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IS THE ABOLITION OF CAPITAL GAINS TAX JUSTIFIED?

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The paper evaluates the government's decision to abolish capital gains tax and substitute it by an increase in stamp duty rates on urban immovable properties. The analysis does not support the case made for the abolition of the tax. It shows that the two percentage point increase in stamp duties recommended is inadequate to maintain the existing level of revenue. Moreover, the new scheme introduced is regressive in incidence and leads to a 'lock-in' of capital. A 'reverse merger' of the two taxes is instead recommended in this paper.

In developed as well as developing economics where the housing markets are either fully or partially developed, taxation of urban immovable properties is quite popular. In Pakistan also, in view of the buoyant nature of construction activities, the housing sector has been taxed in a number of ways by different levels of government. At the federal level, there is a wealth tax on capital value of properties and in income tax on annual rental income. At the provincial level, there are stamp duties and capital gains tax, both levied at the time of sale or transfer of properties. Lastly, at the municipal level, there are the property and betterment taxes, which are collected by the provincial governments but the bulk of revenues are transferred to the municipal governments. Both these taxes are annual collections assessed on Net Annual Rental Values (NARV) of the properties. All taxes on urban immovable properties were imposed, either just before or, soon after the independence of the country and their imposition has traditionally been justified on equity and/or efficiency grounds.

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However, in 1985-86, the provincial governments decided to abolish the capital gains tax. According to the Finance Minister, Government of Sindh, "Government has been receiving serious complaints in the administration of capital gains tax and even its validity has been questioned".[1] A similar kind of reasoning has been given by the Finance Minister, Government of Punjab, who further says that "the government will be protecting its resources from capital gains tax by substituting it with a two per cent addition in stamp duty".[2]

Since capital gains tax is a popular tax as opposed to stamp duties which are levied in only a few European and Asian countries, the government's decision to merge capital gains tax into stamp duties comes as a surprise. It is the purpose of this paper to evaluate the government's decision to abolish capital gains tax and substitute stamp duties for it. We start first, by briefly describing the structure of stamp duties and capital gains tax, respectively. Section II presents the case for and against the capital gains tax. Section III studies the merits of the case for merger of capital gains tax into stamp duties. Section IV examines the extent to which escalation in stamp duties will substitute for revenues from capital gains tax and highlights the efficiency and equity implications of the change. This section also includes estimation of the revenue neutral stamp duty rate. In section V we examine a possible alternative, a reverse merger with stamp duties on sale of urban properties being withdrawn and replaced by higher rates of capital gains taxation. Finally, section VI briefly examines some of the potential tax-induced behavioural changes which might emerge in the medium to long-run as a consequence of the induction of the new government scheme.

I. Description of Stamp Duties and Capital Gains Tax

Stamp duties, a provincial government subject in Pakistan, was first introduced by the Government of India in 1847. It presently applies to a large number of transactions and instruments including various financial and legal documents and urban immovable properties. Property related receipts account for approximately 40 per cent of stamp duty revenues in Pakistan. Stamp duties are levied at a flat rate of six per cent on the 'total sale value' of a property at the time of sale/transfer.

The Stamp Act, under which stamp duties are levied, is purely a fiscal statute. Its sole objective is to increase revenues and all its provisions

[1] Sindh Budget, Daily Dawn, Karachi, June 15, 1986.

[2] Budget Speech 1986-87, the Finance Minister, Punjab, Lahore, May 24, 1986.

must be construed as having in view the protection of revenues. Though the primary objective of the Stamp Duty is revenue generation, it also helps in the detection of forgery of documents.

The history of capital gains tax goes back to pre-partition times. It was first introduced in the year 1947 in India on any profit or gain arising from the sale, exchange or transfer of assets. Later, in June 1963, it was bifurcated into financial assets and urban immovable property with the latter going to the provincial governments. In its present form, it is levied under the West Pakistan Finance Act, 1964.

The history of capital gains tax goes back to pre-independence between the sale value of the property and its cost to the owner. The nominal burden of the tax, levied at progressive rates (see Table 1), falls on the seller of the property.

The revenue structure of capital gains and the property component of stamp duties for each province is given in Table 2. The table reveals

TABLE 1

Rates of Capital Gains Tax
(Prior to 1985-86)

(in percentage)

Capital Gains Realized	Punjab	Sindh	N.W.F.P.	Baluchistan
First Rs. 10,000	Nil	Nil	Nil	—
Next Rs. 20,000	5	5	5.0	—
Next Rs. 70,000	10	10	7.5	—
Next Rs. 100,000	15	15	10.0	—
Above Rs. 200,000	20	20	20.0	—
First Rs. 50,000	—	—	—	Nil
Next Rs. 100,000	—	—	—	5.0
Above Rs. 200,000	—	—	—	7.5

that though the absolute magnitude of capital gains tax revenue is lower than that of stamp duties, the growth in them has been much faster. As a result the share of capital gains tax revenues in total provincial tax receipts has increased more than the share of stamp duties (see Table 2).

