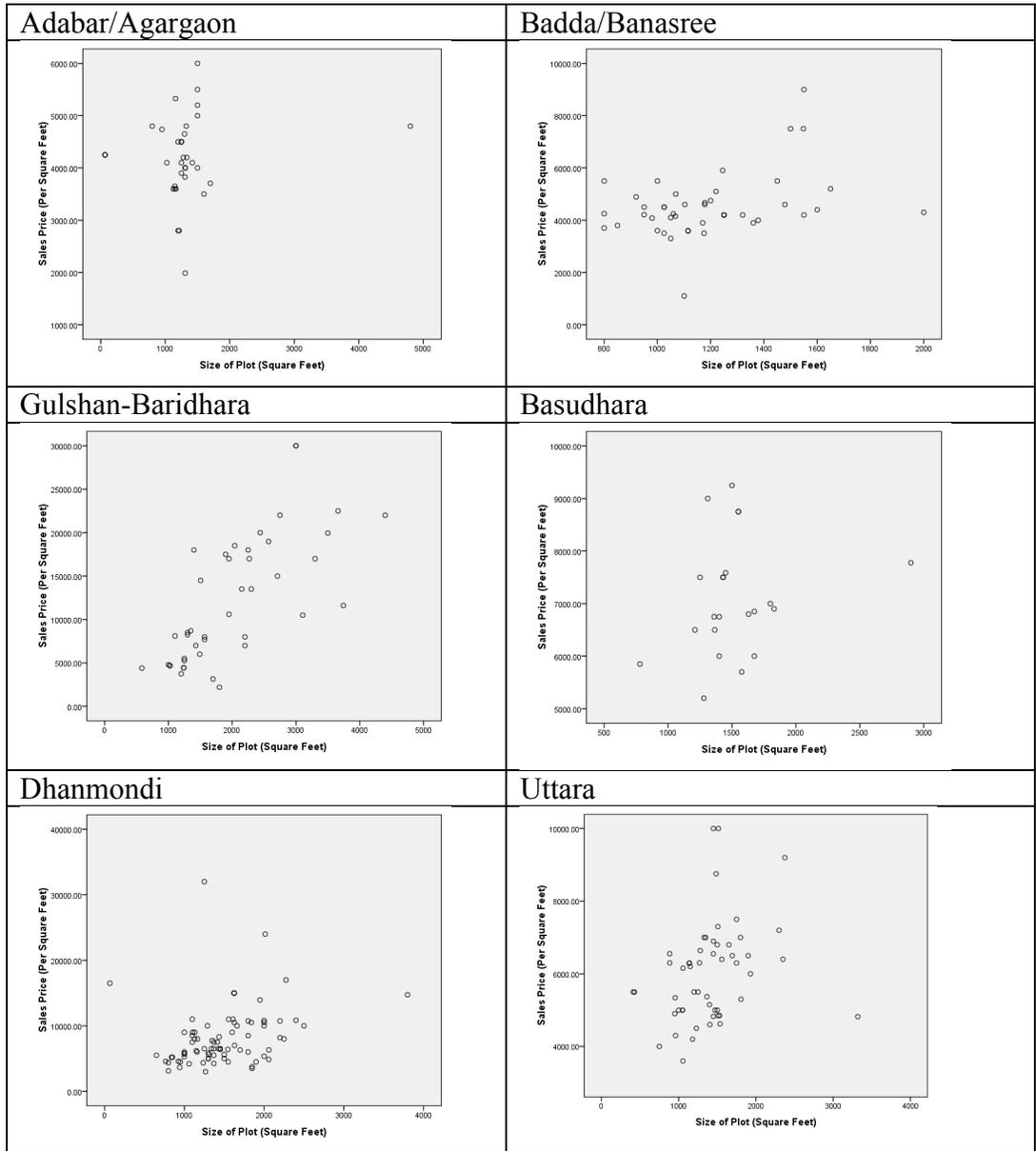


Table 2: Dependent Variable = Price of apartment (Taka/sq ft)

| Explanatory variables | Specification 1 | | Specification 2 | |
|----------------------------|-----------------|---------|-----------------|---------|
| | Coefficient | t-stats | Coefficient | t-stats |
| Constant | 3251 | 2.29 | 85 | 0.09 |
| Size of Plot (Square Feet) | 0.83 | 0.79 | 3.08 | 7.41 |
| Number of bedrooms | 508 | 1.45 | 530 | 1.55 |
| Swimming pool (yes=1) | 4340 | 3.03 | 5694 | 3.76 |
| Generator (yes=1) | 405 | 1.16 | 428 | 1.16 |
| Dummy1, Adabor/Agargaon | -892 | -0.47 | -1978 | -3.02 |
| Dummy2, Badda-Banasree | -1951 | -0.81 | -880 | -1.45 |
| Dummy3, Gulshan-Baridhara | -3701 | -2.08 | 3836 | 5.94 |
| Dummy4, Basudhara | 1052 | 0.25 | 661 | 0.86 |
| Dummy5, Dhanmondi | -1917 | -1.14 | 1031 | 1.87 |
| Size x Dummy1 | -0.75 | -0.58 | | |
| Size x Dummy2 | 0.55 | 0.29 | | |
| Size x Dummy3 | 4.48 | 4.07 | | |
| Size x Dummy4 | -0.14 | -0.05 | | |
| Size x Dummy5 | 2.19 | 1.94 | | |
| Adjusted R ² | 0.61 | | 0.57 | |

Note: Reference location for dummies defined in both specifications is Uttara.

Several other variables were also included, but later dropped due to their high correlation with the included ones.

IV. Policy Recommendations

The study points at the need to distinguish policy choices under regimes of incomplete information, available with the enforcer. While increasing inequality, in spite of contrary HIES findings, cannot be ruled out, one needs to be cautious in using wealth tax as an instrument for achieving equity. The size of tax revenue generated is likely to be small due to meager information the authority has on individuals' wealth. Moreover, problems associated with valuation have been raised. Given the background, the following recommendations are put forward:

- Continue with the current surcharge tagged to stated wealth.
- While revenue may be increased by lowering the threshold from 2 crore taka, given the incompleteness in information, such move is bound to discourage honest submission of tax returns (and wealth statements) and encourage rent-seeking within the administration.
- It is more important to consolidate information base around the current threshold. Over the short term, the objective of the tax policy will have to be reset away from significant revenue generation or achieving equity in the short term, to one of improved information management. With that perspective, few specific suggestions may be made:
 - (i) Redesign the assessment, expenditure and wealth statement forms to get relevant information. One needs to differentiate between land (as a property) and the building and other investments on land.

- (ii) Undertake PPP initiative to computerize data during submission that can also ensure (gradually improving) consistency.
- (iii) Establish linkages with other sources of information on tax-payers.
- (iv) Make information on TIN (and NID) mandatory for all BOI accounts that seek claims for tax rebate or any other incentives introduced. The same applies for term deposits with the commercial banks.¹⁶
- (v) Undertake area-based revaluation of property, moving out of the inertia set by the land registry offices.
- (vi) The above is not exhaustive and it is already a tall order. In order to address these, the research capacity within the NBR needs to be strengthened. It is recommended that research initiatives with in-house data be undertaken with select group of agencies and individuals noting the need for utmost confidentiality on such matters.

¹⁶ It is understandable that the government faces dilemma while considering the option of strict rule enforcement on apprehension that capital flight may occur. Thus, the milder step is proposed.

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Annex 1: A Comparison of the Property/Wealth Tax Provisions as contained in the Direct Tax Code 2012 of Bangladesh and the Wealth Tax Act of India

The purpose of this section is to show the striking resemblance between the property tax section of the Direct Tax Code 2012 of Bangladesh and the Wealth Tax Act of India. It needs to be said at the outset that the ensuing comparison is not exhaustive. Rather, the focus is on selected elements to establish the claim that conceptually, there is no difference between the anticipated property tax of Bangladesh and existing wealth tax of India-essentially, both are net wealth taxes.¹⁷ The items compared include, charge and computation of the tax (Table A.1.1), taxable assets (A.1.2) and the kind of properties exempt from tax (A.1.3).

Table A.1. 1: Charge and Computation of Tax

| Property Tax, Chapter IX, Direct Taxes Code 2012 | Wealth Tax Act, India |
|---|---|
| Subject to the provisions of this Code, every person, shall be liable to pay Property tax on the net worth of the property on the valuation date of a tax year | Wealth tax is payable on net wealth on valuation date |
| The net property of a person referred to...shall be the amount in accordance with the formula: $A - B$, where A = the aggregate of the value on the valuation date, of all the specified assets, wherever located..., and B = the aggregate of the value on the valuation date, of all the debts, owed by the person, which have been incurred in relation to the specified assets | Net Wealth = Value of assets...plus deemed assets...less exempted assets...less debt owed Debt should have been incurred in relation to the assets which are included in net wealth of assessee. Only debt owed on date of valuation is deductible |

Table A.1. 2: Types of house not considered as taxable asset

| Direct Taxes Code 2012, Bangladesh | Wealth Tax Act, India |
|--|---|
| A house meant exclusively for residential purposes allotted by a company to an employee | A residential house is not an asset if its meant exclusively for residential purposes of employee... |
| Any house for residential or commercial purposes which forms part of stock in trade | Any house which forms part of stock in trade of the assessee is not treated as an asset |
| Any house which the assessee may occupy for the purposes of business carried on by him | Any house which the assessee may occupy for the purposes of any business or profession carried on by him is not treated as an asset |
| Any house that has been let out for a minimum period of three hundred days in the tax year | A residential property which is let out for a minimum period of 300 days in the previous year is not treated as an asset |
| Any house in the nature of commercial establishments or complexes | Any property in the nature of commercial establishments or complex is not treated as an asset |

¹⁷ Information about the Indian Wealth Tax is taken from the following websites: www.dateyvs.com/wealth_tax.htm; and tax-india.com/wealth-tax/wealth-tax-in-india. All entries are direct quotations.

