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Toward a Middle-Income Tax Structure: A Development Perspective with a Focus on Bangladesh

Abstract

This paper, originally designed to focus on discovering a suitable tax structure that befits an aspiring LMIE as it advances toward the UMIE status. On reflection, it becomes evident that it is hard to meaningfully deliberate on the composition of taxes without focussing in equal measure on the issue of the size of tax revenue at stake, namely the tax effort. The transition to UMIE must embrace public's demand for a healthcare system fully in compliance with the WHO criteria of UHC, for quality human capital, and for both a physical and IT infrastructure consistent with faster growth over the next decade or so. We explore the probable causes of low revenue effort and an unchanged structure of taxes and their persistence over the recent decades. Finally, we delve into the issues of fundamental reforms of the tax system as well as of the softer aspects of tax reform, namely that of tax administration, evasion and compliance.

JEL-Codes: B120, H210, H220, H240, H250, H260, H270, H550.

Keywords: tax structure, taxable capacity, tax handles, tax compliance, tax evasion, informal economy, inheritance and property taxation.

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Toward a Middle-Income Tax Structure: A Developmental Perspective with a focus on Bangladesh

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Executive Summary

1. Why Taxation? Beyond meeting the current expenses on health, education, and infrastructure, in a developmental context, it is necessary to accumulate public savings, defined as tax revenue less public expenditure (T-G), to augment the stock of domestic capital. These commitments would demand increasing magnitude of public resources, essentially tax revenue, as the economy strives toward the upper-middle income economy status (UMIE).

To be specific, BGD cannot shy away from meeting or exceeding the expectations of a healthcare system fully in compliance with the WHO criteria of UHC, from developing quality human capital, and from creating both a physical and IT infrastructure consistent with faster growth in real percapita output over the next decade or so, all of which would require much greater expenditure than can be afforded for example with the measly FY23 realised tax revenue of 7.4 % of GDP.

- 2. A Taxonomy of Taxation Analysis (Section2): Before getting into the substance of the issues at stake here, it is helpful to review the basic terminology and hence some definitions of tax analysis that we shall be using in this paper; see section 2 below.
- **3.** Back to the Basics: The 'Principles' of Taxation (Section 3). An in-depth review of the early literature (mainly Smith, Ricardo, and Mill) on the principles of taxation offers the following takeaways.
- (a) While most thinkers hailed '*equality*' as an avowed goal of a tax system, their failure to endorse redistribution as a goal in itself, and hence the unwillingness to allow a robust scope of taxation in the nation's life, lest it retards growth, held them back from recommending full-throttle progressive taxation.
- (b) While there is a bit of unnecessary muddle in the debate on 'ability' vs 'benefit' as a basis of how much tax one should be assessed, the qualified winner was ability. Though the erroneous view that somehow the benefit principle can be endowed with an equity interpretation continue to mar progress on this front.
- (c) When it came to measuring *ability*, Smith stuck to income, while both Ricardo and Mill leaned toward consumption as the better indicator of ability. This debate has proved to be an enduring one, which is still very much alive. Both Canada and US have moved closer to the consumption base, though in fits and starts rather than by following a well-orchestrated roadmap.

- (d) Only when it came to *indirect taxation*, the great classicists were unanimously determined to strive for economic efficiency, i.e., recommending a system that in, modern parlance, inflicts the least excess burden on the citizenry.
- (e) There was not much of a debate in the literature on the *compliance friendly* tax collection procedures implied by the second and the third maxims of Smith, which were intended to save harassment of the citizens by the State except, of course, "...the unavoidable one of being obliged to pay the tax" (Smith, 1976a, p. 834).
- (f) Finally, regarding 'growth and stability', while preserving growth was a paramount concern of the classical scholars, who generally viewed taxation as an evil, the modern focus, since the Great Depression and the birth of Keynesian economics, has centred on the stability of the macroeconomy over the economic cycle. The stress on tax-expenditure policies to guide the economy through boom and bust has strictly been a 20th century phenomenon continuing to this day.
- 4. The Idea of Taxable Capacity (Section 4): Not many have defined 'taxable capacity' with an economist's precision, leaving it to essentially convey its vague literal meaning. We advance a preliminary definition: taxable capacity denotes the share of GDP that a nation, in view of its evolving structure, can potentially raise as taxes under certain ideal conditions, and without 'undue burden' on its taxpayers.

An examination of the concept and the related literature, and upon much introspection, we are led to conclude that the potential taxable capacity for a lower-middle income economy (LMIE) like BDG lies somewhere in the range 15-20% of GDP as of FY22. (This necessitates a correction to the figure of '15%' marked on the flag hoisted on the summit, Fig 4!)

The above range encompasses the Gasper et al (2016) recommendation of 15% as its floor, the Benitez et al (2023) determination of taxable capacity of 20% as the ceiling, and situates the 15.4% predicted by our interpolation methods vis-à-vis the IMF estimates in its interior.

Thus, it is not overly dramatic to characterize the current state of BDG tax effort to be an alarming one, more so that the ratio has effectively remained stagnant over the past five decades or so and has even registered a declining trend of late. (See section 5.2 below for additional details.) This contrasts sharply with a secular increase in the tax effort in IND over the past decade, except for the dip in COVID years, but has fully recovered and stabilised at about 18% by 2022 (Table A2).

5. The Lowness of Realised Tax Revenue (Section 5): Following a careful analysis, we find that neither low income or nor low tax rates were *per se* the reasons for the low tax effort in an LMIE like BGD. Instead, (a) low tax bases, (b) a dormant tax structure, (c) the substantial burden of an informal economy, and (d) weak/corrupt tax administration were among the chief culprits.

While the above review identified the low tax base as restraining the tax effort, that may be the outcome of either the absence of fundamental tax reform and/or governance weakness mainly in the form of low tax morale, high tax expenditure, widespread tax evasion and tax avoidance.

6. The Tax Structure Question (Section 6): The question of structure merely boils down to the evolving *composition* of tax revenue as the economy grows within the overarching goal of reaching a certain share of GDP.

We acknowledge that even though the economy has been making impressive strides in annual growth of output, both the tax-GDP ratio as well as the tax structure had remained dormant for long. Absent any fundamental reform, narrow and low tax base, little innovation in discovering new tax handles, a low degree of compliance, selective/ indifferent enforcement of the tax code (and law, generally) have landed the tax system in a 'bad equilibrium' in the political economy speak.

- 7. Fundamental Reforms of the BGD Tax Structure (Section 7): Here we outline the *fundamental reforms* of the tax system, necessary to both raise the tax effort and transform the tax structure mirroring a modern UMIE. These reforms would incorporate broadening the base of all major taxes, namely PIT, CIT and VAT so as to achieve the objective of restructuring the tax system. This process would in effect bring in a large chunk of the shadow economy under the tax net. It will also be necessary to design new tax handles that can track the emerging growth sectors of the economy. The principal recommendations are as follows.
- (a) FY 2035 Goal and Tax Shares: With the goal of achieving UMIE status in the near future, it is prudent for BGD to focus on achieving a tax effort of 20% of GDP by FY35, while engendering a significant shift in the structure of taxation so that by FY35, the share of both direct and indirect taxes become equal at 50% each. The target revenue ratio for PIT is 25% of all taxes (and thus half of direct taxes), while VAT would emerge as the primary vehicle of indirect taxation, raising 35% of all tax revenue.
- (b) Presumptive Value Paradigm: The reforms analysed in the paper call for a large role for presumptive taxation in order to overcome the informational constraints on property values, house and land rents, and even sales of informal sector firms. We offer a methodology of how to set up such a data base at NBR to be updated as feasible, say quinquennially.
- (c) Strategies of Tax Reform: In order to raise the tax effort by such a large amount, it will be necessary to (i) bring about significant reforms in all major tax instruments primarily by broadening the tax base rather than rate increases, and secondly, by (ii) initiating new tax handles targeting the emerging sources of economic gains in society (e.g., personal capital income, real estate and other wealth, and luxury consumption), thereby inducing elements of income and wealth redistribution in society.
- (d) *PIT*: Here we recommend a reduction of the number of tax slabs as well as the broadening of the tax base, primarily by clawing back tax expenditures and by widening the concept of income to include all personal capital income and capital gains.
- (e) Inheritance and Property Taxation: Discussion of the viability of an inheritance tax led us to recommend a revamped property transfer tax (PTT) that would encompass all property transfers (including intangible ones like memberships and intellectual property) and acts of mutation of real assets, all at presumptive values as per the data bank. Even at modest rates, these measures are likely to yield significant new revenues to the State while at the same time improve upon the allocation of wealth in society and result in lower inequality over time.
- (f) *Capital Gains*: We recommend a unified treatment of capital gains and losses (again based on presumptive values except for financial market transactions) between real and financial assets and that the taxes due on net capital gain in a year be fully paid by the respective asset owner within 60 days of the end of the tax year.

- (g) CIT Reform and Encouragement of Equity Finance: We recommend disbanding most tax expenditures in the CIT code and introduce a standard deduction (prorated to the estimated value of new investment undertaken by the firm in the tax year), regardless of the mode of finance, reflecting the cost of capital. This policy ought to discourage reliance on bank borrowing and render the CIT totally investment neutral.
- (h) Informal Sector: In order to bring informal sector entities under the tax net, we propose a three-pronged strategy encompassing (i) easy registration/licencing, (ii) ready access to formal finance, and (iii) light taxation of profits and sales as per eligibility, and especially for providers of services.
- (i) VAT: OECD research finds that about 71% of potential VAT revenue is lost in Bangladesh annually mostly to tax expenditures. We believe that a good fraction of these losses can be recouped by a judicious blend of policies (i) initiating the entry of the informal sector firms and other small traders/service sector firms under the VAT net, (ii) rationalisation of the rate structure, and (iii) a new tax on luxury spending.
- (j) Import Tariff Cuts: We foresee a dramatic decline in the tax revenue from imports (import duties with VAT and supplementary dues added in) from about 28.4% of tax revenue to about 7.5% by FY35. The tariff cuts would remove the bias in favour of import substitution, pave the way for more export-oriented growth of industry, allow faster economic growth, which along with PIT and VAT reforms can make up the lost revenue over time.
- (k) Additional Tax Handles: Over and above the preceding measures, we also propose instituting (i) a modest (say 0.1%) tax on all financial transactions of BDT one million or greater (a 'Tobin tax'), and (ii) an annual wealth tax at the rate of 1% on all owners who possess net assets exceeding BDT 50 million (to be indexed every five years).
- 8. Tax Administration, Compliance and Evasion (Section 8): We now turn to the softer aspects of tax reform, namely that of tax administration, that take the tax code as given, and employs various modalities (e.g., audits, inspections, staff morale and discipline) to implement the tax instruments the best it can. We analyse how the compliance challenges can be met and the fallout minimised over the medium term, so that the tax effort target of 20% of GDP can be realised by FY35. After much deliberation, we reach the following observations.
- (a) Administration: We recommend a major overhaul of NBR with significant changes in recruitment, training and capacity building, and the compensation structure with a view to raising the level of professionalism in the cadres and at the same time weeding out endemic corruption. We also call for the setting up of Divisional Municipal Boards (DMBs); see below.
- (b) Technology: A top priority for NBR would be to invest in technology and promote electronic communication in all spheres of its activities. Face-to-face interaction between a taxpayer and a tax official ought to be discontinued forthwith, except for the advisory services.
- (c) *Presumptive databank*: It is recommended that NBR continually update and manage the databank and explore its wider applicability, e.g., to the direct taxation of SMEs and VAT for small holders.
- (d) Voluntary Compliance: Launching (a) an awareness campaign on the role of taxation in economic development, (b) promoting third party information reporting, (c) installing functioning auditing and monitoring modalities, (d) detecting tax evasion, and (e) reliance on national identity and pride are suggested as means of inducing voluntary compliance with the evolving tax system.