II. The Case for and against Capital Gains Taxation

Capital gains tax is a tax on income from capital gains and as such it has the general advantage of a direct tax. In this section we first develop, in some detail, the case for the tax which has justified its imposition in various countries of the world, including Pakistan. These can broadly be classified into equity and efficiency arguments in favour of the tax.

1. The Equity Case

Modern income taxation is based on the relative economic position of the people. Broadly speaking, capital gains on assets increases a person's taxable capacity. Therefore, such taxation can be supported on equity grounds. The equity case for capital gains tax can be developed further on the following grounds:

i) Concentration of Gains

The equity reason for taxing capital gains in developing countries is emphasized by the high concentration of wealth. Capital gains accrue only to those who own property, and failure to tax these gains discriminates in favour of property owners. This encourages reinvestment of such gains in assets which perpetuate and enhance inequalities in income and wealth.

A corollary of the concentration of wealth is the skewed distribution of capital gains by income classes. As such, as income increases, capital gains are an increasing fraction of the total income. Failure to tax capital gains, therefore, puts greater relative burden of the income tax on those who do not enjoy such gains. Further, if real capital gains are not taxed or if they are given preferential treatment, there is an incentive to convert ordinary income into capital gains, thereby leading to a distortion in portfolio choice of assets by households and the corporate sector.

Distinction between real and nominal capital gains tax, however, needs to be made here. For taxation of capital gains to be neutral and non-distortionary, it must be levied on increases in the real value of assets; purely inflationary increases in asset values (i.e., nominal capital gains) should not be taxed.

A progressive capital gains tax structure, like what Pakistan had upto

TABLE 2

Revenues from Capital Gains Tax and Stamp Duties (From Sale of Urban Properties)*
by Province, 1981-82 to 1984-85

(Rs. in Million)

	1981-82	1982-83	1983-84	1984-85
PUNJAB				
Capital Gains Tax	64	80	115	129
Stamp Duties	187	199	213	232
SINDH				
Capital Gains Tax	44	49	71	76
Stamp Duties	84	90	100	109
N.W.F.P.				
Capital Gains Tax	7	10	10	11
Stamp Duties	28	23	26	27
BALUCHISTAN				
Capital Gains Tax	—	—	—	—
Stamp Duties	3	2	3	3
ALL PAKISTAN				
Capital Gains Tax	115	136	196	217
Stamp Duties	302	315	343	379
SHARE IN TOTAL PROVINCIAL TAX REVENUES (%)				
Capital Gains Tax	4	4	6	7
Stamp Duties	9	9	11	11

**Assumption:* 40 per cent of total stamp duty collections accrue from property related transactions.
Source: Public Finance Statistics, 1985-86, Government of Pakistan, Finance Division.

1985-86, is particularly successful, in the absence of large scale evasion and corruption, in discouraging further concentration of wealth.

ii). Unearned Increments

Another strong argument often cited in favour of capital gains tax is that it is a tax on "unearned increments". Bhargara (1954) argues that gains frequently arise without a deliberate effort of the owners of properties due to public investments in infrastructure, like construction of roads, parks, installation of power and other public improvement projects. Therefore, as argued by Lent (1967), beneficiaries ought to contribute to the community exchequer by way of payment of capital gains tax. In fact, capital gains tax in several countries like India, Malaysia and Pakistan is levied on the basis of "unearned increment" argument [see Amatong (1975)].

2. The Efficiency Case

i). Land Speculation

Speculation in real estate arises from inflation, population growth and urbanisation, which characterise most developing countries. A notable feature of land prices during an inflationary period is that they usually increase much faster than the general price level. This encourages speculation in land. The case for capital gains tax is made on the ground that such investments are not socially productive and that a capital gains tax is a suitable instrument for tapping speculative gains. Strengthening of capital gains tax has been successful in bringing land speculation largely to a halt in many developing countries like Colombia and Ghana, [Amatong (1975)].

ii). Composition of Investment

The other impact of capital gains tax, as mentioned earlier, is on the allocation of investment. Preferential taxation of capital gains encourages a shifting of investment to those which yield capital gains from those which yield income taxed at higher rates [see, Eilbott (1985)]. David (1964) has given examples where capital gains tax has been used successfully to influence the direction of investment.

iii). Buoyancy of Revenues

Lastly, capital gains tax is considered to be a very buoyant tax as

property values tend to appreciate more rapidly than values in general. In Pakistan, for example, revenues from the tax grew rapidly between 1972-73 and 1984-85. Pasha and Ghaus (1986) have estimated that the buoyancy coefficient of the tax was as high as 1.64 during this period.