Table A.1. 3: Taxable Assets

| Direct Taxes Code 2012, Bangladesh | Wealth Tax Act, India |
|---|---|
| Any building or land appurtenant thereto (hereinafter referred to as “house”) used for any purpose | Any building or land appurtenant thereto whether used for commercial or residential purposes or for the purpose of guest house |
| Any farm house situated within twenty five kilometers from local limits of any municipality or municipal corporation or a Cantonment Board | Any farm house situated within twenty five kilometers from the local limits of any municipality or a cantonment board |
| Any urban land | Urban land is an asset |
| Motor car, yacht, boat, helicopter and aircraft other than those used by the assessee in the business of running them on hire or as stock in trade | Motor car, yachts, boats and aircraft other than those used by assessee for commercial purposes |
| Jewellery, bullion, furniture, utensils or any other article made wholly or partly of gold, silver, platinum or any other precious metal or any alloy containing one or more of such precious metals, other than those used by the assessee as stock in trade | Jewellery, bullion, utensils and any other article made wholly or partly of gold, silver, platinum or any other precious metal or any alloy containing one or more such precious metals are treated as assets;...jewellery includes ornaments made of gold, silver, platinum or any other precious metal or any alloy containing one or more of such precious metals, and also precious or semi-precious stones, whether or not set in any furniture, utensils or other article or worked or sewn into any wearing apparel. Where any of the above assets is used by an assessee as stock in trade, then such asset is not treated as assets... |
| Cash in hand, excess of two hundred thousand taka, of individuals; deposit in a bank located outside Bangladesh, in case of individuals and in the case of other persons, any such deposit not recorded in the books of account | Cash in hand; in case of an individual and HUF cash in hand in excess of Rs. 50,000 shall be included in assets; In case of any other person cash in hand not recorded in the books of account shall be included in assets |

Annex 2: Property/Wealth Taxes Advantages and Disadvantages

| Advantages | Disadvantages |
|---|--|
| <p>Revenue Potential: The tax base of land and buildings is constantly growing and thus property taxes can be a significant source of revenue for countries.</p> <p>Stability: Unlike wages, profits and financial assets which are prone to business cycle fluctuations, real asset prices are relatively stable.</p> <p>Fairness and Equity: Property taxes are fair since they are directly linked to the provision of government services such as street lighting, police service etc. Further fairness can be ensured if the tax is relatively progressive and heavily concentrated on the wealthy.</p> <p>Compliance Costs: The compliance costs of property tax are low since it does not require self assessment (as with VAT or Income Taxes). Property tax assessments are carried out by the respective authorities. [The same does not however apply for wealth tax in countries with incomplete information.]</p> <p>Tax Base Competition: Local governments are usually given complete authority to carry out property taxation. Central governments do not get involved due to the complexity and political cost involved.</p> <p>Land Use Efficiency: Property taxes can lead to significant improvements in the quality of land usage. Better allocation can occur if assessments are done on the basis of location, highest and best use.</p> | <p>Administration Cost: Property taxes are difficult and costly to administer. The revenue yield per dollar of admin cost is quite low as are the collection rates. Since property cannot be self assessed by owners, high staff costs and record keeping costs must be borne.</p> <p>Enforcement: Property taxes are difficult to enforce since elected officials often do not want to risk taking actions against prominent members of society. Enforcement actions are often avoided due to potential political fallout.</p> <p>Tax Payer Attitudes: Property taxes are very unpopular with citizens. This is because the taxes are levied upon unrealized accretions in wealth, the assessments are often confusing and because property taxes have high visibility.</p> <p>Distorts the inter-temporal consumption-savings behavior: In societies with weak social security system, wealth tax put people in more vulnerable situations at old ages.</p> <p>Income Inelastic: Property taxes are not income elastic. Year to year growth in revenue is only due to new constructions. Reassessments are done every 5-10 years and this produces a sudden jump in tax liability leading to public outcry.</p> <p>Capital flight and adverse implications in the long term: Since countries compete for global funds that move more freely than central bank authorities perceive, capital flight is empirically found to be an obvious outcome of wealth tax,</p> <p>Discretions in Valuation encourage rent-seeking: Since information on wealth of taxpayers are often incomplete, rent-seeking is encouraged dampening the revenue productivity.</p> |

Source: Adapted from Bahl,2009.

Annex 3: Statistical Tables

Table A.3. 1: Property Tax Bases

| Region | Number of Countries | Land Value | Capital Improved Value | Land and Improvements (Separately) | Improvements only | Annual Rental Value | Area | Flat Rate |
|---------------------------|---------------------|------------|------------------------|------------------------------------|-------------------|---------------------|------|-----------|
| Africa | 25 | 1 | 8 | 3 | 4 | 7 | 11 | 6 |
| Caribbean | 13 | 4 | 4 | 2 | 0 | 8 | 5 | 0 |
| Asia | 25 | 2 | 6 | 2 | 0 | 11 | 12 | 0 |
| Oceania | 7 | 6 | 2 | 0 | 0 | 4 | 0 | 0 |
| Western Europe | 13 | 0 | 9 | 0 | 0 | 6 | 0 | 0 |
| Eastern Europe | 20 | 1 | 6 | 0 | 0 | 0 | 15 | 0 |
| Central and South America | 16 | 2 | 14 | 1 | 0 | 1 | 1 | 0 |
| North America | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| Totals | 122 | 16 | 52 | 8 | 4 | 37 | 44 | 6 |

Source: McCluskey and Bell, 2010, Table 1, p.126

Table A.3. 2: Property Tax as a percentage of GDP

| Region/Groups of countries | 1970s | 1980s | 1990s | 2000s |
|---|--------------|--------------|--------------|--------------|
| OECD Countries (Number of Countries) | 1.24 (16) | 1.31 (18) | 1.44 (16) | 2.12 (18) |
| Developing Countries (Number of Countries) | 0.42 (20) | 0.36 (27) | 0.42 (23) | 0.6 (29) |
| Transition Countries (number of Countries) | 0.34 (1) | 0.59 (4) | 0.54 (20) | 0.68 (18) |
| All Countries (Number of Countries) | 0.77 (37) | 0.73 (49) | 0.75 (59) | 1.04 (65) |

Source: Bahl, R. 2009. "Fixing the Property and Land Tax Regimes in Developing Countries".

Table A.3. 3: Investment Incentives in Bangladesh

| Investment options | Average gross annual rate of return | Rate of taxation | Net of tax rate of return |
|-----------------------------------|-------------------------------------|------------------------|-----------------------------|
| Bank fixed deposits | 10-12 per cent | 10 per cent | 9-11 per cent (risk free) |
| Commerce Industry | 20-30 per cent | 28-38 per cent | 15-23 per cent (with risk) |
| Stocks (2006-2011 average) | 38 per cent | 0 | 38 per cent (with risk) |
| Land holdings (1972-2010 average) | 100-125 per cent | 0-5 (limited taxation) | 95-120 per cent (risk free) |

Note: Losses as a result of recent crash in the share market is not possibly included.

Source: Ahmed (2011).

Table A.3. 4: Distribution of Government Revenue in 1992

| | Income & Profit | Goods & Services | International trade | Non-Tax Revenue | Sum of columns 1-4 | Property tax & capital transfers |
|-------------|-----------------|------------------|---------------------|-----------------|--------------------|----------------------------------|
| Singapore | 27 | 22.8 | 2.2 | 33.5 | 85.5 | 14.5 |
| Indonesia | 58 | 26.3 | 5.1 | 7.8 | 97.2 | 2.8 |
| Malaysia | 34.2 | 20 | 14.9 | 26.9 | 96.0 | 4 |
| Philippines | 29.3 | 26.2 | 28.7 | 12.6 | 96.8 | 3.2 |
| Thailand | 27.5 | 41.6 | 16.7 | 9.9 | 95.7 | 4.3 |
| Bangladesh | 8.6 | 25.8 | 27.3 | 23 | 84.7 | 15.3 |
| Bhutan | 7.5 | 16.6 | 0.4 | 75 | 99.5 | 0.5 |
| India | 17 | 34 | 25.5 | 22.8 | 99.3 | 0.7 |
| Myanmar | 11.4 | 32.6 | 16.5 | 39.6 | 100.1 | -0.1 |
| Nepal | 9.9 | 36.7 | 30.8 | 17.1 | 94.5 | 5.5 |
| Pakistan | 10 | 32.2 | 30.2 | 27.2 | 99.6 | 0.4 |
| Sri Lanka | 11.2 | 47.8 | 27.6 | 9.8 | 96.4 | 3.6 |

Note: The last column is residually calculated by the authors. Taxes on Property & Capital Transfer include: Estate Duty and Gift Tax, Wealth Tax, Narcotics Duty, Land Revenue, Stamp duty-non-judicial, and Registration fee.
Source: Government Financial Statistics of IMF, reported in http://www.asosai.org/asosai_old/R_P_government-revenues/chapter_3_bangladesh.htm

Table A.3. 5: Comparing Market Prices with SRO-assessed land value
(‘000 Taka per katha=1.65 decimal)

| Thana/Area | www.realestatebd.com | | | SR Office value for tax | |
|--------------|----------------------|-------|-------|-------------------------|---------|
| | 2010 | 2011 | 2012 | average | maximum |
| Airport Road | 1200 | 5900 | | | |
| Ashulia | | 443 | 838 | | |
| Baridhara | | 27313 | | | |
| Bosundhara | 5171 | 4322 | 5510 | | |
| Dakkhin Khan | | 2083 | | 1474 | 5200* |
| Dhanmondi | 32000 | 48500 | | 5149 | |
| Gulshan | 35667 | 47500 | 56667 | 2368 | 6136 |
| Mirpur | 5250 | 2267 | | 1139 | 2166 |
| Mohammadpur | | 1271 | | 1555 | 4912** |
| Purbachal | 3394 | 3318 | | | |
| Uttar Khan | | 3855 | | 613 | 1329 |
| Uttara | 5158 | 10746 | | | |

Table A.3. 6: Prices of Apartment in Dhaka City

| Location | Web information | | | Survey information | | | | |
|-----------------------|-----------------|----|------|--------------------|----------------------|-----|---------------|------|
| | Price | N1 | Size | Acquisition Price | Year of registration | N2 | Current Price | Size |
| Shyamoli and Adabar | 4348 | 27 | 1432 | 2319 | 2002 | 29 | 4728 | 1385 |
| Dhanmondi | 7753 | 79 | 1497 | 4094 | 1999 | 102 | 12909 | 1854 |
| Bashundhara | 7110 | 22 | 1516 | | | | | |
| Banasree and Badda | 4512 | 46 | 1187 | 1187 | 1998 | 29 | 6205 | 1348 |
| Gulshan and Baridhara | 11274 | 42 | 1969 | 3740 | 1999 | 110 | 12107 | 1953 |
| Uttara | 6020 | 53 | 1409 | 508 | 1992 | 4 | 6000 | 952 |

Note: Prices are Taka/sqft; N= number of observations. Averages are reported. Bashundhara was not included in survey.