- (e) *Financial Innovation*: Parallel with tax reforms, we recommend that simple saving and loan products be designed with secure online accessibility on the cellular phone to meet the needs of the small and informal traders and businesses.
- (f) *Advisories, Tax Tribunals, and Dispute Resolution*: It is recommended that, along with advisory services, the modalities in respect of disputes be streamlined for timebound outcomes without undue harassment of the taxpayer.
- (g) *Property Tax Compliance*: In view of the greater role of taxation of property and capital income endorsed in the paper and in view of the weaker managerial capacity of smaller municipalities, we propose the setting up of Divisional Municipal Boards (DMBs) at the division level. DMBs would liaise between NBR and the municipalities within its jurisdiction, especially on technical details of data sharing and property tax administration (including capital gains as appropriate).
- (h) *Fiscal and Legal Capacity of the State*: The chances of inducing greater compliance with the tax laws making tax reforms a success would require a simultaneous strengthening of the universal application of the rule of law in the rest of the economy (e.g., in dealing with wilful loan defaults).
- **9. Conclusion:** The political economy literature suggests that significant improvement in tax effort can only come after the State commits in earnest to improve the relevant institutions than merely undertake tax reforms. A more balanced position, in light of the discussion presented above, would be that tax reform must be undertaken while at the same time initiating serious measures to repair the weaknesses of tax administration, and more generally, the rule of law in all matters of the State. Given that institution building/strengthening is a slow process, a match has to be found, perhaps by trial and error, so that one comes up with a tax system that can actually be implemented to yield the desired revenue share so that we move away from a bad equilibrium to a hybrid state, if not jump altogether to a good equilibrium.

Toward a Middle-Income Tax Structure: A Developmental Perspective with a focus on Bangladesh¹

Syed M. Ahsan

1. Why Taxation?

Beyond meeting the current expenses on health, education, and infrastructure, in a developmental context, it is necessary to accumulate public savings, defined as tax revenue less public expenditure (T-G), to augment the stock of domestic capital.² Prudent building up of public capital can enhance the productivity of private investment (e.g., Devarajan et al, 1996). Meeting climate change mitigation/adaptation measures as well as debt stabilisation have also been cited as further reasons why additional tax revenues maybe necessary (Barro,1990; Benitez et al, 2023). Even for capital investments financed wholly or in part by official development assistance (ODA) and bimultilateral agency loans, the State often has to contribute a fraction of the total investment from domestic resources in order to secure release of external funds. Hence the case for raising adequate revenue cannot be stronger for a developing country.

While we directly focus on what maybe an adequate level of revenue (as GDP share) for BGD later in the discussion, suffice it to say that this is likely to be double or more than the actual tax revenue take in recent years, at 8% of GDP or less, though IND has already reached that threshold. The weak performance, indeed, a slight declining trend over the past decade (see Figure 1) is especially puzzling given that the economy has posted solid per-capita GDP growth over the past two decades or more.³ With such low revenue, the health sector spending comes in at about 0.6% of GDP, the lowest among major South-Asian (SAS) countries. In the key metric of the magnitude of out-of-pocket (OOP) component as a share of current health expenditure, the BGD figure of 74%, vis-à-vis 50% in IND and 47% in LKA, is disproportionately high by any comparison.⁴ The

¹ An earlier version of the paper was presented as a public lecture during the Annual BIDS Conference 2023 (07-09 December), held in Dhaka, BGD. Comments are most welcome (syed.ahsan@concordia.ca).

² Musgrave and Musgrave (1989, p585) notes that, in case of limitations of private saving, it may also be necessary to allocate any available public saving to finance private capital formation via the intermediation of specialised development banks.

³ Here we have used both tax revenue and GDP growth figures from WDI for consistency. OECD, which specialises in collating global fiscal data, has recently revised its earlier estimates of BDG tax revenue data in the 2024 publication (OECD, 2024). We shall examine the latter in section 5 below.

⁴ Note that in this paper we would often refer to countries by their alpha-3 ISO codes. ... The OOP data is for 2020, the latest available, which shows that the corresponding figure for South Asia (SAS) as a whole is 53%, lower-middle income economies (LMIEs) at 47%, and upper-middle income countries (UMIEs) at 31%. Further, while the UMIE figure has been declining slowly over the past 3 years, the BGD figure has been on a rising trend (https://www.databank.worldbank.org/...).

total health spending (i.e., private expenditure included) in BGD too is the lowest among its SASpeers.⁵ The World Health Organization (WHO) recommends that countries spend an additional 1% of GDP on primary healthcare alone in order to achieve universal health coverage, UHC, as interpreted by WHO.



Figure 1: Tax Revenue and GDP Growth in BGD: 2001-21

Source: Author's construction based on WDI data accessed on 26th March 2024

Despite advances in educational attainment over the recent decades (mainly enrolment and completion), BGD scores poorly in the human capital index (HCI) ranking, placed just ahead of PAK among the SAS-4.⁶ More worrisome is the observation that there has been a slight deterioration in the HCI for BGD since 2017, the only South-Asian country to have so fared. Further advancement in this area is unlikely to materialise unless resources are put into the quality of the curriculum, especially in technical and vocational programs, and in the assessment of effective learning inside the classroom. In the same vein, public initiatives backed up by resources are necessary to get innovations into newer technologies off the ground. BGD Planning Commission data suggests that R&D investments in BGD were abysmally low in FY23 at 0.03 percent of GDP. The comparable figures for its trade competitors were much higher, 0.54% (VNM), 0.70 % (IND) and 2.55% (CHN).

⁵ The peers we refer to are the largest four economies (dubbed SAS-4), namely, BGD (2.63), IND (2.96), PAK (2.95) and LKA (4.07), where the figures within the brackets are the aggregate (public, donor and private combined) current health expenditure shares of GDP. See https://www.who.int/data/gho/data for comparable data for all countries.

⁶ The latest issue of *Human Capital Report* of the World Bank (WB) of 2021 reports related data as of 2020. Out of a possible score of 1.00, BGD scored 0.46, against 0.49 (IND), 0.40 (PAK), LKA (0.60). The regional leader happened to be VNM, at 0.69 [https://www.worldbank.org/en/publication/human-capital].

In a developmental setting, as already cited above, public investment plays a dual role. Over and above meeting the shortfall in private investment (e.g., in the production energy), it also has to undertake investment in infrastructure (including education, health, technology and physical connectivity), all of which serve to boost the productivity of private investment. The nexus between private and public capital therefore is both one of substitutability as well as of complementarity. The paucity of the recent revenue yield is evident by observing that if it were prioritized to finance public investment, pretty much all revenue would have been exhausted leaving nothing for the current expenditures of the government (Figure 2).





Source: Author's construction based on WDI data accessed on 26th March 2024

While public borrowing and the eventual creation of public debt is another vehicle to finance public spending, there are serious limits on the former both in terms of its overall size in relation to the GDP as well as to the composition of debt between foreign and domestic as well as the component from the central bank. Figure 3 depicts that most of the budgetary deficit has been created by the need for the State to engage in public investment in areas such as physical infrastructure, of which a significant share is financed by foreign loans (both bilateral and multilateral sources).⁷ Hence the scope of debt is intertwined with the prospect of underlying growth of national output. Even ignoring the potential concerns of domestic borrowing in crowding out domestic investment, one cannot overlook the fact that at some point meeting the

⁷ Foreign grants have been covering only a negligible share of about a fifth of one percent or less in recent years (Table 4.8, GoB, 2023).

growing interest obligations arising out of both domestic and external debt may pose a serious challenge. How to mobilise the additional revenue? Raising the revenue share of GDP, especially in view of its long dormancy, would entail tapping into the evolving taxable capacity of the country, through a sustained campaign of tax design and reform. Below we dwell on the notions of 'tax effort', 'taxable capacity' and 'tax structure' on the presumption that the total outstanding public debt in BGD and its servicing remain in a stable state despite the very low revenue yield.⁸

What is the Middle-Income Vision? By the middle-income vision, we mean to explore and identify the tax structure that would befit a modern upper-middle income economy (UMIE), which as of 2024 is being identified as one enjoying per-capita GNI in the range of USD 4,466 to 13,845.⁹ Though the paper focusses on BGD, frequent references are made to the four largest South-Asian economies (SAS-4), all of whom are LMIEs as of 2022. BGD and IND have both professed to reach the UMI-level of income in the immediate future. In the interest of presenting a broader overview, some data cited below also relate to the group of economies that are still declared as low-income (LIE) group and hence we often combine the latter two by labelling them as low-to-lower-middle income economies (LLMIEs).



Figure 3: Deficit, Expenditure and Public Investment in BGD: 2001-21

Source: Author's construction based on WDI data accessed on 26th March 2024

⁸ WDI data extracted on 26 March 2024 reveals that external debt stock stood at about 20% of BGD GNI while the interest on debt, though on an uptrend, accounted for about 1.4% of GNI as of 2022.

⁹ The full classification goes as follows. In terms of GNI Atlas data for calendar 2024, the World Bank group defines low-income economies (LIEs) as those with a GNI per capita of USD 1,135 or less. Lower middle-income economies (LMIEs) are those with per-capita income between USD 1,136 and 4,465, while those with GNI between 4,466 and 13,845 are labelled upper middle-income economies (UMIEs). High-income economies (HIEs) are those with a GNI per capita of USD 13,846 or more.

With the accelerated economic growth foreseen and indeed deliberately targeted as a development strategy, significant additional revenues would be required. BGD cannot shy away from meeting or exceeding the expectations of a healthcare system fully in compliance with the WHO criteria of UHC, from developing quality human capital, and from creating both a physical and IT infrastructure consistent with faster growth in real per-capita output over the next decade and beyond. The nascent State-sponsored 'universal pension program' launched in 2023 would make demands on the meagre tax revenues of the State as soon as pensions begin to be paid out, though budgetary provisions ought to be undertaken far in advance. Below we offer an analysis on the magnitude of such additional revenue requirement.