An objective assessment of capital gains tax is, however, incomplete if the problems inherent in the tax are also not explicitly identified. These are discussed below.

i). Administrative Complexities

One of the most serious objections to capital gains tax is the administrative burden which the tax entails. Proper administration of the tax requires careful monitoring of property transactions, periodic reassessment of construction cost and development of procedures for checking under-reporting of prices. Municipal or provincial governments in developing countries are generally not well-equipped to develop tax systems with such features. The consequence is that actual collections lag significantly behind the potential revenues because of large scale evasion and corruption.

ii). Mobility of Capital

Considerable emphasis has been placed on the 'lock-in' effect of the capital gains tax in inhibiting the sale of assets which have appreciated in value [see Holt and Shelton (1962)]. This arises because of the possibility of deferral in tax payment which is generally made at the time of realisation of capital gains and not following accrual, [see Stiglitz (1986)]. The result is an increase in reservation price of the asset and a reduction in the flow of investment. In developing countries, the 'lock-in' argument is of special importance because of the need for greater investment mobility. It is alleged that capital gains tax discourages a shift of capital, from the unproductive investments in real estate, to more risky undertakings in commerce and industry. Funds are withheld and, therefore, not available for development of capital markets.

The influence of capital gains tax on locking-in of investment, however, depends upon the level of rates and the structure of the tax itself. A very high rate will encourage investors to hold on to their assets in order to save on taxes. The holding period provision also influences the timing of sale of capital assets. However, in the Pakistani context, progressivity

of the capital gains tax structure limits the possibility of 'lock-in' of assets.[3]

III. The Case for Merger of Capital Gains Tax into Stamp Duties

We have highlighted above the problems inherent in the application of capital gains tax in Pakistan. In this section we discuss how much of a solution the merger of capital gains tax into stamp duties is to the above cited problems.

i). Administrative Complexity

An important problem already identified in the administration of capital gains tax is the under-reporting of values at the time of sale of properties. As to whether higher stamp duties will be able to overcome this problem, there are two points to note: first, the Excise and Taxation Department in a province, which collects capital gains tax, has the legal authority to, and does make an attempt to, re-evaluate the property values reported. Second, since the Excise and Taxation Department assesses market rental capital values of properties, for the purpose of levying property tax, it has potentially a better knowledge of the housing markets. By independent re-evaluation of properties, therefore, it is able to more accurately determine the likely market values.

On the other hand, the Registrar of Stamp Duties, who is responsible for levying stamp duties, neither has the legislative authority to challenge the reported property prices nor has the market knowledge to make a correct assessment of the property. Traditionally, the ratio of the valuation of the same property for capital gains tax and for stamp duties, respectively, has on an average been as high as 2:1 [see Pasha and Ghaus (1986)]. Thus, if under-reporting is a problem with capital gains tax, it is an even bigger problem in the case of stamp duties.

The problem of non-reporting of transactions is the major problem generally faced in the collection of capital gains tax. Certain administrative steps, in Pakistan had, however, been taken by the provincial governments in Sindh and in the NWFP, to check the problem of evasion in the tax, including institution of the requirement since 1979 of obtaining a 'No Objection Certificate' (NOC) from the Excise and Taxation Department prior to the registration of sale/transfer deed. This had proved to be an effective measure to check evasion in these provinces and revenues after

[3] In a progressive rate structure, as in Pakistan, higher capital gains are taxed at a progressively higher rate, considerably increasing the tax to capital gains ratio. Thus, the tax liability to net gain ratio increases with the holding period, providing a disincentive to hold on longer to properties.

the imposition of an 'NOC' requirement had almost doubled.[4] Stamp duties are, however, better placed in this regard. Validity of property transactions is only established after registration of the sale deed and the payment of the duty. Therefore, merger of the capital gains tax into stamp duties has the advantage that it could lead to a somewhat greater coverage of property transactions.

ii). Mobility of Capital

The 'lock-in' effect of capital gains tax resulting in an immobility of capital is identified as a major weakness in the tax. However, it needs to be appreciated that the stamp duty payment of a fixed per cent of the value of the property at the time of sale also greatly reduces the incentive for frequent trading in properties.[5]

We proceed now to develop a formal methodology for the analysis of the impact of the abolition of capital gains tax and its substitution by higher stamp duties.

IV. Analysis of Impact of Abolition of Capital Gains Tax

In this section we develop the framework to estimate revenue changes to the government, under the 'present scheme' as compared to that prior to the abolition of capital gains tax.