Table A.3. 7: Tax Rates of Dhaka City Corporation and Implicit Rental Value

| Location | Tax rates, Tk/sqft | | Estimated monthly rent, Tk/sqft | | Survey 2012 Monthly rent/sqft, residential |
|--------------------------|--------------------|------------|---------------------------------|------------|--|
| | Residential | Commercial | Residential | Commercial | |
| Motijheel Road | 12 | 25 | 17 | 21 | |
| Dhanmondi | 12 – 13 | 25 – 30 | 18 | 25 | 28 |
| Farmgate | 6 – 7 | 8 -9 | 10 | 8 | 14 |
| Kawran Bazar indust area | 7 - 8 | 26 – 32 | 11 | 27 | |
| Tejgaon industrial area | 7 – 7.75 | 10 – 11 | 11 | 9 | |
| Niketan/Mohakhali R/A | 9 – 9.50 | 12- 13 | 13 | 11 | |
| Gulshan Avenue | 15 - 16 | 25 – 30 | 22 | 25 | 33 |

Note: City corporation annual tax = 12% of (10 months house rent – 40% rebate if owner occupied – loan interest if any).

The 12% includes: 7% holding tax, 3% cleanliness tax, 2% street light tax.

The last two columns are estimates of maximum rental value derived from municipality tax, on the assumption of zero loan liability and zero discount for owner-occupancy in commercial premises.

Table A.3. 8: Characteristics-based Clusters and their correspondence with location (ward)

| Ward number | Maximum percentage in a single cluster | Number of observations |
|-------------|--|------------------------|
| N -19 | 92.86 | 15 |
| N -21 | 60.00 | 15 |
| N.26 | 85.71 | 7 |
| N-07 | 80.00 | 15 |
| N-10 | 84.00 | 25 |
| N-11 | 100.00 | 25 |
| N-12 | 80.00 | 25 |
| N-13 | 100.00 | 21 |
| N-17 | 69.57 | 23 |
| N-18 | 74.36 | 39 |
| N-19 | 94.12 | 51 |
| N-2 | 58.33 | 24 |
| N-21 | 79.17 | 24 |
| N-22 | 100.00 | 25 |
| N-23 | 100.00 | 24 |
| N-26 | 60.53 | 38 |
| N-28 | 53.19 | 47 |
| N-3 | 88.46 | 26 |
| N-30 | 79.49 | 39 |
| N-32 | 60.87 | 46 |
| N-4 | 73.68 | 19 |
| N-5 | 96.67 | 30 |
| N-6 | 93.88 | 49 |
| N-7 | 96.97 | 33 |
| S-15 | 82.42 | 91 |
| S-16 | 60.00 | 50 |
| S-17 | 75.86 | 29 |
| S-19 | 42.55 | 47 |
| S-24 | 100.00 | 36 |
| S-25 | 64.71 | 34 |
| S-29 | 96.55 | 29 |
| S-35 | 58.33 | 24 |
| S-36 | 72.00 | 25 |
| S-39 | 70.00 | 50 |
| S-41 | 88.24 | 51 |
| S-42 | 89.13 | 46 |
| S-45 | 55.10 | 49 |
| S-48 | 93.88 | 49 |
| S-50 | 56.52 | 46 |
| S-51 | 64.58 | 48 |
| S-53 | 100.00 | 46 |
| S-7 | 89.58 | 48 |

Source: ERG Survey data. See Annex 6.

Table A.3. 9: A snapshot of existing wealth tax practices

| Name of Country | Who pays the tax? | What kind of assets are taxed or exempted? | What are the thresholds and rates? | How does valuation take place? |
|-----------------|---|--|---|--|
| India | Resident taxpayers on their worldwide assets; non-resident taxpayers on assets situated in India | Taxable assets: non-productive assets such as guest house, residential house, motor car, jewelry, bullion, boats, aircrafts, cash in hand in excess of Rs.50000; Exempted assets: assets used as stock-in-trade and for commercial purposes | Flat rate of 1% on the aggregate value of net wealth exceeding Rs. 3 million of non-productive assets | In general, market value |
| Norway | Resident individual taxpayers on their worldwide assets; Non-resident taxpayers only on certain property, generally on assets connected to a business carried out in Norway; Corporations and Partnerships | N/A | Municipal net wealth tax: 0% on net wealth up to 700,000 NOK; 0.7% above 700,000 NOK; 0.4% above State net wealth tax: 0% on the first 700,000 NOK; 0.4% above Corporations and partnerships pay state net wealth tax of 0.3% and municipal tax of 0.4% A basic allowance of NOK 700000 for single taxpayers and NOK 1400000 for married couples | Valuation of shares: Since 2008, full market value of shares registered on the stock exchange; unlisted shares are valued based on the company's taxable wealth Valuation of residential property: for primary residence, 25% of deemed market value; secondary residences - 40%; business property is valued based on the deemed yield of the property |
| Switzerland | Levied at the cantonal level; residents pay annual wealth tax on the value of all assets located in Switzerland; non-residents , on assets derived from enterprises and real estate situated in Switzerland; wealth tax also applies to corporations | Taxable assets: immovable assets such as real property, movable assets such as securities and other investments, cash, gold and other precious metals, cash value of life assurance policies, shares in undistributed inheritances, business capital shares, shares in a partnership, motor vehicles, boats, etc. Non-taxable assets: pension funds | The rates for wealth tax are progressive and vary per canton; in 2010, the tax on joint net assets of CHF 1000000 for a married couple resident in Zurich was 0.2%, in Basel City-0.58% and Geneva-0.62% | In general, all assets are evaluated at their fair market value |
| France | Wealth tax is assessed at the level of the household rather than individual | Taxable assets: real estate, cars, furniture (except antiques), horses, jewelry, shares, bonds, etc. Exempt assets: goods necessary for the practice of a profession; pictures, tapestries, statues, sculptures, lithographs, assets designed to fund retirement income, etc. | As of 2010, a 0% applies on the first EUR 790000 of net wealth; thereafter, the rates are progressive. A minimum rate of 0.55% applies to net wealth between 790000 and 1290000 EUR; A maximum rate of 1.80% on net wealth above 16540000 EUR | Assets valued by way of open market valuation at 1 st Jan each year; Residents are allowed a 30% allowance against the value of principal home; Residential (commercial) properties that are let are valued on the basis of capitalization of the rent at 5% (8%). |

Source: Taxation and Investment in India 2012, Deloitte.com; Wealth Tax in India, tax-india.com; Tax Facts Norway 2010, kpmg.com; International Assignment Services Taxation of International Assignees Country-Switzerland, pwc.com; French Wealth Tax, french-property.com; Liechtenstein: Personal Taxation, lowtax.net

Annex 4: Gift Tax in Bangladesh and other countries

Bangladesh

The Gift Tax is a type of wealth tax, specifically a wealth tax on the inter vivos transfer of wealth with the legal incidence falling on the one making the gift. Similar to the annual tax on net wealth, it is levied on the net value of taxable assets transferred.

A Gift Tax law was first introduced in Bangladesh in 1963, only to be repealed in 1985. It was reintroduced in 1990 as embodied in the Gift Tax Act 1990. A section on the Gift Tax also exists in the recent Direct Tax Code 2012 (Chapter VIII, p.92).

In the 1990 Act, gift refers to existing property, movable or immovable, that is transferred by one person to another voluntarily and without any profit. The value of property is assessed in terms of what it would sell for in an open market i.e. at the current market price. An annual exemption on gifts up to Tk.20000 applies in addition to certain other transfers that are not liable to the gift tax. These exemptions include gifts of property located outside Bangladesh, gifts made to the Government or any local authority, gifts to university, hospital, flood and disaster management funds, religious institutions and charity, gifts to dependent relative up to Tk.20000 on the occasion of marriage, gifts by the way of payment of policy of insurance or amnesty for any person-other than wife-dependent upon him for support and maintenance up to Tk.20000; gifts under a will, in contemplation of death; and gifts to sons, daughters, father, mother, his or her spouse, own brothers and sisters.

The 2012 provisions for the Gift Tax are similar. Effective from 1st July 2012, a basic exemption applies to gifts made annually that do not exceed Tk.50000 (Section 116:2, p.92). All the other exemptions as contained in the 1990 Act also appear in the 2012 initiative except for gifts made to dependent relatives on the occasion of marriage up to Tk.20000, and gifts by the way of payment of policy of insurance or amnesty for any person-other than wife-dependent upon him for support and maintenance up to Tk.20000.

The 2012 rates are as follows: on the first one million taka of taxable gift in excess of the exempted limit, a rate of 5% applies; a rate of 10% on the next one million taka; for the next one million and the balance, the respective rates are 15% and 20% (p.166).