With the preliminaries out of the way, the rest of the paper proceeds as follows. In section 2, we briefly review the essential taxonomy of public economics. Though tedious, without such an overview it will be hard to embark upon a substantive discussion of what follows. Next, in section 3, we dwell briefly on some of the earliest writings on the subject of taxation by classical economists (mainly Smith, Ricardo and Mill), and examine if the principles of taxation that they had laid down at the dawn of industrialisation help one relate the nascent concept at the time to the present day LMIEs struggling to implement a modern tax system as they shift their focus away from customs duties and excises taxes. In the process, we also review how these first principles have evolved over time. Section 4 explores the idea of taxable capacity relevant for contemporary developing nations. The lowness of tax revenue in a developmental context, and especially in BGD, is taken up next (section 5). The evolving tax structure, the key focus of this paper, is taken up for analysis next in section 6. Section 7 examines what we call the fundamental reforms of the tax system in the BGD context necessary to both raise the tax effort and transform the tax structure mirroring a modern UMIE. The 'softer' reforms, namely the issues of tax administration, compliance and evasion are explored in section 8, while section 9 concludes the paper.

2. A Taxonomy of Tax Analysis

2.1 *Some Elementary Definitions*: Before getting into the substance of the issues at stake here, namely the tax structure of a nation, it is helpful to remind the reader of the basic terminology of tax analysis that we shall be using in this paper. We note that while most of what follows is commonplace, but some recent writers appear to have deviated from the established norms, and hence the rationale for a brief overview.

Tax Instruments (T_j): In this analysis we use T_j to denote a tax category-j, where there are jcategories of taxes relevant in a given context, i.e., j = 1, 2, ..., n. The numerals 1, 2, ... denote instruments such as the personal income tax (PIT), corporate income tax (CIT), goods and services tax (GST), the value-added tax (VAT) etc. The term T_j can, to save on notation, also refer to the revenue raised by the jth tax instrument. *Tax Base* (B_j): This is simply the magnitude of the base that is taxable for a specific category-j as per the tax code. For example, in the case of PIT, B_j is the 'taxable income', not the gross income accruing to the personal sector.

Disposable Income: This is simply defined as income less taxes. For an income tax, this is most straightforward, but the idea is broader. The concept of disposable income, though tedious in calculation it may be, extends to the case of a complex tax system that in addition to earnings, allows taxation of goods and services as well as that of personal property and the like.

Average and Marginal Tax Rates: Given a tax system, $T_j = T(B_j)$, the average tax rate (ATR) is merely the (T_j/B_j) - ratio, while the marginal tax rate (MTR) is defined as the derivative, i.e., dT_j/dB_j . See below for further interpretation of these terms.

Tax Yields (T_j): This is the amount of revenue realised from a given instrument-j; $T_j(B_j)$. For a proportional PIT system, $T_{PIT} = \tau B_{PIT}$, where τ denotes the hypothetical but unique tax rate on income in a context.

Total Tax Revenue (T or TTR as convenient): This merely is the sum of taxes raised at given pointin time, i.e., $T = \Sigma_j T_j(B_j), j = 1, 2, ..., n.$

Total Revenue (R): This simply adds non-tax revenue (NTR) to total tax revenue (T), i.e., R = T + NTR, to yield the total revenue (R) at the disposal of the treasury. The discussion here abstracts from the non-tax elements of revenue altogether.

Statutory Tax Rates (STR): These are the actual tax rates in force as per the code. For tax instrument-j, we can denote the STR by τ_j for each-j (or for each taxable B_j-slab in a system with graduated rates), where typically $\tau_j < 1$. More generally, therefore, the relevant concept is that of a statutory tax schedule, $T_j(B_j)$.¹⁰

Tax Expenditure (TxE): US Treasury documents describe 'tax expenditures' (TxE) as those revenue losses that arise from features of the tax code that deliberately "allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability" (https://home.treasury.gov). These exemptions can be seen as alternatives to actual spending programs or regulatory acts of their own and some countries often offer direct cash transfers to eligible individuals in lieu of tinkering with the tax code. In case of deferrals, there are also the loss of future revenue and hence the present value of revenue would suffer. Observe that the deviation between what one can call the a priori concept of TxE (from a given source) and the actual revenue yield on account of associated tax expenditure is entirely

 $^{^{10}}$ For a progressive system we would typically have the second derivate of $T_j(B_j)$ positive over a certain range. Below we offer a fuller discussion of the concept to tax progressivity.

legal, and indeed a consequence of tax policy. The real-life consequence of allowing tax expenditure can be gleaned from US federal FY 2023 figures, which reveal that on account of just one element of TxE, namely the exclusion of employer contributions for medical insurance premiums and medical care, the expenditure amounted to USD 3.44 billion vis-à-vis the federal PIT yield of about USD 2.2 trillion, about 1.6% (https://www.cbo.gov/publication/59730). But as shall see below, in a developmental context these expenditures can often be much larger, even exceeding the magnitude of tax actually collected.

Effective Tax Rate vs the Average Tax Rate (ETR_j and ATR_j): While both concepts lead to total tax as a ratio of a given tax base-j, the realised rate, ETR_j, may differ from theoretical one, ATR_j, that is dictated by the tax statute. Such a discrepancy arises out of tax expenditures or out of lapses in tax compliance and/or in tax administration resulting in either the manipulation in the tax base and/or in the tax schedule.¹¹ In the absence of such leakages, $ETR_j = (Tj/B_j) = ATR_j$. Put another way, ATR and MTR are *ex-ante* concepts, while those related to revenues realised such as the 'effective tax rate', and those described below such as 'tax effort' and 'tax shares' are *ex-post*. Clearly the ETR concept can be precisely defined only for a given instrument-j in isolation, not for the entire tax system since different instruments would utilise different bases.

Tax Effort (TEF): This is typically defined for the tax system as a whole, namely the total tax as a share of GDP (Y), i.e., TEF = (T/Y). It would be essential that both T and Y be measured in identical units (e.g., in local currency or USD). Similarly, one can define the 'revenue effort' as (R/Y) when referring to total revenue (R), i.e., inclusive of non-tax sources. Further note that in a federal system, unless spelled out differently, the tax effort would refer to the total tax (T) realised by all levels government, central and sub-central (e.g., provinces/states).

Recently IMF scholars (e.g., Benitez et al, 2023; Gaspar et al, 2016), like Le et al (2008) somewhat earlier, defines the ratio of the realized tax revenue to the maximum potential revenue, as a new definition of 'tax effort'. However, historically the public economics literature has defined 'tax effort' as the ratio of 'actual tax collection'/GDP, which has been a well- established concept. Hence, we see no reason to muddy waters here, and thus have chosen to call the new measure '*effective tax effort*' (ETE), which is indeed an important statistic gauging the extent of fiscal marksmanship of the State. However, as we shall emphasise below, the relevance of the ETE concept depends very much on the quality of the procedures utilised in the estimation of 'taxable capacity'.

¹¹ In a proportional tax system, the tax expenditure and noncompliance can only mean that the effective tax base (EB_j) becomes less than B_j. In a more general context, anomalies in tax administration can also lead to an effective tax rate lower than τ_j . Given proportionality, $T_j = \tau_j B_j$, and in the absence of any revenue loss, the ETR_j, (Tj/B_j) would always be equal to the STR, τ_j or the ATR_j.

Tax Shares (TXS): These are defined as the share of each tax instrument-j in total tax revenue of the nation, i.e., $TXS_j = (T_j/T)$, all j.

Taxable Capacity (TXB): This is the potential tax revenue that a country may feasibly raise at a point in time dependent upon the fundamental elements of the economy and its evolving structure. The fundamentals may include the evolving sectoral composition of output, the level of per-capita income, the distribution of income in society, and the level of public debt. The potential however may not be met due to inadequacies of tax design, tax expenditures, weaknesses of national accounts system, and lapses in tax administration. TXB is generally expressed as a function of national output (GDP) and hence expressed as a fraction. Thus, TXB would exceed the actual TEF (= T/Y). The concept, again an *ex-ante* idea, is discussed and further refined below (section 4.1).

Effective Taxable Capacity (EXB): This denotes the share of potential tax revenue (i.e., taxable capacity) that the State succeeds in raising, i.e., the ratio of actual tax revenue to the taxable capacity (EXB = TEF/TXB < 1). This *ex-post* concept is yet to become part of the public economics lexicon simply because the measurement of taxable capacity, being empirical in orientation, remains work in progress; see Benitez, et al (2023). We discuss this idea more fully in section 4.1 below.

Tax Structure: This is simply the composition of the tax system; in other words, how the various tax instruments, T_j (i.e., the direct and indirect taxes, see below) are combined to raise the targeted level of aggregate tax revenue (T). The tax structure idea is of key focus of the present paper which is taken up in section 6 below.

Tax Handles: Tax handles, as Musgrave explained, were "... forms of economic activity that lend themselves to effective taxation" (1969, p. viii). Thus, these are 'tax bases' that become feasible at a given level of development of the economy in terms of both administrative and technological capability of the taxation authority. "As the structure of the economy changes with economic development," Musgrave elaborated, "the nature of the tax base changes as well, and with it the 'handles' to which the revenue system may be attached" (p. 125).¹² We expand on this theme in section 7 below.

Tax Avoidance: The term *tax avoidance* (or, sometimes, *tax planning*) encompasses attempts to take advantage of the tax code by exploiting the 'loopholes', typically tax expenditure angles, in the law. Some of these steps may not be consistent with the spirit of the law but are presumed 'legal' in terms of the letter of the law. Ahsan (1995a) proposed a broadening of the concept to

¹² The idea has been further explored by Mansfield (1971).

denote 'those activities that involve manipulating the tax code (or any of its provisions) to one's advantage ... with the primary goal of lowering the expected tax liability' (p 80).

Tax Evasion: Tax evasion involves concealment and/or misrepresentation of the size and the source of income. Ahsan (1995a) proposed a more general description: *Tax evasion involves all attempts to incompletely disclose the magnitude and/or the nature of the taxable gain as they accrue* (p81), which incidentally stresses the timeliness of the disclosure.¹³

Erosion of the Tax Base: Erosion of the tax base can generally occur due to a variety of factors including tax expenditure, tax avoidance and tax evasion activities, which may be further exacerbated by failure of the tax authorities to record and track all incomes (e.g., income from capital, land, and other immovable objects). In an international context, erosion may take place at the behest of multinational firms in their practice of transferring profits to tax havens to lower their overall tax liability in the country where the income had originated from. The latter is a prime example of tax avoidance.

Tax Gap: This is a relatively new concept that measures the deviation between the *a priori* (or 'theoretical') tax yield and the actual yield. In effect, "it is a measure of potential tax revenue loss resulting from tax non-compliance" (CRA, 2021, p6). Non-compliance can primarily emanate from activities of tax avoidance and tax evasion. The tax gap concept can be expressed either for a single tax instrument, or for the entire system of taxes for a level of government or the nation. To take a rudimentary example, assuming a strictly proportional tax instrument at the rate τ on some base of known size (B_j), the expected revenue would be $T_j = \tau B_j$, while realised revenue may well be $R_j(\xi) = \tau B_j(\xi)$ such that $B_j(\xi) < B_j$, and $T_j(\xi) < T_j$, where ξ -denotes the compliance parameter in question. Some argue that the tax gap can also emerge out of policy gap (incorrect packaging of the policy), not just incomplete compliance.