For a representative property, value in time period, t, is

$$V_t = V_o (1 + i)^t (1 - d)^t \qquad (1)$$

Where: V_t = Property Value in time period, t; V_o = Property Value at time of purchase/construction; i = Inflation rate; t = Years for which property is held before transaction; and, d = Property depreciation rate.

Capital gains for this property is given by CG_t where:

$$CG_t = V_t - V_o \qquad (2)$$

Given the progressive structure of the tax, revenues from capital gains tax from a property in time 't' are given by G_t where:

[4] Total revenue from capital gains tax were Rs. 32 million in 1978-79. These increased to Rs. 70 million in 1979-80. This increase is primarily due to a doubling of revenues in Sind and NWFP due to the imposition of the requirement of a NOC in these provinces in 1979.

[5] Since stamp duty is a fixed rate flat levy, there is an incentive for the property owners to hold on longer to their properties to maximise capital gains and thereby maximise their after-tax income.

$$G_t = f[CG_t] \tag{3}$$

$$\frac{\partial G_t}{\partial CG_t} > 0, \quad \frac{\partial^2 G_t}{\partial CG_t^2} > 0$$

Total revenues, R_t^o, under the 'original scheme' i.e., when both capital gains tax and stamp duties were levied on urban immovable properties at the time of sale/transfer are as follows:

$$R_t^o = G_t S_g + t_s [V_o (1+i)^t (1-d)^t] S_s \tag{4}$$

Where: S_g = Actual revenues as a proportion of potential revenues. $S_g < 1$ because of evasion in reporting of the true magnitude of capital gains; t_s = Original stamp duties rate; and, S_s = Share of actual market value assessed for levying stamp duties.

Given that full market value or capital gains of properties are not captured for the purpose of assessing tax liabilities, revenue receipts are adjusted accordingly with:

$$0 < S_g, S_s < 1$$

S_g and S_s are measures of assessment performance by the Excise and Taxation Department, and the Registrar of Stamp Duties, respectively.

Revenues under the "present scheme", i.e., when capital gains tax is replaced by a higher rate of stamp duties on immovable properties, are given by R_t^p where,

$$R_t^p = (t_s + e) [V_o (1+i)^t (1-d)^t] S_s \tag{5}$$

Where: e = Increase in Stamp Duties rate.

Using equations (4) and (5) the extent of revenue change, as a percentage of what revenues would have been in the absence of the merger of the two taxes, can be estimated as:

$$\frac{R_t^p - R_t^o}{R_t^o} = \frac{-G_t S_g + e [V_o (1+i)^t (1-d)^t] S_s}{G_t S_g + t_s [V_o (1+i)^t (1-d)^t] S_s} \times 100 \tag{6}$$

1. Results

Simulation of equation (6) under various initial values of properties, inflation rates, depreciation rate, and time period for which a property is held before transaction are given in Table 3. The table shows that the proportion of revenue losses to the government (which are gains for the tax payers) increase with an increase in the time for which a property is held. This implies that a tax payer will maximise gains by holding on longer to properties. The hypothesis that the present scheme will further reduce the mobility of capital is, therefore, confirmed.

Two other important conclusions can be drawn from Table 3 regarding the revenue generating ability of the present scheme and its equity implications. First, the government will incur a revenue loss under the present scheme, with a merger of capital gains tax into stamp duties. The revenue loss is as high as 73 per cent of the revenues prior to the merger for high value properties, with an inflation rate of 10 per cent. However, there is a revenue gain from the smaller properties. This is because under the 'original scheme', which had a progressive capital gains tax structure, smaller properties (with capital gains upto Rs. 10,000) were exempted from capital gains tax payment. Under the 'present scheme' no such provision exists.

The absolute magnitude of the revenue change under the two schemes is given in Table 4. Substantial revenue loss on large properties and small revenue gains on small properties are indicated by the table. Therefore, recovery of all the revenue losses due to the abolition of capital gains tax, as stated by the Finance Ministers, seems rather improbable. Clearly, the two percentage point escalation in stamp duties to compensate for the abolition of capital gains tax is inadequate.

Revenue gains/losses are, however, quite sensitive to the inflation rate. With a relatively high inflation rate, which is the case currently, the government experiences higher revenue losses on a given property. This is because with a high inflation rate, the absolute amount of capital gains accruing to a property is higher. With a progressive tax rate structure the amount of capital gains tax under the original scheme would, therefore, be higher. By a switch-over to the present scheme (with a flat rate structure) the extent of revenue loss compared to the original scheme is thus higher. For the same reason, revenue losses are higher for land (with a zero depreciation rate) compared to a built-up property with the same initial value traded after the same time period.