A comparison of the above with the rates as existed in 2008-2009 will show that although the rates are the same, the levels at which they apply differ. In 2008-2009, a rate of 5% was applied on the first five hundred thousand taka of the taxable gift; on the next ten hundred thousand, a rate of 10%; on the next two hundred thousand, 15%; and finally, a rate of 20% on the balance of the taxable gift.

As per the 2012 provisions, the Deputy Commissioner of Taxes is tasked with the assessment and collection of the gift tax. Gift tax returns are to be submitted to him, and in the event the information contained in the return is not adequate for assessment purposes, the Commissioner may estimate the value of the taxable gifts and determine the tax payable to the best of his judgment. If the return contains false information or the taxpayer deliberately fails to submit the return, the Commissioner can impose a penalty of up to 15% of the value of the gift assessed by him and collect it in addition to the gift tax (p.94).

Thailand

There are no provisions for inheritance tax or gift tax in Thailand's tax laws. However, a person may have to pay income tax on money or value received from another's death. Gifts of gold are not liable to tax but on gifts of property, income tax has to be paid by the recipient only when the property is sold, not when it is received. In the event property is received on the death of another, however, the beneficiary is liable to pay income tax on it in the same year of the transfer, and if the property is sold by the recipient, another payment of income tax is due.

Malaysia

Malaysia does not have any taxes on estate, inheritance or gift. There are also no taxes on annual net wealth in the country.

Vietnam

"Prior to 2009, Vietnam did not have an inheritance tax. As of January 1, 2009: with the exception of income being receipt of an inheritance of real property as between husband and wife; as between parents and children, including foster parents and adopted children; as between parents-in-law and children-in-law: as between grandparents and grandchildren: and as between siblings which is exempt, income from inheritances in excess of VND 10000000 are subject to tax at the rate of 10 percent." (Vietnam Business Guide)

"Also prior to 2009, Vietnam did not have a gift tax. As of January 1, 2009, with the exception of income being receipt of a gift of real property as between husband and wife; as between parents and children, including foster parents and adopted children; as between parents-in-law and children-in-law: as between grandparents and grandchildren: and as between siblings which is exempt, income from gifts in excess of VND 10000000 are subject to tax at the rate of 10 percent." (Vietnam Business Guide)

In other words, both inheritance and gifts exceeding VND 10 million is subject to 10% tax excluding the inheritances/gifts between various direct family members which are not subject to tax. The inheritance/gift tax is on the recipient rather than the donor. It is also worth knowing that transfer of real properties is subject to tax at 25% of net income or 2% of selling price.

India

India first introduced an estate tax in 1953 but it was repealed in 1985 through the influence of the then Finance Minister, V.P. Singh. Double taxation has been cited as the underlying reason for the abrogation of the tax: it had to be paid in addition to a stamp duty on the transfer of property paid by the inheritors. At present, there are no estate taxes in India.

A Gift Tax Act was first introduced in 1953, covering all parts of the nation except Jammu and Kashmir. As defined by the Act, "gift" referred to "the transfer by one person to another of any existing movable or immovable property made voluntarily and without consideration in money or money's worth" (this is exactly how gift is defined in the Gift Tax Act 1990 of Bangladesh). The basic exemption was up to Rs.25000. Gifts in excess of this amount were liable to the tax; however, this did not apply to transfers between relatives. Although the Gift Tax was abrogated in 1998, it was reintroduced under the Income Tax Act 1961 in the year 2004. As a part of income tax, however, the gift tax applies to recipients rather than the donors. In general, the gifts

received by any individual or Hindu Undivided Family (HUF) in excess of Rs. 50,000 in a year would be taxable.

According to the new provisions, gift refers to cash as well as immovable properties, shares, securities, jewelry, archaeological collections, drawings, paintings, sculptures, any work of art and bullion. Property is valued at fair market value and if such information is not available, valuation is as per the estimate of the Valuation Officer. The basic annual exemption applies to gifts not exceeding Rs.50000. As before, transfers between relatives (spouse, brother or sister, siblings of the spouse, siblings of parents and in-laws, lineal ascendants or descendants of spouse) are exempt from the Gift Tax, even if the value exceeds Rs.50000. Exemptions, regardless of value, also extends to:

- Immovable properties located outside the country
- Gift of a movable property outside India, provided the giver is a citizen and an ordinarily resident of India
- Saving certificates issued by the Central Government
- Capital Investment Bonds up to Rs.1000000 per year.
- Relief Bonds gifts by an original subscriber.
- Gifts of Certain bonds from the NRI to his/her relatives, which are subscribed in foreign currency (specified by the Central Government).
- Gift to government or any local authority.
- Gifts to any charitable institutions.
- Gifts to notified temples, churches, mosques, gurudwaras and other places of worship.
- Gift to children for educational purpose (Reasonable amount).
- Gifts by an employer to its employees in the form of bonus, gratuity or pension.
- Gifts under will.
- Gifts in contemplation of death.

Selected Observations

What is interesting about the aforementioned observations is that whereas in common parlance, the gift tax is a type of wealth transfer tax that is paid by the donor, in Thailand, Vietnam and India, the tax is not so much a wealth tax as it is an income tax paid on the gifts received by the recipient. With the exception of Vietnam which levies a specific rate on gifts in excess of a certain amount, Thailand and India simply add the taxable gift amount to the income of the recipient which is then subject to the income tax depending on which slab the recipient's income falls into.

In Bangladesh, however, the gift tax is a tax on the donor. This is evident from Section 116:1 wherein it is said, "No gift tax shall be applicable under this Code for gifts made by any person". Moreover, as has already been noted, depending on the amount of the taxable gift, tax rates vary. It may therefore be more appropriate to compare Bangladesh's gift tax with countries where the gift tax also operates as a tax on donors.

Annex 5: Capital gains tax in Bangladesh and other countries

Bangladesh

As per sections 43-45 of the Direct Tax Code 2012, a capital gains tax is liable on the income a person obtains by selling his capital assets to another party. More specifically, the tax is due on the net income, and capital assets constitute all types of property, including securities that are held consecutively for 365 days, but not stock-in-trade, consumable stores or raw materials used exclusively for the conduct of business as well as movable properties that perform services solely for the personal use of their owner.

Capital gains from the sale of shares of public company, mutual unit certificates and any instrument of redeemable capital as defined by Companies Act 1994 listed on any stock exchange in Bangladesh are exempt from the capital gains tax.

For the purposes of calculating capital gains, the value of expenditures incurred in the course of transferring relevant capital assets, the acquisition cost to the original owner as well as costs incurred in maintaining the property prior to transfer are all deductible from the sales value.

With respect to acquisition cost, in the event the owner obtained the property as a result of succession, inheritance or devolution, the fair market value at the time the property was obtained will serve as the cost of acquisition. On the other hand, if the property was purchased by the owner, the purchase price will serve as the actual acquisition price.

In the case of a company, in so far as income from capital gains is a subset of total income, the tax payable is a summation of two components: the difference between total income and capital gains subject to the relevant income tax rate, and a rate of 15 percent on just the capital gains income.

When the assessee is a person rather than a company there are two qualifications: if the income from capital gains is as a result of transferring assets that have been sold within five years since the period of acquisition, tax payable is on the total income of which capital gains is a subset. However, if the capital assets were disposed after five years, then depending on whichever is lower, capital gains is taxed at the rate at which total income (including capital gains income) is taxed or it is subject to a rate of 15 percent of its (own) value.

Thailand

Thailand does not have a separate tax for capital gains as all realized economic gains, including capital gains, are treated as income and taxed accordingly. As such, income from capital gains is treated as ordinary income on which the corporate tax is due. The general rate of corporate tax on domestic corporations is 30% of net profits. On the other hand, foreign corporations that do not directly conduct business in Thailand but earn income from certain services are subject to a withholding tax of 15% on their capital gains.

With the exception of certain ships, launches and floating homes, capital gains arising from the sale of immovable properties are generally exempt from income tax so long as these were either inherited or acquired solely for personal, non-business services. Also exempted from the income tax are gains from selling securities listed in the Stock Exchange of Thailand.

Malaysia

In Malaysia, the capital gains tax is specific to gains arising from the transfer of real properties as well as gains from the disposal of shares in real property companies. It is, therefore, referred to as the Real Property Gains Tax (RPGT). Effective from 1st January 2010, real properties that are sold within five years of acquisition are subject to an RPGT of 5%. Gains on properties mandatorily sold to the government as well as gains from the sale of one private residence are exempt from the RPGT. Depending on whichever is greater, an amount of RMT 10000 or 10% of the chargeable gain is also exempt from the tax.

Vietnam

While certain capital gains are taxed under different tax categories, there is no separate capital gains tax in Vietnam. According to the 2010 Vietnam tax report by PricewaterhouseCoopers, a capital assignment profits tax of 25% is due on net gains (sales proceeds minus cost minus transfer expenses) made on the transfer of interests, rather than shares, in a Vietnamese limited liability company. However, gains arising to domestic companies from the sale of interest (rather than transfer of interest) in a limited liability company or sale of shares in a joint stock company are treated as income and accordingly subject to a corporate income tax of 25% on the net gain. Foreign investors who realize capital gains from sale of interest to a Vietnamese limited liability company are also subject to a corporate income tax of 25% on the net gain.

According to the Vietnam Business Guide, in general, gains on sale of shares, securities and real estate (with the exception of single holdings of house/land) are considered taxable income.

India

In India, the Income Tax Act 1961 contains the comprehensive rules pertaining to the capital gains tax. As such, capital gains are treated as income and subject to the income tax. It is also worth noting that gains from transfer/sale of capital are broadly divided into two categories: long term gains and short term gains. In general, long term gains pertain to assets, including land or house property, that have been held in excess of 36 months. However, the long term capital gains on shares or equity mutual funds specifically require that they be held for more than 12 months before being sold. While the latter is not subject to income tax and, therefore, exempt from a tax on capital gains, a securities transaction tax has to be paid. Conversely, short term capital gains pertain to assets that have been held for less than the respective durations of 36 and 12 months before being sold. Unlike long term gains, however, short term gains even for shares or equity mutual funds are lumped with total income in the relevant year and subject to income tax as per the appropriate tax bracket pertaining to the pertinent assessee.