Note that the tax gap idea is narrower than what is captured by 'tax base erosion', where tax expenditure is included in addition to tax avoidance, tax evasion, and revenue loss from the policy gap.

Tax Incidence and Tax Shifting: The idea of a tax/expenditure incidence is a fundamental concept of analytical public finance. 'Incidence' is merely the consequence of a tax or, for that matter, an instrument or public expenditure on relevant prices, wages, interest rates, income and profits faced, as appropriate, by consumers, workers, producers, and/or owners of capital.¹⁴ The interesting point

¹³ Both the concepts of tax avoidance and tax evasion, their economic consequences, and policies to contain them have been extensively analysed, among other, by Ahsan (1995a), Cowell (1990) and Kay (1980). Containment issues however depend on the technology at the disposal of both the perpetrators and the tax implementation authorities, and the literature here is burgeoning in real time. See Slemrod and Yitzhaki (2002) for an update.

¹⁴ Though the concept applies to both tax and spending policies, here we focus on taxation only.

is that "the person who effectively *pays* a tax is not necessarily the person upon whom the tax is levied" (Atkinson-Stiglitz, 1980, p132). The discrepancy between the statutory/legal and the effective or the ultimate bearer(s) of the tax occurs due to the chain of incentives or disincentives created by a tax altering the economic behaviour of agents. Thus, a tax on tobacco can lead to a lower price received by the farmers engaged in its production, and thus we say the tax has been *shifted* onto producers. It need not imply that consumers of tobacco do not face a higher price, typically they would but not by the full amount of the tax.

In principle, as Atkinson-Stiglitz (1980) states, the incidence of a tax can be determined by identifying, either analytically or by econometric estimation, the *changes* in prices and incomes obtaining in equilibrium before and after the tax change. The differences measure the incidence and hence the magnitude of shifting of the tax. The appropriate 'equilibrium' concept here is that of 'general equilibrium' rather than partial equilibrium, though the latter may be an instructive tool to gauge valuable intuition.¹⁵ For example, it is easy to visualize the commonly cited example of a good that was supplied inelastically (e.g., a vertical supply curve for undeveloped land), where the tax would not alter the final price paid by the consumer implying that the entire tax would be borne by the supplier (and hence fully shifted). In contrast, in a fiercely competitive market where say a basic good is being sold at the lowest price that allows only a normal profit to the producer, any tax on that good (regardless upon whom it is imposed) will be fully borne by the available technology. The latter two examples were obviously of the partial equilibrium variety, though, there being few substitutes, the land example is possibly of wider validity.

Elasticity and Buoyancy of a Tax System: These are the final two concepts that we feel necessary to clarify before reviewing the typology of a tax system. Both 'tax elasticity' (ε_T) or 'tax buoyancy' (ε_B) are elasticity concepts as used by economists, namely, the ratio of percentage changes between two related variables over a time interval.¹⁶ The elasticity figures being unit-free are directly comparable across tax categories and across countries. Given that we are comparing revenue levels following a lapse of time, it is logical to use all variables in real than in nominal terms to net out the effect of inflation.

¹⁵ An equilibrium generally implies that prices are right; they equalize supply and demand such that these equilibrium prices are utilized by all buyers and sellers to maximize their utility and profit as appropriate. In partial equilibrium, one analyses the functioning of a single market in isolation, ignoring the plausible repercussions in markets for related commodities. By contrast, in 'general equilibrium', holistically one looks for a set of all prices that clears all markets simultaneously.

¹⁶ See Haughton (1998) for a detailed discussion.

Tax buoyancy is defined as the percentage change in a specific tax revenue (i.e., dT_j/T_j) over the percentage change in its base, namely, (dB_j/B_j) :

(1)
$$\epsilon_{Bj} = (dT_j/T_j) / (dB_j/B_j) = (B_j/T_j)(dT_j/dB_j), \ j = 1, 2, ...$$

where both the revenue and the base are exactly the realised values obtaining at a given point in time. Tax buoyancy is therefore an *ex-post* concept. Often regardless of the revenue source, GDP is taken as the relevant base, and of course, if the buoyancy were to refer to total tax revenue (TTR), the natural tax base of choice would indeed be the GDP:

(1a)
$$\varepsilon_{\rm B} = (dT/T) / (dY/Y) = (Y/T)(dT/dY).$$

Buoyancy figures in excess of unity would suggest that revenues actually rose at a faster clip than output in proportionate terms. This may signal fiscal sustainability, i.e., the capacity of the government to maintain its spending programs at its current level, while values below unity may signal the need to worry about tax reform and or spending cuts to turn things around. Over the long run however, the buoyancy cannot exceed unity primarily because major tax revenues tend to be anti-cyclical, thus serving as an agent of macroeconomic stability (OECD, 2024).¹⁷

The tax elasticity is also defined in a very analogous manner:

(2)
$$\varepsilon_{Tj} = (d\boldsymbol{\mathcal{T}}_j/\boldsymbol{\mathcal{T}}_j) / (d\boldsymbol{\mathcal{B}}_j/\boldsymbol{\mathcal{B}}_j) = (\boldsymbol{\mathcal{B}}_j/\boldsymbol{\mathcal{T}}_j)(d\boldsymbol{\mathcal{T}}_j/d\boldsymbol{\mathcal{B}}_j), \ j = 1, 2, ...,$$

where T_j and B_j denote, respectively, the modified values of tax revenue and tax base that would have been observed in the absence of any changes in the tax code that may have taken place over the time interval in question (e.g., a tax expenditure provision allowed by the Minister upon lobbying by the business sector). An essential point here is that the tax elasticity as defined in (2) is in the nature of an *ex-ante* concept or a hypothetical concept requiring construction of a revised tax revenue series over time that nets out the effects of tax code changes. The latter is a tedious process, and if one were to attempt to measure the elasticity of the entire tax system, it is simply impractical (Haughton, 1998).

Given its relative ease, the tax buoyancy concept is used more frequently, yielding an indication of how the tax system has been functioning over time, though it may be difficult to gauge whether the leakages from the revenue system were due to compliance and/or administration hurdles or due to concerns of tax avoidance, evasion, and tax expenditure. Tax elasticity, on the other hand, by retaining the same tax rules over time, offers insight as to the capacity of a tax to lead to revenue

¹⁷ To the extent that the overall tax system is 'progressive', growth in revenue take would leave the private sector with proportionately smaller net gains thus tending to dampen the exuberance in spending in a boom thereby slowing down the economy, and the reverse process would work out in times of an economic slowdown or recession. Thus, ideally the buoyancy ought to exceed unity during booms and fall shorter than unity in periods of despair.

growth as the economy evolves on its growth path. Given an unchanged tax code, it can be plausibly assumed that attempts at tax avoidance, evasion, or non-compliance would remain largely unaffected over the duration in question. Reliable estimates of the elasticity of individual tax instruments would thus allow an informed comparison of the relative revenue yield of different taxes for a unit of economic growth, which may be of help in the design of tax reform and hence the choice of a tax structure. Though developing countries tend to place a high emphasis on their capacity to stimulate revenue growth over time, as we shall see below, there are other criteria of relevance for tax design such as the concern over equity as well as that of the distortion of resource allocation induced by taxes.

2.2 *The Progressivity Issue*: Progressivity or the lack of it in a tax schedule refers to how the tax rates change as the tax base increases. Major categorisation here are as follows.

(i) *Lump Sum Taxes*: These are base-independent, i.e., $T(B) = \kappa$, where κ is a positive scalar. [A subsidy ($\kappa < 0$) can also be lump sum in nature.] Lump sum taxes cannot be legally avoided or altered, e.g., a poll tax or a road tax on vehicles. While a great virtue of lump-sum taxes is that these cannot be shifted onto others (hence no evasion or noncompliance), the main difficulty is that there is little scope of raising a substantial amount of revenue from this source. The annual British municipal tax on urban property, a per-person levy of a modest magnitude bearing no relation to property values, is among the rarest of examples of a lump-sum tax in practice. Certain land taxes can thus be examples of lump sum taxation under a transparent information system, an issue we examine later in the paper.

(ii) *Proportional vs. Progressive Tax Schedules*: A tax function T(B) defined on some arbitrary base, B, is called strictly proportional if the ATR = MTR (i.e., if T/B and dT/dB were both equal to each other). Such a tax system can be written in the simplest form as $T(B) = \tau B$, where $\tau > 0$ a scaler, is the rate of tax, typically below 100%, i.e., $\tau < 1$. Given that the rate of tax, τ , remains constant regardless of the size of B, this is the classic case of a proportional tax (ATR = MTR = τ). On the other hand, one typically defines a progressive tax where the T(B)-function is itself concave, namely, that both T'(B) and T"(B) > 0, for all values of B.

(iii) *Regressive Taxes*: A tax system T(B) is regressive over a range of B, where T''(B) < 0. Here too we must have $T'(B) \ge 0$, otherwise tax revenue itself would keep on declining as the tax base (e.g., income) rises, a rather perverse situation. Here practicality requires that the highest rate approach zero since negative taxes are infeasible in general.

(iv) *Linear Progressive Taxes* (LPT): This is defined as a tax system where (i) the ATR is an increasing function of B, i.e., ATR''(B) > 0, and (ii) MTR > ATR, though the MTR itself remains unchanged as B rises (Atkinson, 1973). In effect, this is akin to a proportional tax (at

the rate τ) combined with an exemption level (say, K > 0), and hence we obtain the tax function $T(B) = \tau(B-K)$, where B denotes the pre-tax base. Hence the marginal tax rate (MTR), (dT/dB) = τ , while the average rate (ATR), $T(B)/B = [\tau(1 - (K/B)]$. Clearly therefore, MTR > ATR for all levels of B, and, of course, ATR increases with income: (dATR/dB) = (d[$\tau(1 - (K/B)]/dB$) = (+) (K/B²) > 0, all B though (dMTR/dB) = 0, again for all values of B.

The LPT structure has been in focus in modern tax analysis since it can easily be interpreted as a negative income tax, NIT, simply by implementing T < 0 for incomes B < K) as well by observing that many real-world tax systems admit of a relatively few brackets, and hence, approximately linear, or flat. Many tax-reform proponents in the rich world, especially those in the political right, recommend LPT design claiming that a broader base (see below) and fewer brackets would minimise attempts at tax avoidance and tax evasion.¹⁸

(iv) *Ex-post Progressivity and Regressivity*: The preceding discussion of proportionality, progressivity or regressivity related to the properties of the tax function, T(B), namely its shape (linearity/concavity/convexity etc). However, in real life, tax avoidance, evasion, tax expenditure, and similar tinkering with the tax code typically lead to base erosion or even lowering of the marginal tax rates. The issue of tax incidence is also at play here since taxes differ along the extent they can be shifted onto others through the forces of supply and demand. Therefore, the actual burden of a tax can be very different from its statutory burden. Consequently, ex-post concepts of progressivity deals with the total taxes effectively paid as a fraction of the pre-tax income of a person or a company. While the term is used without qualification, the context makes it transparent whether one is referring to the shape of the tax schedule or that of *ex-post* progressivity. The latter is the most widely used notion of 'progressivity/regressivity' in common parlance.