Second, under the 'present scheme' the loss of revenue from a property transaction is higher for properties with a higher initial property value. That is, the revenue losses to the government increase with the

TABLE 3

Extent of Change* in Revenues due to the Merger of Capital Gains Tax into Stamp Duties

(in percentage)

Years of Trading	Value of Property (Rs.)				
	25,000	50,000	100,000	250,000	500,000
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 2.5%					
5	33.3	25.3	14.7	− 2.3	− 9.3
10	15.3	1.6	−17.9	−30.1	−43.1
15	− 3.7	−24.7	−30.2	−50.4	−57.1
20	−23.5	−37.5	−46.7	−60.6	−64.1
25	−36.8	−43.4	−57.6	−66.1	−68.2
Inflation Rate (i) = 10% Depreciation Rate (d) = 2.5%					
5	31.3	11.8	− 3.8	−13.6	−20.9
10	− 3.4	−24.3	−29.6	−50.1	−56.9
15	−30.7	−41.4	−51.3	−63.5	−66.3
20	−44.2	−53.0	−64.1	−69.3	−70.7
25	−50.8	−63.5	−69.6	−72.4	−73.2
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 0%**					
5	29.3	10.6	− 5.5	−15.6	−30.7
10	− 4.8	−26.0	−32.0	−51.5	−57.8
15	−32.6	−42.5	−52.5	−64.3	−66.9
20	−45.4	−54.4	−65.1	−69.8	−71.2
25	−52.8	−64.8	−70.3	−72.8	−73.6
Inflation Rate (i) = 10% Depreciation Rate (d) = 0%					
5	14.6	0.4	−18.6	−30.7	−43.7
10	−24.5	−38.0	−47.4	−60.9	−64.4
15	−44.9	−53.9	−64.8	−69.7	−71.0
20	−55.6	−66.6	−71.2	−73.3	−74.0
25	−66.4	−71.9	−74.1	−75.2	−75.6

* As a percentage of what the revenues would have been in the absence of the tax merger. Also, Sg = 0.75, Ss = 0.50 [see equation (6) in the text]. The pattern observed are not sensitive to the values of Sg and Ss, so long as Sg $>$ Ss.

** This analysis is essentially for land which has a zero depreciation rate.

TABLE 4

Absolute Magnitudes of the Revenue Changes due to the Merger of Capital Gains Tax into Stamp Duties

(Rupees)

Years of Trading	Value of Property (Rs.)				
	25,000	50,000	100,000	250,000	500,000
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 2.5%					
5	316	511	646	− 305	− 2577
15	− 79	− 1328	− 3495	− 20588	− 53526
25	−1887	− 4972	−17587	− 63093	−138967
Inflation Rate (i) = 10% Depreciation Rate (d) = 2.5%					
5	337	299	− 223	− 2237	− 11581
15	−1268	− 4036	−12038	− 49756	−112263
25	−5931	−20025	−52799	−151123	−314996

increase in the size of the property (as reflected by the initial value of property). For example, with an inflation rate of 10 per cent, the government will collect 31 per cent more revenues from a small property, transacted after 5 years. Whereas on a bigger property transacted after the same time, the government suffers revenue losses of a magnitude of 21 per cent. Again, this is due to the fact that the original scheme was progressive in nature. It taxed higher gains at a higher rate. As compared to this, the 'present scheme', being a flat rate levy, taxes all properties, irrespective of the property value, at the same rate. Therefore, the 'present scheme' gives a larger tax break to the big property owners. Thus, compared to the 'original scheme', the 'present scheme' is regressive in nature and will reduce the progressivity of the provincial taxation system.

2. Revenue-Neutral Stamp Duty Rate

It has been demonstrated that the two percentage point increase in stamp duty rates suggested under the 'present scheme' is likely to be

inadequate to compensate the revenue loss due to the abolition of capital gains tax. It thus becomes relevant to know by how much stamp duty rates should have been enhanced to yield the same magnitude of revenues as the 'original scheme'. Also, with the revenue-neutral stamp duty rate what would be the underlying equity and efficiency implications?

For the estimation of a 'revenue-neutral' stamp duty rate actual revenue generation of stamp duties and capital gains tax were analysed for the city of Karachi.[6] In 1984-85, Karachi accounted for almost half of capital gains tax and more than one-fifth of the stamp duty revenues collected in Pakistan.