Annex 6: Findings from Field Survey

In an attempt to collect detailed information about properties in Dhaka, a field survey was conducted by the Economic Research Group on 1600+ residential properties, spread over purposively selected 48 Wards of Dhaka City Corporation (DCC)¹⁸. The key information collected covered location and neighborhood information, building information, and apartment information (if applicable), including the current market prices of the properties as reported by the respondent. The main purpose of the survey was to understand the distribution and variation of residential properties characteristics in Dhaka and to identify which of these characteristics better explain variations in property prices.

To begin with, the distributions of property prices (Taka per square feet) appear to be very concentrated within locations suggesting relatively greater homogeneity within than across locations. Figure A.6.1 shows the distribution of price within each of the surveyed Wards. Each of the graphs relate to a particular Ward, denoted by its Ward Number, preceded by a prefix 'N' or 'S' depending on whether the ward falls in DCC North or DCC South, respectively. However, the variation in prices across locations indicate that locations may have an impact on the price, as discussed in earlier analysis of other data.

Figure A.6. 1: Distribution of Price Within Locations



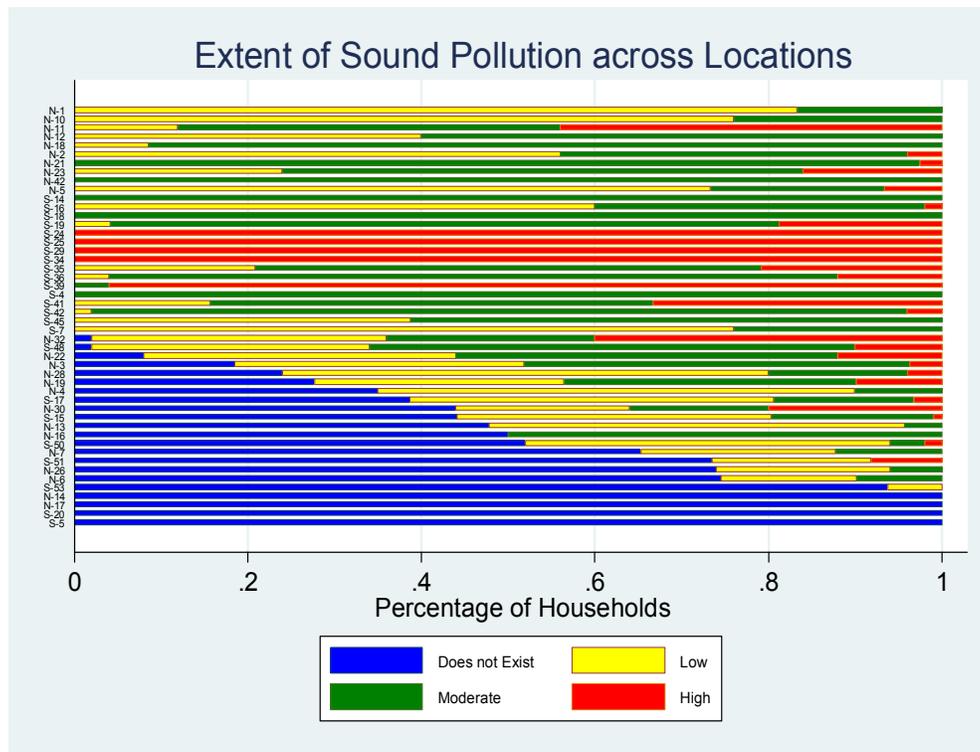
Apart from locations, the other neighborhood characteristics that also have impacts on price include, sound pollution, water logging, community security, garbage collection, distances from nearest hospital, police station, shopping mall, park and banks. To understand the variation in these characteristics across locations, we plot some graphs for each of these characteristics. The graph for the Extent of Sound Pollution in various

¹⁸ There were additional 400+ urban commercial properties surveyed in Dhaka and elsewhere, which have not been covered here.

wards is shown below (Figure A.6.2), while all the others are provided in Figures A.6.3 to A.6.11.

Each line or bar of the graph belongs to a particular Ward, and is broken down into sections as described in the legend. The length of each section of the bar is determined by the percentage of households in the Ward sample, who relate to that particular section of the bar. For instance, in the graph below (Figure A.6.2), the blue section of bar N-22 (Ward 22 of DCC North) tells us the percentage of households in that particular Ward who reported *no sound pollution* in their neighborhood; similarly, the yellow section of the same bar gives us the percentage of households who face *low* sound pollution problem in their neighborhood.

Figure A.6. 2: Extent of Sound Pollution across Locations



In addition to neighborhood characteristics, some building-specific characteristics were also found to have an impact on the price of a property. Such characteristics include the number of facilities within the building and water disposal system. The graphs for each of them are presented below in Figures A.6.3 and A.6.4.

Figure A.6.3 shows the average number of building facilities in each of the Wards in the sample. Such facilities include having an elevator, a generator, security guards, swimming pool, gym, community room, play area and garden.

Figure A.6. 3: Average Number of Building Facilities across Locations

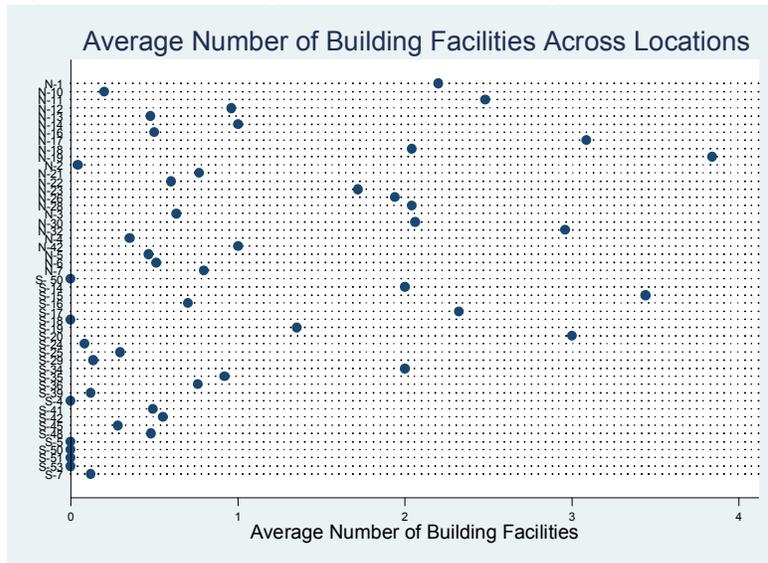
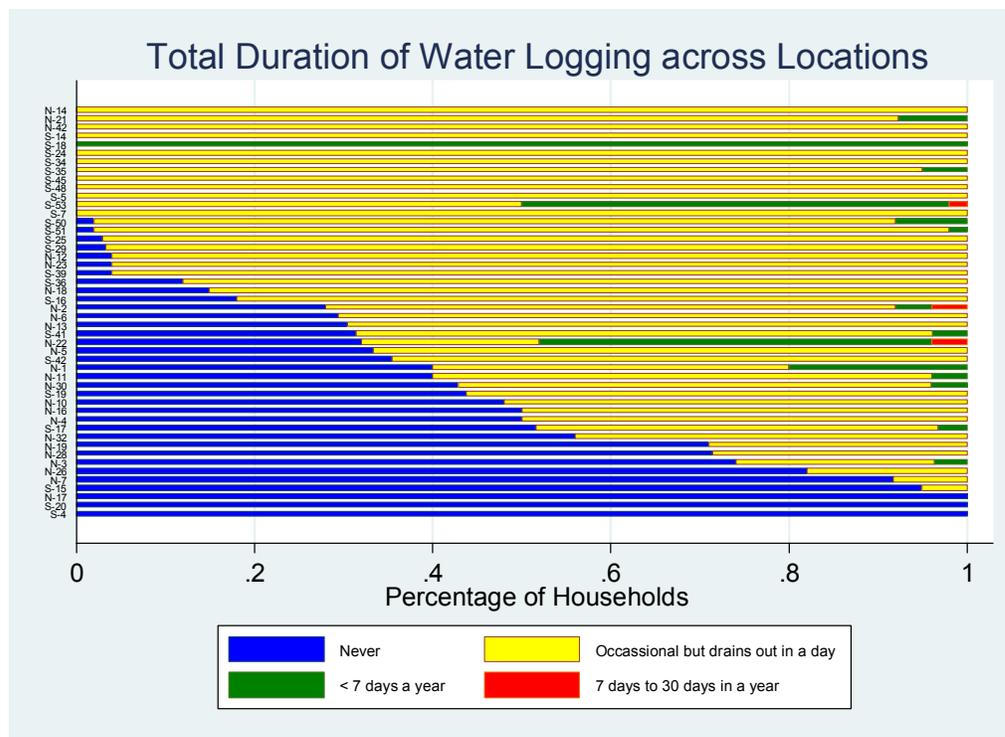


Figure A.6. 4: Total Duration of Water Logging across Locations



Finally, among the apartment-specific characteristics, the type of apartment (i.e., simplex or duplex) and the type of floor in the apartment were found to have statistically significant impact on price. Variations across apartment and floor types are illustrated in Figures A.6.5 and A.6.6 respectively.