A second point of note here is that regardless of the tax base (B) in question, the *ex-post* concepts always refer to the tax paid, T, as a share of pre-tax income (y). Further, this analysis can be applied to one tax only, say PIT, or to all major taxes together, and even including transfer programs as relevant, thus measuring the overall progressivity of the tax-transfer system. There is also a nuance in the categorisation of pre-tax income here; the reference almost always is to what economists call the 'size' distribution of income, e.g., income classes differentiated by deciles or percentiles.

¹⁸ For example, note the large following behind the idea of a flat tax, as for example, proposed by Hall and Rabushka (2007), where the authors also call for switching away for income to consumption as the tax base. See sections 3 and 7 below for a discussion on the choice of an appropriate tax base.

To take a simple example, think of a proportional tax (say, at 10 %) on all consumption spending (c), the tax base, of a household. It is easy to comprehend that this would prove to be a regressive tax in practice not only because generally c < y, but it is more so for high earners since those in higher deciles spend a smaller share of income on consumption than those down the ladder.

2.3 *Broad Classification of Taxes*: Over and above the taxonomy reviewed above, individual tax instruments may belong to one of the two mutually exclusive types.

(a) *Direct Taxes* (DRT) are those that may be adjusted to the specific circumstances (including demographic as appropriate) of the taxpaying unit such as taxes on various incomes (i.e., PIT, CIT, or social security contributions, SSC). By its nature, there arises great opportunities for tax avoidance, evasion, and non-compliance with most direct taxes. Some writings and online sources (e.g., including government revenue sites) mistakenly claim that direct taxes cannot be shifted to any other person or group. It has been shown in a variety of general equilibrium contexts that the effects of the CIT would extend to the non-corporate sector, and the tax, essentially on corporate capital, can affect the equilibrium wage rate, commodity prices and the economy-wide return to capital (Atkinson-Stiglitz, Ch 6). In any event, as we shall see below, direct taxes have evolved as the mainstay of modern tax systems.

Lump sum taxes would generally fall under the direct tax category, as the objects of taxation can in principle be tied to the gender, age, and other demographic characteristics of the person of concern (e.g., owner or beneficiary). However, these taxes are mostly of a regressive nature, but as cited above, by design they are not easy to manipulate.

(b) *Indirect Taxes* (IDT) cannot be 'personalised', e.g., those levied on transactions or asset valuations irrespective of the circumstances of the buyer/seller/owner. Examples include the goods and services tax (GST) /value-added tax (VAT) generally or the annual municipal property tax dependent on property valuation practiced in a certain location. To the extent indirect taxes are assessed on market transactions, which are in principle anonymous (e.g., GST/VAT), these are harder to avoid, except via administrative failure to register all sellers and all transactions. Property transactions, where the identity of market participants can be individually identified, unless guarded against, leave a greater room for abuse by overt means of corruption and fraud, e.g., via falsification of the nature of the asset (and hence the tax slab) and the contracted values being reported.

The above categorisation of taxes is a fundamental one, and any overlap, especially between direct and indirect tax can be traced back to the inadequacy of definition and/ or of interpretation, but not one of principle.

2.4 *Concept of 'Narrow' vs 'Broad' Tax Base*: There is a structural as well as a practical (e.g., tax administration) side to the idea. The base can be structurally narrow because the target population (e.g., salaried persons as opposed to all earners) or goods (e.g., if the latter denote only the manufactures) are narrowly defined in the tax code. Moreover, the tax base may be eroded by eligible tax paying units evading the payment because of corruption and /or weak accounting, poor registration and monitoring systems. Alternatively lobbying by the vested interests may lead to a narrower base than intended by admitting exclusions and exemptions and by the unwillingness of the authorities to plug loopholes in the tax code (i.e., tax expenditures). Reforms may be undertaken to overcome the latter deficiencies by incorporating a wider definition of income, net income, profits, and commodities subject to taxation thereby structurally broadening the tax base.

3. The 'Principles' of Taxation and their Smithian Origin

What are the principles of taxation? In contemporary literature, analysts tend not to delve deep into an abstract discussion of the 'principles' of taxation policy, except when it comes to the design of specific taxes (e.g., income vs commodity). Modern textbooks however offer the following guidelines. Tax policies are to be so designed such that (a) the allocation of tax burden be fair and equitable, (b) that the tax induced distortions (read: 'excess burden' or 'deadweight loss') be minimised, (c) taxes be easy to administer and *comply* with, (d) taxes be politically responsible; (taxpayers must know what revenues were meant for and that the associated expenditures reflect voter preferences), and (e) that the taxation system be consistent with *growth and stability*.

Without surprise, we note the above description at its roots captures the key influences of the leading classical economists, mainly Adam Smith, David Ricardo, and John Stuart Mill. Adam Smith was among the first to enunciate the four 'maxims' of taxation (1976a, p 825):

(1) *Equality*: "The subjects of every State," Smith asserted, "ought to contribute towards the support of the Government as nearly as possible in proportion to their respective abilities, that is, in proportion to the revenue which they respectively enjoy under the protection of the State. In the observance or neglect of this maxim consists of what is called the equality or inequality of taxation" (p.825).

(2) *Certainty*: "The tax which each individual has to pay ought to be certain and not arbitrary. The time of payment, the amount to be paid ought all to be clear and plain to the contributor and to every other person" (p825).

(3) *Convenience*: "Every tax ought to be levied at the time or in the manner which it is most likely to be convenient to pay it" (p825). He preferred that revenue collection campaign coincide with the accrual of gains that were the objects of taxation. He also acknowledged the practical idea of payment by instalments (taxes exacted 'little by little').

(4) *Least Cost Means of Raising Revenue*: "Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the State" (p825).

Ricardo's position on the matter of taxation had evolved over time. In an 1811 pamphlet, Ricardo voiced that an ideal tax system would (i) leave the distribution of income unchanged, (ii) keep prices unchanged, and (iii) be paid from consumption rather than saving (Dome, 2000, p 238). Dome (2000) labels the first two, respectively, as (a) the 'principle of distribution neutrality' and (b) 'the principle of price neutrality'. The third element reflected Ricardo's concern that taxation of income, naturally including capital income (as wages in the early 19th century were a minor component in quantitative significances), would seriously impede capital accumulation. Dome however likens this to demanding very low level of taxation, *ergo*, the 'principle of minimum taxation' (p 238). We believe this to be a misplaced emphasis. Literally Ricardo calls for consumption taxation, indeed the first one to do so, believing that income was not the best measure of ability, and hence the tax base. We thus restore this to the (c) 'principle of consumption taxation'.

In the *Principles* (1817), he further clarified that his position on taxation was nearly the same as Smith's. His demand for distributional neutrality coincided with Smith's view of 'equality', the first maxim. He interpreted the principles of price neutrality and consumption taxation as elaborations of Smith's fourth maxim of taxation (that is, 'efficient' revenue collection). He went on to expound that a tax that infringes the latter two principles would prevent an efficient use of resources and retard capital accumulation (Dome, 2000, p 239).

3.1 *Equality vs Progressivity*: The modern notion of 'fair and equitable', as cited at the start of this section, allows a wide interpretation. The notion of 'equality' has been refined into concepts of (i) horizontal equity (equal treatment of equals) and (ii) vertical equity, which allows for differential tax allocation to individuals of different worth (namely a graduated or a fully progressive tax). Though the wording used by Ricardo ('distribution neutrality') was stronger than Smith's, a strict interpretation of the latter's qualifier, *in proportion*, would admit horizontal equity and by extension, only proportional taxation. However, Ricardo's 'distributional neutrality' too, if interpreted literally, only allow proportional taxation as the 'scale invariance' property in the measurement of inequality affirms.¹⁹

Even for John Mill, who was more liberal in his perspective on income distribution than either Smith or Ricardo, the remark "whatever sacrifices the [government] requires should be made to

¹⁹ Scale invariance requires that if distribution-y is obtained from distribution-x such that y = kx, where the scaler k > 0, then a measure of inequality I(y) = I(x). See Foster et al, (2013).

bear as nearly as possible with the same pressure upon all" (Atkinson-Stiglitz, 2015) can easily be construed to imply proportional taxation. Thus, at this point, the views of all three would appear to be mutually consistent, although we shall see below that there was more to Mill's call for 'equal-sacrifice-by-all' idea.²⁰

Musgrave indeed laments that the Smithian 'equality' admits only distributional neutrality. Perhaps one of the key reasons behind this ambivalence was that redistribution was alien to Smith's, and indeed that of the leading classicals' worldview, though he did, unlike Ricardo, recognise what the 'duties of the sovereign' were (e.g., national defence, justice, and infrastructure), which obligated the State to raise revenue via taxation. Secondly, they each were anxious lest a large revenue withdrawal from the private economy inflict an enormous harm to the entrepreneurial incentives and prosperity of the nation. Though all these writers were concerned with inequality in society but raising public revenue via taxation (except possibly on inheritance) was not a tool to employ to meet the objective. Even Mill was against the proposition "that the State should use the instrument of taxation as a means of mitigating the inequality of wealth" for a 'tax on industry and economy' would serve as a check to the growth of wealth (1848). Interestingly, the classicists' great stress on the disincentives that taxes may induce on work, saving, investment, and hence on output was based merely on their belief of how taxes affected the economy, and not on any detailed analytical discussion of the logic involved, not to speak of even fragmentary statistical evidence. They then relegated the redressal of inequality to supplementary measures such as generous tax exemptions, (progressive) inheritance taxes, and voluntary transfers among citizens out of their taste for beneficence.

Mill to his credit, recognised the disproportionate burden that excise and customs duties, heavy lifters in the arsenal of the exchequer of the day, imposed on the poor. He wondered given the regressivity of the indirect taxes, how can direct taxes remain proportional if equal sacrifice was to be obtained. He thus proposed to exempt a sufficient amount needed to maintain the essentials of 'life, health, and immunity from bodily pain' (1848, p 807). As Atkinson (1973) demonstrated much later that a simple proportional tax with a fixed exemption for all can be interpreted as a *linear progressive tax*; even though the marginal rate remains constant, the average tax rate increases with income.²¹

Mill went farther than other classicists in demanding that conditions be set for establishing an *exante* equal society in Britain by limiting the scope of inheritance via progressive estate taxation.

²⁰ From here on, when we refer to Smith, Ricardo, and Mill, unless otherwise spelled out, we will refer to the respective primary publications of each, namely the treatises of 1776, 1817 and 1848.

²¹ Moreover, the marginal rate becomes higher than the average rate regardless of the level of the pre-tax income See the discussion LPT in section 2 above.

He firmly believed that that the tax system, though in a restricted sense (i.e., not allowing all tax instruments to be at play) can be leveraged to bring about a diffusion of property and mobility in society based on skill and inventiveness in the individual, not hereditary status (Ekelund and Walker, 1996).