The revenue-neutral stamp duty rate can be defined as the rate which equates revenue yield from the 'present' and the 'original scheme'. That is,

$$R_t^o - R_t^p = 0 \tag{7}$$

and

$$\Sigma G_t S_g + \Sigma V_1 t_s S_s - \Sigma V_1 (t_s + \bar{\epsilon}) S_s = 0 \tag{8}$$

From equation (8) we get the revenue-neutral rate of stamp duty ($\bar{\epsilon}$)

$$\bar{\epsilon} = \frac{\Sigma G_t S_g}{\Sigma V_1 S_s} \tag{9}$$

Estimation of equation (9) shows that the revenue-neutral rate of stamp duty ($\bar{\epsilon}$) is 11.5 per cent.[7] This means that for total revenues to have been unaffected, the government should have increased the stamp duty rate by an additional nine and a half percentage points, as compared to the actual increase of two percentage points.

Simulations of equation (6) with $\epsilon = \bar{\epsilon}$ are presented in Table 5. The table shows that, compared to the present scheme, the basic patterns remain unchanged. The absolute magnitudes of the revenue change are, however, smaller for high income groups and, much bigger for low income

[6] Data for Pakistan or any other city of Pakistan are not available. Data for Karachi are obtained from the Socio-Economic Survey of approximately 7000 households carried out in 1987 on behalf of the Karachi Development Authority. The survey reveals that the recent pattern of property trading is such that more than 60 per cent of the properties are traded within 10 years of holding and approximately one fourth of the total transactions are for bigger properties (i.e., properties which value more than Rs. 250,000). Most of the transactions are from owners to owners.

[7] This estimate and the following tables based on the revenue-neutral rate of capital gains tax is for the city of Karachi only. That is, Tables 5 to 8 are primarily applicable to Karachi.

TABLE 5

Extent of Change* in Revenues due to the Merger of Capital Gains Tax into Stamp Duties (Revenue-Neutral Stamp Duty Rate)

(in percentage)

Years of Trading	Value of Property (Rs.)				
	25,000	50,000	100,000	250,000	500,000
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 2.5%					
5	191.70	174.10	150.80	113.60	98.50
10	152.20	122.20	79.50	53.00	24.00
15	110.50	64.70	52.80	8.40	− 6.20
20	67.40	36.80	16.50	− 13.80	− 21.50
25	38.20	23.70	− 7.20	− 25.80	− 30.50
Inflation Rate (i) = 10% Depreciation Rate (d) = 2.5%					
5	186.80	144.50	110.50	88.90	55.40
10	111.20	65.60	53.90	9.13	− 5.70
15	51.50	28.20	6.50	− 20.20	− 26.20
20	22.00	2.80	−21.60	− 32.90	− 36.00
25	7.70	−20.20	−33.60	− 39.70	− 41.50
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 0%**					
5	182.90	142.00	106.80	84.50	51.50
10	108.20	61.90	48.40	6.10	− 7.70
15	47.40	25.90	3.90	− 21.90	− 27.50
20	19.50	− 0.30	−23.70	− 24.10	− 36.90
25	3.30	−23.00	−34.90	− 40.50	− 42.20
Inflation Rate (i) = 10% Depreciation Rate (d) = 0%					
5	150.70	119.80	78.20	51.50	23.20
10	65.20	35.60	15.10	− 14.60	− 22.10
15	20.40	0.80	−22.90	− 33.60	− 36.60
20	− 2.90	−26.90	−36.90	− 41.70	− 43.20
25	−26.50	−38.70	−43.30	− 45.80	− 46.60

* As a percentage of what the revenues would have been in the absence of the tax merger. Also, Sg = 0.75, Ss = 0.50 [see equation (6) in the text]. The patterns observed are not sensitive to the values of Sg and Ss, so long as Sg $>$ Ss.

** This analysis is essentially for land which has a zero depreciation rate.

categories. That is, the increase in tax burden for small properties is much larger while the tax break for larger properties is somewhat smaller. The revenue-neutral tax rate, therefore, adversely affects the smaller income groups even more. Also, like the present scheme the revenues losses increase with the number of years for which the property is held, but the rate of increase is more significant. Thus, even though the overall revenue change is driven to zero, implications on equity and efficiency remain the same as under the present scheme.

The absolute magnitudes of revenue changes with the revenue-neutral stamp duty rates are presented in Table 6.

V. Alternative Proposal

In light of the conclusions in the previous sections, it is clear that the justification given for the abolition of the capital gains tax is not very strong and the substitute offered for it fares poorly on the norms of taxation. The only justification that can perhaps be made for the abolition of the tax is on the ground that it removes double taxation at the point of sale of property. Abolition of one of the two taxes would constitute

TABLE 6

Absolute Magnitude of the Revenue Change due to the Merger of Capital Gains Tax into Stamp Duties (Revenue-Neutral Stamp-Duty Rate)

Years of Trading	Value of Property (Rs.)				
	25,000	50,000	100,000	250,000	500,000
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 2.5%					
5	1818	3514	6654	14716	27464
15	2324	3479	6118	8446	− 5857
25	1958	2719	− 2205	−24637	− 62025
Inflation Rate (i) = 10% Depreciation Rate (d) = 2.5%					
5	2022	3669	6517	14613	22120
15	2125	2750	1535	−15826	− 44401
25	901	−6360	−25470	−82800	−178350

a simplification of the tax system. Thus, if one of the two provincial taxes on urban immovable properties is to be abolished, the obvious alternative is a 'reverse merger' of the taxes, i.e., the abolition of stamp duty[8] and its substitution by a higher capital gains tax.