Figure A.6. 5: Type of Apartment across Locations

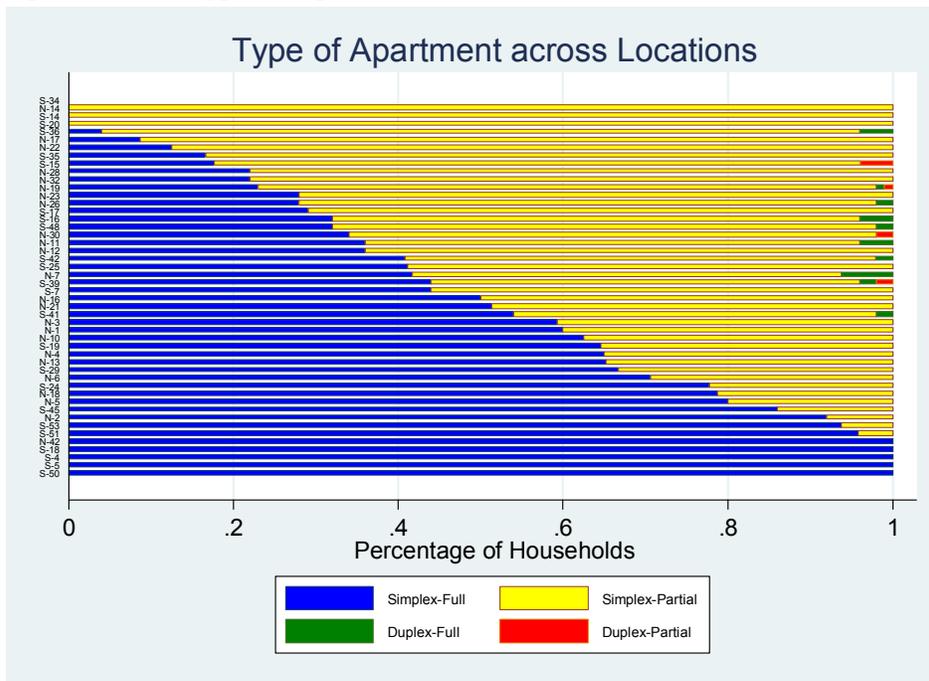
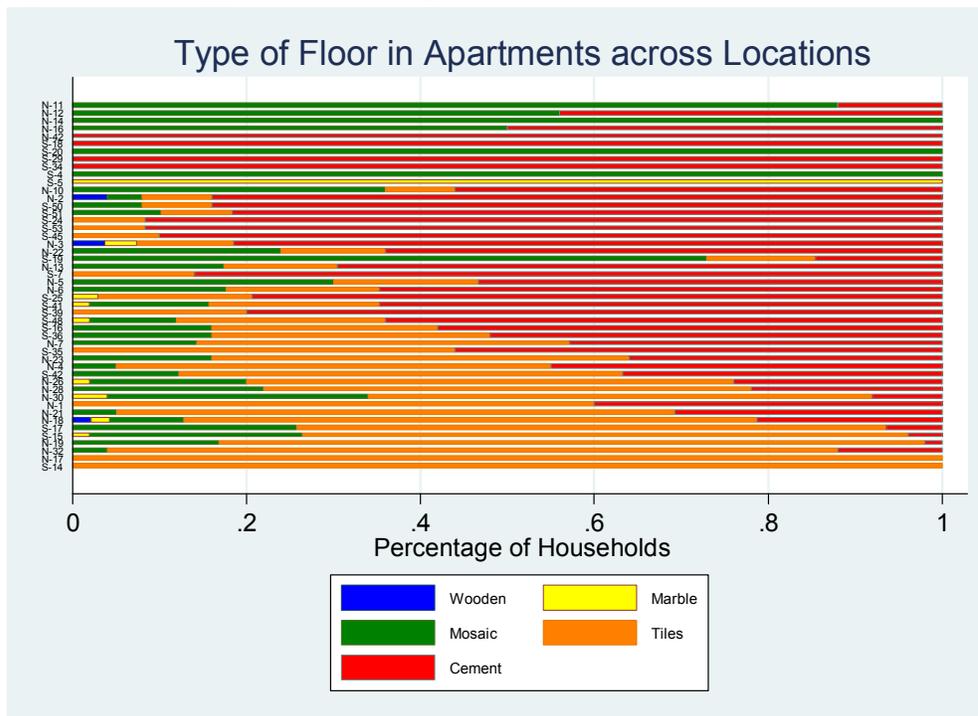


Figure A.6. 6: Type of Floor in Apartments across Locations



All the graphs serve to clearly show that the neighborhood, building and apartment specific characteristics (which play their parts in determining the price of properties) vary widely across locations. The fact that location information alone cannot adequately

reflect the price of a property, and that there is wide variation of such additional property specific characteristics across various locations, calls for a proper mechanism to generate such additional information at individual location and property level, before tax on a particular property is assessed.