It is a curiosity, however, that Mill's concept of 'equal sacrifice', couched in the ability-to-pay doctrine, remains associated with progressive taxation. Mill in fact called for 'equal proportional sacrifice', mistakenly thinking that it would lead to least total sacrifice (Musgrave, 1976, p 401). It fell upon Edgeworth (1881, 1897) to enunciate and contrast the concepts of equal absolute, equal proportional, and equal marginal sacrifice.²² He showed that it was the latter, that had a solid foundation on the utilitarian dictum of maximisation of the sum of individual utilities, which led to the least total sacrifice, and thus fiscal efficiency, as desired by Mill. However, as Edgeworth discovered this principle led to an extreme solution, namely that taxes be so chosen as to equalise the marginal utility of all (i.e., thus to a common value, a scalar). Critically, the model allowed income to remain exogenous to the choice of the tax schedule. Now if one imposed the further condition that all individuals had identical tastes, taxation would equalise all post-tax incomes, an extremely egalitarian outcome. However, as it turns out, the fatal flaw in the characterisation just described, as discovered by Pigou, was the exogenously given income, perhaps not so objectionable a hypothesis in days of the hereditary emoluments dispensed as per the civil list and the like. Mirrlees (1971), Atkinson (1973) and Atkinson-Stiglitz (1980, 2015) were among the first to demonstrate how a reasonable interpretation of the dependence of work incentives on tax rates, direct restrictions on the nature of admissible tax schedules, and on the design of the utilitarian framework, and combinations thereof, lead to different results as to the rate of progressivity of the 'optimal' income tax schedules.

3.2 *Ability vs Benefit Principles of Taxation*: Although Smith articulated his first maxim identifying equality to be consistent with exaction in 'proportion to their respective abilities', awkwardly Musgrave views it as advocating either the 'ability-to-pay' or the 'benefit' based view of equity in taxation (1976, pp 396-7). In view of Smith's overall architecture of taxation, we do not agree with the above conjecture.²³ The truth is that Smith too was the originator of the idea of a 'benefit rule' of taxation, but not in the context of *direct* taxation. In enumerating the duties of

²² Edgeworth's analysis is well captured by an extensive discussion in Musgrave's celebrated text (1959, Ch 5).

²³ Musgrave may have mis-read the second part of Smith's interpretation of the 'ability to pay': in proportion to the revenue which they respectively enjoy under the protection of the State. We take the latter to mean that ability be measured by the lawful revenue, such that both the earnings and to its entitlement were made possible by the legal apparatus of the State. There is no reason to construe that protection provided by the State which facilitates the earning of income by citizens would command a fee to be paid in return, i.e., thereby offering a benefit interpretation to the income tax demanded by the State. Smith indeed reserved the benefit tax idea only to the financing of public works and infrastructure of primary benefit to industry.

the sovereign, Smith (1976b) realised that the third element, infrastructure ('publick work and institutions') necessary 'to facilitate the commerce' would require substantial revenue (in contrast, for example, to the maintenance of law and order). He could not bear making more impositions on the Treasury, and, in that spirit, commanded that such outlays may in part be financed by 'tariffs and tolls'. The manifest purpose of tolls and tariffs, therefore, was to alleviate the 'general revenue of the society' (Coutinho, 2005, p11). Coutinho sums up the point as "if public works produce an indisputable individual benefit, their beneficiaries should at any rate participate in the defrayal of the expenses" (p29). Smith even conceived that the administration of these 'tariffs and tolls' be entrusted with local authorities, who would presumably oversee the provision of maintenance of the public work anyway. The latter point may be one of the early advocacies toward fiscal decentralisation by Smith.

Smith did however argue that one could build in a notion of 'equity' in the setting of tolls in two steps, first, definitionally in that the user would only avail the service if the gain to commerce afforded by public work was greater than the toll, and secondly, due to that "his payment is exactly in proportion to his gain" (Smith, 1976a, p. 725). He however offered no clue how this matching of perceived gain with the toll in the guise of a 'benefit tax' would be achieved, Logically, one could argue that the entrepreneur would utilise the facility till at the margin the gain was made equal to the incremental cost, namely the toll. However due to lumpiness etc, reaching the optimum utilisation would not be feasible for all users, certainly not for minor users. In any event if indeed the toll payments were in exact proportion to the perceived gain, this would correspond to a Lindahl equilibrium. Erik Lindahl (1919) was the first to explore formally a mechanism for the *de facto* market provision of public goods, though with known preferences. In a Lindahl equilibrium, everyone's voluntary willingness to pay for a public good (measured by her marginal rate of substitution of the numéraire good [read: money] for the public good in question) added up to the marginal cost of the latter's provision. This is an outcome reflecting a Pareto efficient allocation when the domain of goods in an individual's choice set has been expanded to include public investments as further clarified by Johansen (1963) and Samuelson (1954, 55, and 1958). The proportionality of Lindahl price can be invoked only to add an additional degree of freedom to meet the budgetary constraint, which may require a re-scaling of the individual marginal rates of substitution (MRS). Incidentally, Groves and Ledyard (1977) have generalized the Lindahl process by starting off with unknown preferences, which has attracted a vast literature of its own with many refinements of late.

What has all this got to do with equity or distributional neutrality for that matter? None whatsoever! Many of the writers (Smith included) believed that the principle of making taxes²⁴ equal (even 'proportionately') the benefits received as *quid pro quo* would lead to equitable taxation. The fact that

²⁴ Where relevant, we shall use the terms 'benefit tax' or a 'Lindahl price' synonymously.

'equal benefits' call for 'equal tax' does in no way lead to distributional neutrality since these payments reflect only the degree of craving a person has for the public good in question vis-à-vis her compatriots. It tells us nothing how the individual MRS related to the level of income or consumption enjoyed by her. To repeat, two individuals with an identical income, but different tastes, would volunteer very different sums, hence very different proportions of their income, to match their own MRS for the public good in question. In sum, there is no equity here as no account is taken of one's wellbeing; we have an *efficiency* rule pure and simple. Hence the phrase 'the benefit view of equity', as it occurs even in the contemporary literature, is a misnomer, period.

A final remark on the limitations of the benefit principle of taxation is in order. The principle, typically practiced in a presumptive mode in the contemporary context, is meant to finance the maintenance of bridges, roads and highways, public parks etc. These benefit levies, in effect user fees, therefore, serve as revenues *earmarked* for specific purposes, often outside of the general budget.²⁵ Even then the initial outlays for implementing large public investment projects are almost always financed by public borrowing to be eventually paid off in future from general revenue of the State. The point is that the benefit principle cannot be used as a system of taxation as no general revenue can be raised in this mode, say to pay for civil administration, public spending on health and education, maintenance of law and order, to say nothing about redistribution. Even among the classical economists of the day, Mill and many others did not think much of it either (as claimed by Edgeworth, 1897).

3.3 *Measurement of Ability: Consumption or Income*? The preceding section demonstrates that Smith's 'ability' principle emerges as the only viable principle within which one must pursue the question of an appropriate tax structure and refinements thereof. The key question that emerges next, is how to measure ability.

While it may be tempting to claim that Smith's remark that ability can be 'measured by revenue which they respectively enjoy', may denote either income or consumption. Enjoyment of revenue can literally be construed to imply consumption spending, and indeed Smith when describing his theory of utility, he treated the latter as consumption. However, as Musgrave observes, in laying down the principles of taxation, he relates equity "in terms of income (i.e., income from all sources) rather than in terms of consumption" (1976, p397).²⁶

Here Mill offers a great contrast. He was indeed the first economist to have forcefully endorsed consumption as the appropriate tax base by granting full exemption of savings (S) from all taxation regardless of a person's income level, 'in order to do complete justice' (Ekelund and Waker, 1996).

²⁵ Generally, these are termed 'non-tax' revenues.

²⁶ Musgrave (1976, p397) further points out that Smith was opposed to consumption taxes on account that "they do not always fall equally or proportionably upon the revenue of all individuals" (Smith, 1976a: p358).

Mill saw through the 'double' taxation of savings implicit in income (Y, made up of both labour earning and the return on capital) as the tax base in that first the earnings were taxed, and then once returns accrued to what was saved, that (capital income) too was taxed a second time. He was determined to encourage savings, which he took as the source of investment funds and 'improvement of the labouring classes'. In other passages, it seems Mill too acquiesced in accepting income as the tax base in practice possibly believing that the alternative was difficult to implement in terms of logistics (as for example was the case with Robert Haig as explored more fully below).

Though Ricardo was the one to enshrine his concern for sheltering savings from taxation as one of his three criteria of taxation, he feared that heavy taxation of consumption may itself lower saving without offering much of a rationale. In the end he too appears to have become indifferent to the choice between income or consumption as the right tax base. It may indeed be claimed that Ricardo had lost his heart on taxation matters, while on one hand believing taxation was a necessary evil in view of unavoidable expenditure of the State (and he had excellent company on that front), but at the same time believing that none of the feasible tax instruments could satisfy the three criteria that he felt were indispensable. As Dome observed, Ricardo gave up any attempt to establish a taxation system derived from his abstract theory (2000, p243). He was thus quite literally lost between a rock and hard place, and thus chose to take, one may add profitably for mankind, his thoughts elsewhere.

Thus, the issue of tax base could not be resolved by the classicists, and indeed, though progress have been made, it remains a matter of debate as of the present. Robert Haig (1921) appears to be among the first in modern times to lend support for consumption as the tax base of choice. As Wildasin (1990) has taken pains to explain that Haig believed that *consumption expenditure* would be a better measure of true income than measured income for he viewed income as the flow of utility from current consumption. He famously questioned: "Is his income the dollar, or is it the dinner itself, or is it the satisfaction of his wants which he derives from eating the dinner" (Haig, 1921, p2)? He concluded that a monetary measure of the increase in satisfaction would be the value of consumption services (C). Irving Fisher in a series of writings, forcefully argued that double taxation of saving implicit in the income tax base renders it unsuitable as a candidate for measuring the 'ability' or the 'capacity' to pay criterion of taxation (1939, p17).

However, Haig thought it would be difficult to measure C accurately, and hence the need to turn to Y, a view that modern economists hold as incorrect. The modern view notes that the simplicity in observing consumption arises from the obvious truth that consumption necessarily equals income *less* savings (i.e., C = Y - S), hence the cash flow. Thus, all we need is lump together wages, interest,

dividends, and proceeds from the sale of assets to arrive at income and then deduct saving.²⁷ As Bradford (2005) puts it, "... Only cash transactions are needed. Accruing gains and losses on assets and liabilities have no bearing on the measurement of current consumption" (p18). Moreover, one can keep track of saving in individual registered accounts as is currently being done in many countries, notably Canada (via its Registered Retirement Savings Program, RRSP) and the US (e.g., via the Individual Retirement Account, IRA).²⁸ Below we return to the issue of the choice of tax base in the context of tax reform (section 7).