Given the framework of analysis developed in the previous section, total revenues from the 'reverse merger' of taxes are given by R_t^R where,

$$R_t^R = G_t (1 + \gamma) S_g \tag{10}$$

Where: γ = Revenue-neutral increase in the capital gains tax rate.

Revenue-neutral increase in capital gains tax is estimated as follows:

$$R_t^0 - R_t^R = 0 \tag{11}$$

$$\Sigma G_t S_g + \Sigma V_t t_s (S_s) - \Sigma G_t (1 + \gamma) S_g = 0 \tag{12}$$

$$\gamma = \frac{\Sigma V_t t_s S_s}{\Sigma G_t S_g} \tag{13}$$

The extent of revenue change, as a percentage of what the revenues would have been in the absence of the merger of the two taxes, is:

$$\frac{R_t^R - R_t^0}{R_t^0} = \frac{G_t \gamma S_g - t_s [V_0 (1+i)^t (1-d)^t] S_s}{G_t S_g + t_s [V_0 (1+i)^t (1-d)^t] S_s} \times 100 \tag{14}$$

Results of the estimation of equation (14) under the same value of different parameters, as in the earlier simulations, are given in Table 7. The percentage increase in the capital gains tax rate (γ) estimated by equation (13) is 52 per cent. This makes the alternative scheme revenue-neutral.

Reverse patterns are observed in Table 7 compared to Table 3. The revenue losses decrease with the number of years for which the property is held. That is, the longer the property is held by the owner the less the benefit for him in terms of tax saving at the time of transaction. The locking-in of capital is not encouraged under the 'reverse merger scheme'. Therefore, as opposed to the 'present scheme', the 'reverse merger scheme'

[8] A small flat levy may, however, be continued to preserve the authenticity of documents.

TABLE 7

Extent of Change* in Revenues due to the Merger of Stamp Duties into Capital Gains Tax

(in percentage)

Years of Trading	Value of Property (Rs.)				
	25,000	50,000	100,000	250,000	500,000
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 2.5%					
5	−100.0	− 90.8	− 78.7	− 59.3	− 51.5
10	− 79.5	− 63.8	− 41.5	− 27.7	− 12.8
15	− 57.7	− 33.8	− 27.7	− 4.5	3.1
20	− 35.2	− 19.3	− 8.7	7.1	11.1
25	− 20.0	− 12.5	3.6	13.3	15.7
Inflation Rate (i) = 10% Depreciation Rate (d) = 2.5%					
5	− 97.5	− 75.4	− 57.7	− 46.5	− 28.9
10	− 58.1	− 34.3	− 28.2	− 4.9	2.9
15	− 27.0	− 14.8	− 3.5	10.5	13.5
20	− 11.6	− 1.6	11.1	17.0	18.6
25	− 4.1	10.4	17.4	20.6	21.5
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 0%**					
5	− 95.4	− 74.1	− 55.8	− 44.2	− 27.0
10	− 56.5	− 32.4	− 25.5	− 3.3	3.9
15	− 47.4	− 13.6	− 2.2	11.3	14.2
20	− 10.3	0.0	12.1	17.6	19.1
25	− 1.8	11.9	18.1	21.0	21.9
Inflation Rate (i) = 10% Depreciation Rate (d) = 0%					
5	− 78.6	− 62.6	− 40.8	− 26.9	− 12.2
10	− 34.1	− 18.7	− 8.0	7.5	11.4
15	− 10.7	− 0.5	11.9	17.4	18.9
20	1.4	13.9	19.1	21.6	22.4
25	13.7	20.0	22.5	23.8	24.2

* As a percentage of what the revenues would have been in the absence of the tax merger. Also, Sg = 0.75, Ss = 0.50 [see equation (6) in the text]. The patterns observed are not sensitive to the values of Sg and Ss, so long as Sg $>$ Ss.

** This analysis is essentially for land which has a zero depreciation rate.

will increase the mobility of capital.

An analysis of the revenue loss by the initial value of the property reveals that under the 'reverse merger scheme', a tax break is given to small property owners, while the tax burden increases on large properties. Thus, the alternative scheme of merging stamp duties on urban immovable properties into the capital gains tax is more progressive in nature and will increase the element of equity in the provincial tax system.