Figure A.6. 7: Extent of Garbage Collection across Locations

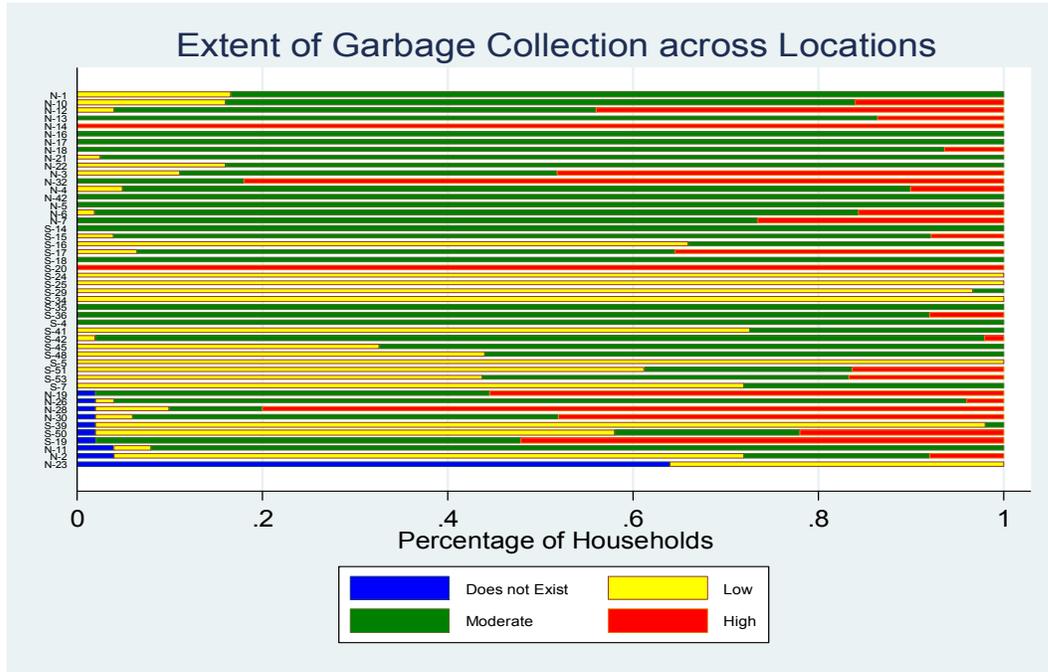


Figure A.6. 8: Distance (walking time) from Nearest Police Station

Distance (walking time) from Nearest Police Station across Locations

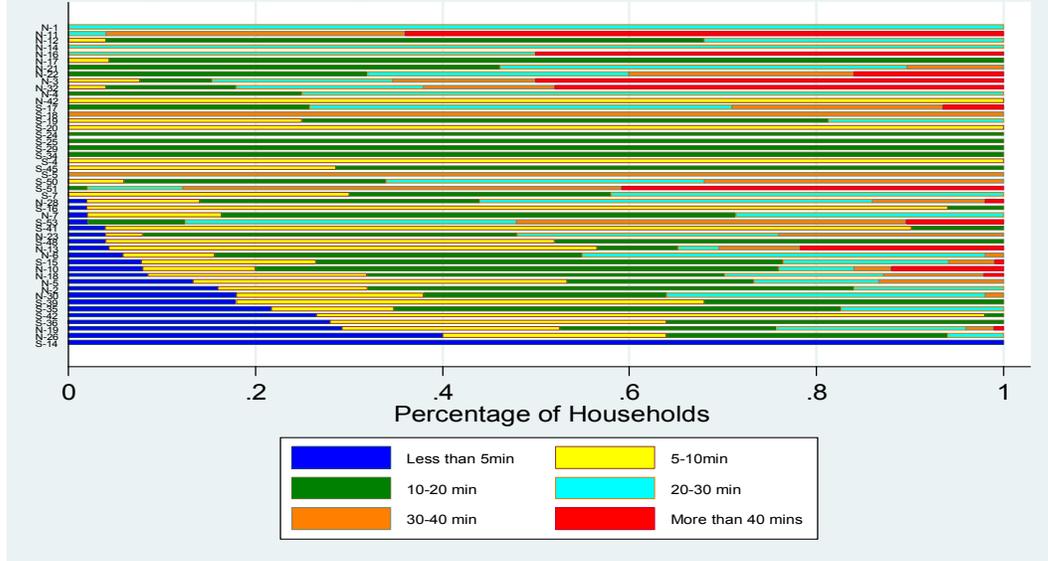


Figure A.6. 9: Distance (walking time) From Nearest Shopping Mall

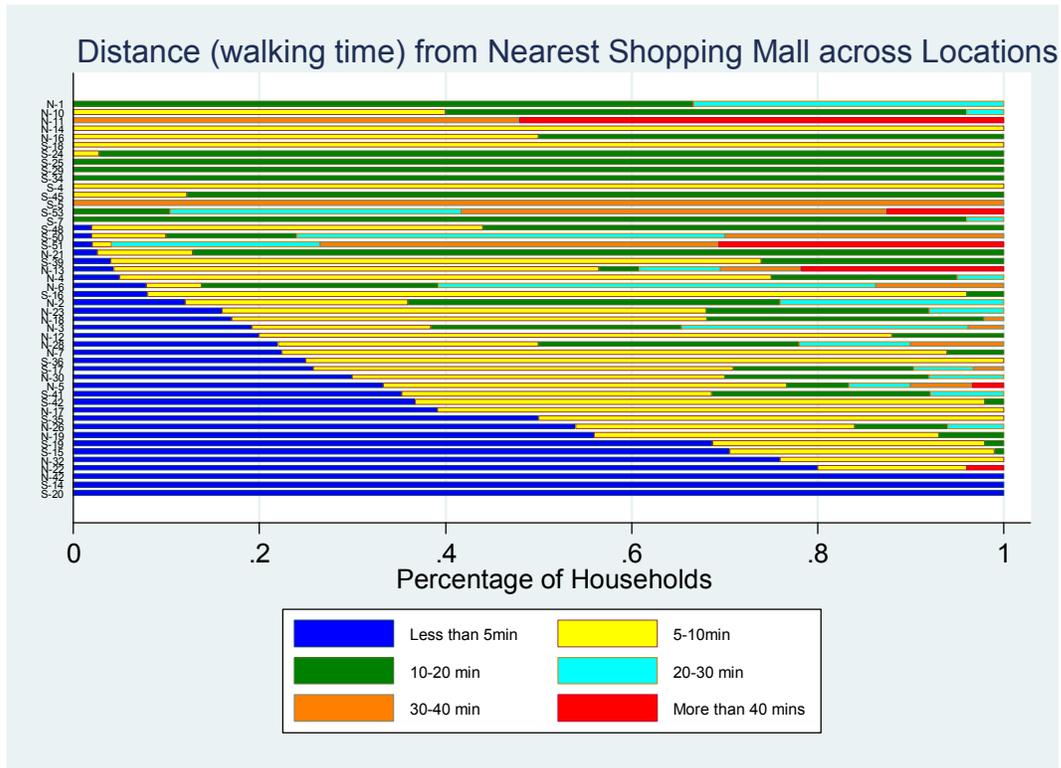


Figure A.6. 10: Distance (walking time) from Nearest Park

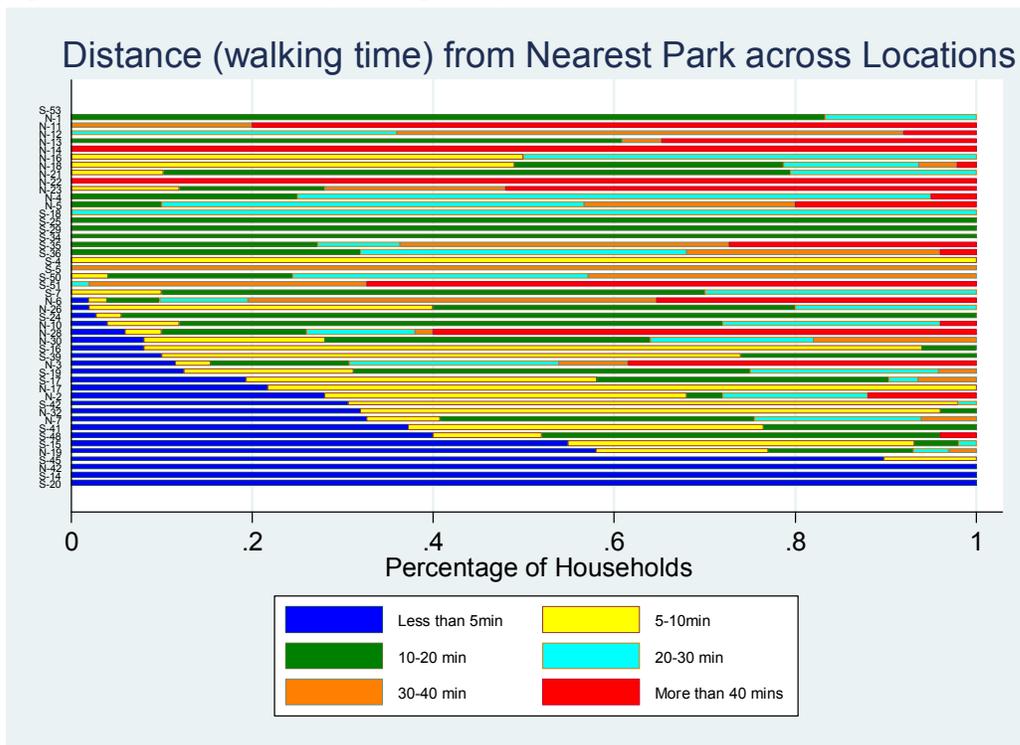
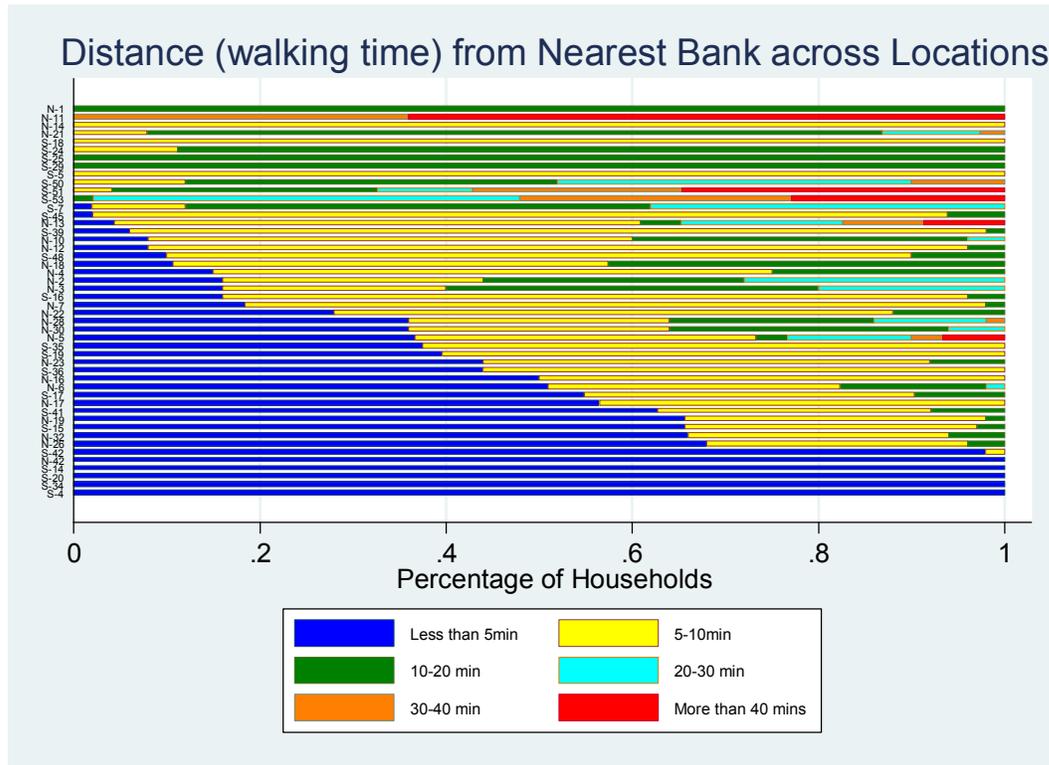


Figure A.6. 11: Distance (walking time) from Nearest Bank



Further Details on the Survey and Regression Estimates

Various wards covered under the survey and their grouping into five locations for regression analyses are described in Table A.6.1.

Table A.6. 1: Grouping of Wards

| Location Group | Description | No. of Obs. | Percent |
|----------------|--|-------------|---------|
| 1 | Consists of DCC South Ward No. 24, 29, 36, 39, 41, 51, 53, and DCC North Ward No. 02, 03, 04, 05, 06, 07, 10, 11, 12, 13, 14, 16, 22, 23, 30 | 692 | 43.14 |
| 2 | Consists of DCC South Ward No. 04, 16, 25, 35, 50 | 160 | 9.98 |
| 3 | Consists of DCC South Ward No. 05, 07, 14, 17, 18, 19, 20, 34, 42, 45, 48, and DCC North Ward No. 01, 17, 18, 21, 26, 28, 32, 42 | 549 | 34.23 |
| 4 | Consists of DCC South Ward No. 15 | 102 | 6.36 |
| 5 | Consists of DCC North Ward No. 19 | 101 | 6.3 |
| Total | | 1,604 | 100 |

A wide range of property characteristics were collected through the survey. Such characteristics include neighborhood characteristics such as sound pollution in the area, water-logging problem, distances (in walking time) from nearest facilities such as school, shopping mall, police station, bank etc. Information about building characteristics, such as the total number of floors, number of adjacent roads, whether the building is an apartment building, independent house or a commercial building, water disposal system, age of building, number of amenities (elevator, generator, security guard, community space, gym, swimming pool, play area and garden) available in the building, etc. were also collected. Finally, apartment specific information such as the type of floor, whether the apartment faces south, whether the apartment is a simplex or duplex, etc. were also covered.

Two alternative OLS specifications were tested, the results of which are presented in the Table A.6.2 below. The first specification includes, along with other variables, both neighborhood characteristics and the location variables - Location Groups as described in Table A.6.1. However, multi-collinearity tests revealed that many of the neighborhood characteristics were correlated with location variables; hence, the second specification leaves out location variables and includes only the neighborhood characteristics.

Variables 7 through 86 are dummy variables, converted into binary from their original variables which were either cardinal or ordinal. Variables 11 through 17 are analyzed against corresponding dummies that take the value 'never'. Variables 18 through 35 are analyzed against corresponding dummies that take the value 'non-existent'. Variables 36 through 74 are analyzed against corresponding dummies that take the value 'less than 5 minutes'. Variables 75 through 77 are analyzed against a dummy that takes the value 'simplex-full'. Variables 79 through 82 are analyzed against a dummy that takes the value 'tiles'. Finally, Adjusted R Square values and F-Tests verifying the strength of the specifications are reported at the end of the table.