3.4 *The 'Least Cost' Method or the Efficiency Criterion*: From an analytical perspective, Smith's fourth maxim, namely 'least cost' means of raising revenue is the most pragmatic of an idea that has far reaching implications. In modern terminology, it is called the *efficiency criterion*, as cited in the introductory paragraph of this section. This calls for designing a system of taxation, especially that on commodities, that creates least aggregate distortion in consumer or producer behaviour. Practically all taxes distort relative prices and marginal costs of commodities, and consequently, rational agents (both consumers and producers) alter their behaviour. While consumers would attempt to choose more of the relatively cheaper commodities, firms would tend to produce more of the pricier goods utilising more of the cheaper inputs into production. In the process they suffer net 'welfare/efficiency loss' (e.g., measured by consumer/producer surplus in partial equilibrium) over and above the tax payment. While the Treasury gains the tax revenue, the private sector remains stuck with the welfare/efficiency loss.²⁹ The latter is known as 'excess burden' or deadweight loss (DWL) of taxation. Cleary only goods in fixed supply or demand

²⁷ Note that the definition of income for determining consumption need not coincide with the 'comprehensive income' or *accretion* income idea advanced by Schanz (1896) and Simons (1938). The latter requires the tracking of net asset values on an accrual basis.

²⁸ A common feature of these programs is that savers gain up-front tax exemption on the funds they can deposit, which are taxed fully upon any withdrawal (both capital and the return thereon), ideally in retirement. The 'net contribution' to the registered account, if positive is deemed savings and remains tax exempt, while if negative, it is deemed consumption and is subject to taxation, all in real time.

²⁹ Considering one good in isolation, it is easy to verify that Dupuit's intuition nearly 200 years ago was spot on. If we hold marginal cost to be constant (i.e., a horizontal *industry* supply curve), given any downward-sloping Marshallian demand curve, the initial equilibrium can be described by (p_0,x_0) . The post-tax equilibrium leads to a new market price, p_1 that is just (p_0+t) , and a lower quantity, x_1 . The change in *consumer surplus* due to the tax is therefore the sum of (i) the tax revenue so raised, x_1t (a rectangle) and (ii) a triangle equalling $(\frac{1}{2})(\Delta p.\Delta x)$, or $(\frac{1}{2})(t.\Delta x)$, since Δp is merely the tax (t) and $\Delta x = (x_0-x_1) < 0$. Netting out the revenue, the DWL is thus $(\frac{1}{2})(t.\Delta x)$, "... it is possible to find an upper limit to the amount of the utility lost by multiplying the change in consumption by half the tax" (Dupuit, 1844 [1969, p277]). Even if we modify the supply curve to incorporate a rising MC-function, the above intuition remains intact even though $\Delta p = t$ no longer holds. Now $\Delta p = (p_1-p_0)$, while the final price $p_1 = (p_0^s + t)$, where p_0^s is the net price producers receive as the consumers reduce the quantity purchased, $p_0^s < p_0$, but still DWL = ($\frac{1}{2}$)(t. Δx). For a more detailed analysis of the DWL idea see Auerbach (1985), duly noting the misprint in Figure 2.3 (p58) therein; (the final price has been mislabelled). The Marshallian analysis however falls apart even if when we extend the analysis to just two goods and one must adopt the Hicksian concepts of *compensating* and *equivalent variations* to satisfactorily measure DWL. Harberger (1971) however contends that for the measurement purposes, the consumer/ producer surpluses would do just fine.

would not incur DWL upon taxation. Smith's cleverness is evident as he implicitly called for the minimisation of DWL, ideas that became transparent only in the 20th century, when he demanded to "keep out of the pockets of the people as little as possible over and above what it brings into the public treasury".

Ricardo was opposed to indirect taxation altogether by his requirement of 'price neutrality', which can in principle be maintained only in an extreme situation where all goods were taxed at an identical *ad-valorem* rate. The latter would be hard to accomplish on political grounds (e.g., a tax on 'baby formula') and, fundamentally, also because leisure, a basic good enjoyed by all, cannot be taxed. Thus, the Ricardian edict, if taken literally, would at one stroke preclude most forms of indirect taxation, leaving only lump-sum taxes such as the poll tax in play. Given that no sizeable revenue can be raised by means of capitation, one may reasonably interpret Ricardo's wish for price neutrality to mean the same as Smithian efficiency, namely, to minimise the DWL induced by price distortions. In any case, Ricardo too echoed Smith's warning against efficiency losses; "more may be raised from the people, than what finds its way into the coffers of the State" (1817, pp 234-5). Ricardo however particularly stressed production inefficiency, while Smith's concern was broader.³⁰

In recent decades, the efficiency loss criterion has been adopted in the analysis of the overall composition of taxes (say between direct and indirect and more minutely on the make-up of both direct and indirect taxes). The modern literature on optimal indirect tax has, since the original pathbreaking contribution by Frank Ramsey (1927), been focussed on efficiency, which has been broadened to include the ideas of equity by Diamond and Mirrlees (1971a, b) and Diamond (1974) and by many since then.

3.5 A Sum Up: The preceding discussion looked in some depth into the key aspects of the early literature (mainly Smith, Ricardo, and Mill) on the principles of taxation. The major takeaways are as follows. (i) While most thinkers hailed 'equality' as an avowed goal of a tax system, their failure to endorse redistribution as a goal in itself, and hence the unwillingness to allow a robust scope of taxation in the nation's life, lest it retards growth, held them back from recommending full-throttle progressive taxation. (ii) While there is a bit of unnecessary muddle in the debate on 'ability' vs 'benefit' as a basis of how much tax one should be assessed, the qualified winner was ability. Though the erroneous view that somehow the benefit principle can be endowed with an equity interpretation continue to mar progress on this front. (iii) When it came to measuring ability,

³⁰ There may be good reasons to worry more about production inefficiency. In the optimal tax literature, there is an indication that direct taxes on consumption goods can be made more or less uniform, and thus less distortionary, while taxes/subsidies on productive inputs are necessarily discriminatory by design. For example, the payroll taxes make capital more attractive as an input in production, not to speak of the myriad of investment incentives both outright and via favourable treatment of depreciation etc (Stiglitz, 1973).

Smith stuck to income, while both Ricardo and Mill leaned toward consumption as the better indicator of ability. This debate has proved to be an enduring one, which is still very much alive. Both Canada and US have moved closer to the consumption base, though in fits and starts rather than by following a well-orchestrated roadmap. Only when it came to (iv) indirect taxation, the great classicists were unanimously determined to strive for economic efficiency, i.e., recommending a system that in, modern parlance, inflicts the least excess burden on the citizenry.

There was not much of a debate in the literature on the compliance friendly tax collection procedures implied by the second and the third maxims of Smith, which were intended to save harassment of the citizens by the State except, of course, "...the unavoidable one of being obliged to pay the tax" (Smith, 1976a, p. 834). Awkwardly, we note in passing that the *certainty* criterion appear not enforced by many developing country tax administrations. In many cases, including BGD, any excess payments (or, equivalently, excess withholding by the exchequer) are not automatically returned to the taxpayers in real time. The 'convenience' criterion requires the State to allow taxpayers a reasonable amount of delay in coming up with the money.³¹ This is especially relevant for those facing an irregular frequency of income flows, e.g., whose receipts are dependent on seasons, or, more generally those engaged in fishing, agriculture or activities exhibiting idiosyncratic shocks. Instalment payments are often commonly employed to meet such contingencies in advanced tax systems.

In a modern outline of the principles, as stated at the start of section 3, we added the criterion of taxes being 'politically responsible' as well as being consistent with 'growth and stability'. While the political acceptability of any level of taxation was a major hurdle in the days of Smith and Ricardo, tellingly the spectre of a substantial tax agenda, as common in the advanced country context, is frowned upon by the political right. Liberal governments have to work hard to implement expansion of healthcare, improve public pensions, or the quality of early public education (e.g., day care) in the face of stiff opposition by opponents of 'big government'. Finally, regarding 'growth and stability', while preserving growth was a paramount concern of the classical scholars, who generally viewed taxation as an evil, the modern focus, since the Great Depression and the birth of Keynesian economics, has centred on the stability of the macroeconomy over the economic cycle. The stress on tax-expenditure policies to guide the economy through boom and bust has strictly been a 20th century phenomenon and beyond, so much so that Richard Musgrave

³¹ Most tax codes allow individuals an additional, often several months (e.g., four months in Canada while 3.5 months in the US) beyond the end of the accounting period, typically the calendar year, to pay the tax due for the period in question.

found it prudent to devote roughly a third of his 1959 opus on the 'stabilization branch' of the government.³²

4. The Idea of Taxable Capacity

4.1 *Taxable Capacity (TXB): A Definition.* Despite some early attempts reviewed below, not many have defined 'taxable capacity' with an economist's precision, leaving it to essentially convey its vague literal meaning. It is of course a conceptual idea, which we have introduced already in section 2 above. We expand on the theme by advancing a preliminary definition: *taxable capacity denotes the share of GDP that a nation, in view of its evolving structure, can potentially raise as taxes, under certain ideal conditions, and without 'undue burden' on its taxpayers.* The fundamental structural elements would encompass the composition of sectoral output in the economy and its growth trajectory, the level of per-capita income, the distribution of income in society, and the level of public debt.³³ In a growth context, the pattern of shifts in output (e.g., among agriculture, industry, and services, and more finely, between manufactures destined for home consumption and exports) would indicate where the future tax revenues may be harnessed from. Finally note that the quantum of TXB would evolve with the economy; it is therefore time dependent.

The ideal conditions can be non-exhaustively defined to include, (a) the application of technology in revenue administration commensurate with its income status (LMIE/UMIE etc), (b) that the level of governance (i.e., control of corruption, rule of law, regulatory oversight) be no weaker than that of its peers, (c) that the tax structure has undergone fundamental reforms, so that the former has been rationalised over time in keeping with the evolving economic structure (more on this below).

How to interpret the 'undue burden' in this context? Primarily we refer to the idea of both efficiency and equity.³⁴ The efficiency aspect deals with the notion that rates of taxation be set so that the taxpayer retains the incentive to continue earning more income or continuing consuming taxed goods despite the level of taxation in force. An extreme example of undue burden would be

³² The implications of the last two points in this paragraph for the modern-day developing economies, say of South Asia, are dealt with in the context of tax reform analysis in section 7 below. There we argue that these economies have no option but to grow their revenue yield significantly over time in order to finance public spending that is necessary to engender faster growth of the private economy. These economies, by and large, are not intimately linked to the global macroeconomy primarily due to capital controls, and thus are less prone to the contagion of international business cycles. That however still leaves all exposed to shocks of wars and similar disruptions, where we examine how public policy can have a productive role.

³³ While Kuznets (1942) was the first to link debt profile to the taxable capacity idea, it was Kaldor (1963) who raised the role of income inequality in the context. See below.

³⁴ Alan Prest (1977), for example, likened taxable capacity as "... connected with the amount of tax which could be justly or fairly imposed on an individual ..." (p 465). Our interpretation of 'no undue burden' is however more nuanced as spelled out above.

the case where the tax rates were so high as to induce a fall in the tax yield, namely the so-called 'Dupuit-Laffer phenomenon'.³⁵ The equity concern arises from the idea of progressivity, namely that those earning higher incomes be subjected to higher rates of tax than those below the step.³⁶ Thus, the tax burden ought to be equitably (i.e., in the vertical sense of the term) spread among all.