The absolute magnitude of the revenue change by a merger of stamp duties into capital gains tax is given in Table 8.

VI. Potential Tax Induced Changes in the Medium to Long Run

The simulations carried out in section IV and V are based on the implicit assumption that the new tax structure will not lead to any behavioural changes regarding property trading, saving, investment, etc. In this section we briefly identify the nature of some of the changes which might emerge as a consequence of the induction of the 'present scheme'.

TABLE 8

Absolute Magnitude of the Revenue Change due to the Merger of Stamp Duties into Capital Gains Tax

Years of Trading	Value of Property (Rs.)				
	25,000	50,000	100,000	250,000	500,000
Inflation Rate (i) = 7.5% Depreciation Rate (d) = 2.5%					
5	− 949	−1834	− 3473	−7684	− 14345
15	−1214	−1819	− 3202	−1843	2944
25	−1026	−1430	1114	12730	32091
Inflation Rate (i) = 10% Depreciation Rate (d) = 2.5%					
5	−1055	−1915	− 3403	−7635	− 11574
15	−1112	−1444	− 827	8158	22946
25	− 483	3278	13187	42912	92454

i). Trading of Properties

The new tax structure is likely to induce changes in the trading rate of properties. For all properties, irrespective of size, there is a clear incentive for property holders to hold on longer to their properties. Therefore, the trading rate is likely to decline. Also, the trading that will continue to take place will perhaps have a higher proportion of bigger properties. This will be the case because irrespective of the period of transactions larger properties have been given a bigger tax break compared to the smaller properties.

ii). Housing Stock

The tax benefits given to the large-size properties is likely to lead to more construction of bigger properties, depending on the elasticity of housing construction to such fiscal incentives. Construction of smaller properties will be discouraged. Thus, the impact of the present scheme on the overall stock of housing is ambiguous. What perhaps is unambiguous is that 'luxury housing' or large-sized houses will be relatively encouraged.

iii). Effective Incidence

Previous sections have thrown light on the nominal incidence of the present scheme. What perhaps is more important is the effective incidence of a tax system. The empirical evidence suggests that in Pakistan most of the trading takes place in owner-occupied properties and not in rented properties. Therefore, small (large) properties are likely to be sold by relatively low (high) income households to households in the same income group. It, therefore, does not matter whether the buyer or the seller of properties bears the burden (or benefit) of the tax since they most likely belong to the same income category. Given the observed trading pattern, the effective incidence across income groups is, therefore, the same as nominal incidence.

iv). Impact on Savings and Investments

The new tax structure will possibly lead to a tendency towards the construction of large sized properties. The impact of this tendency on the level of saving and investment in the economy is ambiguous. Will this lead to a transfer of funds from other forms of capital to real estate or will it lead to an overall increase in the pool of savings? To answer this question, knowledge of the interest elasticities of savings is required. In

the absence of such estimates it is difficult to conclude, first, how responsive investment in properties is to the tax induced increases in returns and, second, if it is, whether the relative responsiveness is more of the upper income groups compared to the lower income groups.[9] This is important because, as stated earlier, the former income group is given an incentive while the latter is discouraged.

VII. Summary and Conclusions

The case for the abolition of capital gains tax, made on the ground of its questionable validity and administrative complexities, is not supported by the analysis. Capital gains tax is recognised here as a well justified tax with strong equity and efficiency arguments to back it. It is a highly progressive tax charged primarily on the 'unearned increments' in value accruing to properties. It has the ability potentially to check unproductive activities like land and property speculation and direct investment towards socially desirable channels. Further, it constitutes a buoyant source of revenue to the government.

Analysis of the impact of abolition of capital gains tax and its substitution by a higher stamp duty rate reveal the following:

1. The 'present scheme' is regressive compared to the original tax system. The tax burden increases on small properties while there is a substantial tax break on larger properties.
2. It also encourages longer holding periods for properties, i.e., it 'locks-in' capital more and thus reduces its mobility further.
3. A two percentage point increases in stamp duties is inadequate to sustain revenues.

The revenue-neutral stamp duty rate is estimated to be 11.5 per cent. Altogether, the abolition of capital gains tax and its substitution by higher stamp duties is an inferior step both on equity and efficiency grounds. Instead, a 'reverse merger' is recommended whereby the stamp duty on sale of property is withdrawn, and simultaneously there is an appropriate escalation in the rate of capital gains taxation. This 'reverse scheme' is shown to have a progressive incidence and to increase the mobility of capital.

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[9] A study addressing these two questions is perhaps a logical extension to this work and constitutes, potentially, an interesting area of further research.

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