Table A.6. 2: Regression Estimates - Property Price (Tk/sq.ft) as dependent variable

| Sl. No. | Variable | Specification 1 | Specification 2 |
|---------|-------------------------------------|----------------------|----------------------|
| 1 | No. of adjacent roads | 169.3 (-215.2) | 182.4 (-234.5) |
| 2 | Width of widest adjacent road | -5.653 (-10.04) | -13.25 (-10.86) |
| 3 | Ratio of attached to total toilets | -652.2 (-451.4) | -534.5 (-489.4) |
| 4 | Total number of Floors | -203.3** (-82.89) | -144 (-89.19) |
| 5 | Number of building amenities | 822.9*** (-163.3) | 1,261*** (-168.7) |
| 6 | Age of building | 1.351 (-12.12) | -2.609 (-13.15) |
| 7 | Independent house | 484.2 (-356.8) | 986.1** (-381.9) |
| 8 | Commercial building | -404.8 (-1068) | -464.8 (-1164) |
| 9 | Water disposal in closed drain | 25.94 (-457.5) | 318.7 (-493.9) |
| 10 | Water disposal in sewerage | 593.3 (-544) | 1,447** (-584.6) |
| 11 | Water logging: short and occasional | 756.9** (-326.6) | 917.4** (-355.5) |
| 12 | Water-logging: < 1 week/year | 465.1 (-909.7) | 537.1 (-988.7) |
| 13 | Waterlogging: 1 week - 1 mnth/yr | 571.3 (-3314) | 64.49 (-3610) |
| 14 | Powercuts: occasional | 969.5 (-1308) | 1227 (-1426) |
| 15 | Powercuts: daily, <2hrs/day | 630.2 (-1221) | 287.6 (-1330) |
| 16 | Powercuts: 2 - 6 hrs/day | 825.7 (-1213) | 842 (-1319) |
| 17 | Powercuts: > 6 hrs/day | 1479 (-1232) | 1053 (-1342) |
| 18 | Sound Pollution: Low | -495.7 (-406) | -361.3 (-442.3) |
| 19 | Sound Pollution: Moderate | -689.4 (-451.4) | -447.2 (-484.7) |

| | | | |
|----|---|----------------------|-----------------------|
| 20 | Sound Pollution: High | -957.7 (-583) | -1,639*** (-630.6) |
| 21 | Availability of Domestic Help: Low | 1035 (-674.2) | 1104 (-732.2) |
| 22 | Availability of Domestic Help: Moderate | 562.8 (-698.6) | 289.2 (-759.6) |
| 23 | Availability of Domestic Help: High | 956.5 (-901.4) | 1283 (-976.4) |
| 24 | Community Security: Low | -736.1* (-385.6) | -252.3 (-411.6) |
| 25 | Community Security: Moderate | -727.6* (-441.4) | -169.7 (-473.1) |
| 26 | Community Security: High | -1,221** (-603.6) | -529.6 (-651.3) |
| 27 | Garbage Collection: Low | 1,745** (-867.9) | 2,242** (-943.8) |
| 28 | Garbage Collection: Moderate | 1340 (-848.6) | 2,503*** (-918.6) |
| 29 | Garbage Collection: High | 2,718*** (-905.5) | 3,600*** (-982.7) |
| 30 | Roadside Parking Availability: Low | 46.55 (-310.1) | -318.7 (-335.1) |
| 31 | Roadside Parking Availability: Moderate | 293.5 (-492.2) | 458.1 (-532.6) |
| 32 | Roadside Parking Availability: High | -361.5 (-753.3) | -403.8 (-805.5) |
| 33 | Bus Transport Availability: Low | -162.9 (-391.5) | -428.6 (-422.7) |
| 34 | Bus Transport Availability: Moderate | -242.3 (-364.9) | -293.2 (-378) |
| 35 | Bus Transport Availability: High | 345.9 (-489.4) | 78.2 (-519.5) |
| 36 | Distance from Bazaar: (5-10] mins | 102.4 (-302) | 246.3 (-327.8) |
| 37 | Distance from Bazaar: (10-20] mins | 40.13 (-568.7) | 179.3 (-619.4) |
| 38 | Distance from Bazaar: (20-30] mins | 2439 (-2561) | 2943 (-2791) |
| 39 | Distance from Bazaar: (30-40] mins | 384.8 (-2415) | -143.8 (-2632) |
| 40 | Distance from Bazaar: >40 mins | 1088 (-3427) | 1623 (-3733) |

| | | | |
|----|--|-----------------------|-----------------------|
| 41 | Distance from Hospital: (5-10] mins | 1,429*** (-428.3) | 655.6 (-461.4) |
| 42 | Distance from Hospital: (10-20] mins | 1,336*** (-491.8) | 717.9 (-532.6) |
| 43 | Distance from Hospital: (20-30] mins | 1,150* (-640.1) | 1,303* (-695.6) |
| 44 | Distance from Hospital: (30-40] mins | 1192 (-934.5) | 1134 (-1012) |
| 45 | Distance from Hospital: >40 mins | 1872 (-1384) | 1061 (-1507) |
| 46 | Distance from Police Station: (5-10] mins | -2,642*** (-547.3) | -2,401*** (-595.1) |
| 47 | Distance from Police Station: (10-20] mins | -2,715*** (-537.9) | -2,093*** (-583.1) |
| 48 | Distance from Police Station: (20-30] mins | -2,659*** (-577) | -2,212*** (-627.9) |
| 49 | Distance from Police Station: (30-40] mins | -2,911*** (-751) | -2,610*** (-817.1) |
| 50 | Distance from Police Station: >40 mins | -2,845*** (-826.6) | -2,615*** (-900.8) |
| 51 | Distance from School: (5-10] mins | -138.7 (-304.1) | -123.1 (-331.3) |
| 52 | Distance from School: (10-20] mins | 191.6 (-480.4) | 535.1 (-511.8) |
| 53 | Distance from School: (20-30] mins | -337 (-803.3) | -847.9 (-873.7) |
| 54 | Distance from School: (30-40] mins | 218.6 (-1513) | -659.7 (-1644) |
| 55 | Distance from Shopping Mall: (5-10] mins | 487 (-420.9) | 222.1 (-457.6) |
| 56 | Distance from Shopping Mall: (10-20] mins | -91.08 (-493.5) | -9.001 (-535.8) |
| 57 | Distance from Shopping Mall: (20-30] mins | -665.5 (-642.5) | -1,506** (-695.7) |
| 58 | Distance from Shopping Mall: (30-40] mins | -415.3 (-872.3) | -855 (-949) |
| 59 | Distance from Shopping Mall: >40 mins | -35.45 (-1300) | -102.1 (-1415) |
| 60 | Distance from Park: (5-10] mins | -124.5 (-420.1) | -173.8 (-455.8) |
| 61 | Distance from Park: (10-20] mins | 309.1 (-423.1) | 52.45 (-458.9) |

| | | | |
|----|------------------------------------|---------------------|----------------------|
| 62 | Distance from Park: (20-30] mins | 1,040** (-487.3) | 175.7 (-522.6) |
| 63 | Distance from Park: (30-40] mins | 251.8 (-600.8) | -1,288** (-631.4) |
| 64 | Distance from Park: >40 mins | -43.4 (-576.4) | -1,226** (-613.6) |
| 65 | Distance from Mosque: (5-10] mins | 387.8 (-366.3) | 389.5 (-394) |
| 66 | Distance from Mosque: (10-20] mins | -2213 (-1646) | -2025 (-1793) |
| 67 | Distance from Mosque: (20-30] mins | -2790 (-2048) | -1616 (-2231) |
| 68 | Distance from Mosque: (30-40] mins | -2046 (-1488) | -2158 (-1621) |
| 69 | Distance from Mosque: >40 mins | -2053 (-1594) | -1860 (-1735) |
| 70 | Distance from Bank: (5-10] mins | -688.0* (-360.9) | -648.6* (-389.8) |
| 71 | Distance from Bank: (10-20] mins | -538.9 (-469.3) | -543.5 (-504.6) |
| 72 | Distance from Bank: (20-30] mins | -9.674 (-641.3) | -150.9 (-692.6) |
| 73 | Distance from Bank: (30-40] mins | 312.5 (-1181) | -390.4 (-1286) |
| 74 | Distance from Bank: >40 mins | 896.2 (-1312) | -268.3 (-1426) |
| 75 | Simplex-Partial | -170.1 (-266.5) | -92.98 (-290.3) |
| 76 | Duplex-Full | -879.2 (-979.8) | -1198 (-1068) |
| 77 | Duplex-Partial | -5,986** (-2675) | -635.6 (-2539) |
| 78 | Apartment facing south | 132.2 (-267.2) | -149.8 (-288.2) |
| 79 | Floor type: Wooden | -2221 (-2330) | -2737 (-2540) |
| 80 | Floor type: Marble | 1603 (-1341) | 636 (-1459) |
| 81 | Floor type: Mosaic | -475.4 (-424.5) | -855.7* (-461.4) |
| 82 | Floor type: Cement | -254.4 (-338.9) | -419.3 (-369.2) |

| | | | |
|----|------------------|-----------------------|-------------------|
| 83 | Location group 1 | -1,166*** (-450.7) | |
| 84 | Location group 3 | 1,808*** (-487.3) | |
| 85 | Location group 4 | 16,154*** (-2672) | |
| 86 | Location group 5 | 8,166*** (-1330) | |
| 87 | Constant | 4,300** (-1951) | 3,524* (-2071) |
| | Observations | 864 | 864 |
| | Adj. R Sq | 0.274 | 0.137 |
| | Prob > F | 0 | 0 |

*Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$*

The above analysis clearly indicates that location variables have strong influence on price, when those variables are included in the specification. Moving on to more property specific characteristics, an independent house fetches a higher per-square-foot price than a regular apartment building, but the per-square-foot price falls with the size of the building (total floor space and number of apartments). Buildings with larger number of facilities, such as elevators, security guards, garden, etc. also fetch higher prices. A proper sewerage water disposal system also increases the price of space. Other building characteristics do not seem to have any influence on price per square feet of a residential property.

Among the neighborhood characteristics, better the garbage collection system higher is the price. A neighborhood affected by extreme sound pollution will have the opposite impact, although low or medium levels of sound pollution do not seem to matter. Furthermore, closer an apartment is to a police station, shopping mall, park or a bank, higher will be its price. Other neighborhood variables are mostly found statistically insignificant in the second specification.