Historically, the literature however appears to have described taxable capacity within a rather narrow focus. We briefly review these antecedents and examine what one can learn there.

(a) *Income and Surplus Income*: The first impression that one gets from a review of the literature is that TXB of a nation depends on some measure of a nation's income. Early writers such as Simon Kuznets (1942) noted that the tax-GDP ratio in the US rose from 4% in 1860 to 23% in 1938, a period over which the real income of the country rose by nearly 17 times. He thus believed that the taxable capacity was intimately related to the size of the GDP. Relying on some notion of the surplus of income over essential spending (including the acquisition of private capital), much as in a command economy, he projected the maximum size of taxable capacity to be about 31-33% of GDP in the immediate post-war US context. The latter figure was much in excess of what was being collected then.

(b) *Efficiency Loss*: Kuznets himself however cautioned that even if such a high level of taxation were feasible, it did not necessarily imply it were desirable on grounds of economic efficiency, namely DWL associated with taxation as touched upon in the preceding section. However, the chief difficulty with the surplus idea lies elsewhere as explored in more detail in section 4.2 below.

(c) *Debt vs Tax*: He also made the important point that taxes and (private) debt were competing means at the disposal of the government to withdraw resources from the private economy. Thus, a low-debt country could be lax about taxes and borrow to build its infrastructure, but that window would substantially close once debt obligations become substantial. Hence the

³⁵ While popularly known as the Laffer phenomenon, the idea is due to Jules Dupuit [1844 (1969)], who had observed that under certain conditions the revenue (T) as a function of the tax rate (τ), T(τ), may start at zero when $\tau = 0$, but it may reach a maximum at some $\tau > 0$, and then start declining as the tax rate rises further. In effect the T(τ)-function would be bell shaped. In particular, if the supply of work hours can be written as a linear function such that no work is offered till the wage rate reaches a positive amount ('the reservation wage'), the tax revenue from proportional taxation of labour income at the rate τ becomes a quadratic function in τ yielding the bell shape, where the revenue function reaches the maximum level before the tax rate reaches 50% (i.e., the first derivative, T'(τ) = 0 for $\tau < 0.5$). In such a context, one can claim that a tax rate approaching anything like 50 % imposes an undue burden. Incidentally, Laffer himself never claimed originality for demonstrating the possibility described in this footnote.

³⁶ Though single-minded focus on efficiency in the optimal income tax literature (while allowing for redistribution to those unable to work or only earning below the survival level) may lead to deviations from this simple rule since the Minister has to keep track of the evolving work incentives in response to taxation of both the highly skilled as well as those below the ladder (Mirrlees, 1971).

taxable capacity of a nation cannot in all honesty be discussed in the absence of a digression on the notion of a viable debt policy. Debt profile is therefore a fundamental element determining taxable capacity as we have captured above.

(d) *Role of Inequality*: Kaldor (1963) too likened the taxable fraction of GDP to depend on the surplus output à la Kuznets, though he believed that TXB would deviate from the GDP-nexus on account of inequality in society. He highlighted the presumed highly unequal accrual of net income from capital and land by the private owners of such assets, especially in the Latin American context. He reasoned that most of the latter wealth was being spent on 'luxury consumption', and not saved, and hence ripe for heavy taxation. Thus, the taxable capacity of a relatively poor country need not be commensurably low; it all depends on the prevailing degree of inequality. He also believed that lacking adequate tax instruments or the administrative wherewithal, many developing countries rely on tools such as the income tax on salaries and wages that often target those at the bottom tiers of income distribution, while the rich getting away with untaxed property income facilitated by endemic corruption.

4.2 *How to Operationalise the Concept of Taxable Capacity*? This is the first 64\$ question we dwell on in this paper. First, we note that though Kuznets undertook a monumental task in estimating the likely size of the 'surplus' in the advanced economy context, this is not a feasible route nor an analytically challenging path, mainly because the idea of 'surplus over essential' remains nebulous in nature. This is more so in a developmental context, where the citizens continually crave for access to a wider range of commodities commensurate with a rising living standard, and the material means to acquire the same. We believe that such a concept is a non-starter in the present time. Second, instead of national income, as already proposed above, it is the per capita income that should be the relevant measure of capacity. Further in a cross-country context, the relevant per-capita income ought to be the constant PPP value, as adopted in the recent IMF analysis cited below.

(a) *The Early Empirics*: While Harley Hinrichs (1966) was among the early economists who offered some practical estimates of the taxable capacity while discussing how the tax structure of a nation evolves as it develops in terms of per-capita income.³⁷ Focussing on 30 developing countries,³⁸ with data much outdated by now (1957-60) and utilising the tax structure prevailing at the time, he regressed the tax effort on the 'explanatory' variables, namely, (a)

³⁷ Martin and Lewis (1956) and Oshima (1957) had carried out analysis of the Hinrichs type at about the same time, while much later, Le et al (2008) also followed up with similar analysis with new data and suggested that "... taxable capacity is the predicted tax-GDP ratio estimated from a regression, taking into account the country's specific characteristics (p. 385). What are the 'specific characteristics' of a country?

³⁸ The definition uses per-capita income below USD 300 in 1960, which has the purchasing power of about 3,000 USD at present. This would appear to describe mostly the current LMIEs, not LIEs.
openness of the economy, (b) per-capita income, and (c) cultural/geographical straits. This analysis led him to predict that a "rough rule of thumb that the government revenue share is equal to 5% plus one-half the openness ratio" (1965, p.551). The focus on 'openness' arose from then prevalent disproportionate dependence of developing county revenue systems on one category only, imports (both goods for direct consumption and the machinery, parts, and other material inputs to production). Import duties were the mainstay of national finances for long, regardless of the distortions that such levies, especially on the input side, created on the evolving economic structure.

By Hinrich's metric, in view of the 2022 trade data, BGD tax/revenue-GDP should have been 21.9%, about thrice the actual level of 7.56 percent in 2022.³⁹ What about India? Given the much higher openness, the target here is also formidable. The predicted tax effort comes to 29.98 percent, against the actual level of about 18%.⁴⁰ Though Hinrichs titled his paper as a 'General Theory', it comes up short at many levels. He went on to conclude that "for less-developed countries openness, not per capita income, is a key determinant of government revenue shares'' (1965, p554). And that a much higher income, something approaching 9K in current USD (750 as of 1960) would be 'sufficient' to meet/exceed tax effort of above 18%. This too has been proven to be off the mark. India has already reached that level at a much lower income, i.e., at 2022 per capita GDP of (current) USD 2,366. The LAC region, which reached Hinrich's 'threshold of criticality' in 2004, did so at a level of per-capita GDP of not more than USD 5,000 (and has never looked back). In contrast, many countries with the threshold income (i.e., 9K) or more still exhibit much lower tax/GDP ratio today (e.g., Kazakhstan, Malaysia, Singapore, ...).

A more fundamental difficulty of tying the openness concept to the observed tax effort arises from the fact that, unlike the earlier epochs, trade patterns have radically shifted such that much trade has been occurring in intermediate goods even in LMIEs. To wit, Viet Nam's openness is close to double its GDP. In sum, the Hinrich type of empirics do not appear to offer good predictions simply because the original estimates were tied to data reflecting the tax structure focused on customs duties on the import of final consumption goods and on inputs meant for direct use in the production/service sectors that prevailed some 60 years ago. Even emerging

³⁹ The trade openness data is taken from WDI, which is consistent with the more detailed breakdown made available by WTO (https://stats.wto.org/). For calendar 2022, for which latest data is available, the BGD openness ratio was about 33.8 Percent, and thus the taxable capacity would be half of the latter, i.e., 16.9 plus 5, that is 21.9%. The calendar 2022 tax/GDP ratio is calculated by adding up half the values for FY22 and FY23 (see Table A1 in the appendix). The actual FY22 tax effort was 7.73%, while the data given in GoB (2024, p50), Table 4.2 (revised), allows us to calculate the actual tax/GDP ratio for FY23 to be 7.38 precent.

⁴⁰ The Indian openness figure for 2022 is reported to be 49.96% by WDI.

countries are known do have undergone significant changes in the economic structure and with that they have reformed their tax systems.

(b) *The Optimal Tax Literature*: Insofar as PIT is concerned, one may want to turn to the literature on optimal income tax à la Mirrlees (1971) for guidance. His numerical illustration yielded rates of tax generally on the low side, reaching a maximum of 34%, while the average rate was below 20%, as opposed to much higher rates prevalent in high income countries at the time. In part dismay, Mirrlees had remarked: "… I must confess that I had expected the rigorous analysis of income taxation in the utilitarian manner to provide an argument for high tax rates. It has not done so" (p 207). If one took the above analytical finding seriously and accepted the average tax rate of 20% as desirable, further interpreting 'income' to mean both labour and capital income, a major leap of faith, it can be likened to GDP.⁴¹ Thus 20% can be a construed to be the ideal taxable capacity.

The awkwardness of this route going forward is three-fold. First is that we do not have robust empirical estimates of basic parameters needed to validate the Mirrlees type of optimal tax analysis in a developmental context. The latter would include elasticities of supply and demand along commodity groups, the gender differentiated estimates of labour force participation, and of the supply of effort, measures of wage dispersion by skill level etc. Secondly, the optimal tax rules are generally devised for each major tax categories (e.g., PIT/CIT/VAT ...) and thus to utilise these individual results to gauge the overall TXB would prove arduous. Additionally, in the determination of tax rates, especially that on goods and services (e.g., VAT/GST), the exercise can only be undertaken once one specifies the revenue goals first, and hence we have a circularity problem here.

(c) *Recent IMF Analysis*: Last but not the least, the IMF has gotten into the game of estimating taxable capacity from regressions of the Hinrichs type (Hinrichs, 1965; Le et al 2008). Benitez et al utilise the stochastic frontier methods to estimate the maximum tax potential (i.e., the frontier) by "controlling for country characteristics including GDP per capita, the size of the agriculture sector, and, importantly, government effectiveness and the perception of corruption in the public sector" (2023, p8). They use IMF's latest World Revenue Longitudinal Dataset (WoRLD) that encompasses 157 countries over the period, 1990–2021, as well as other data from WDI and IMF sources.⁴²

Benitez et al (2023) utilise the above dataset and estimate the taxable capacity for the Low-Income Developing Countries (LIDCs) at 19.9 % (without social security contributions, SSC)

⁴¹ We must admit that Mirrlees only considered labour income in this paper.

⁴² Though the dataset is possibly the best of its type, for many countries the tax revenue only relates to that collected at the federal level only, not for the entire tax system. This renders the dataset somewhat anomalous.

for 2020.⁴³ In contrast the actual collection was merely 13.2%, i.e., about two-thirds of the potential. Were the LIDCs able to achieve the governance effectiveness scores of the average 'emerging market economies' (EMEs), the authors go on to forecast that LIDC tax potential would have increased by an additional 2.3 percentage points, reaching a lofty 22.2% of GDP. These projected figures appear to be on the high side, especially in view of the existing record in South Asia as we examine in more detail in the next section.

In terms of methodology, the chief innovations vis-à-vis earlier attempts at estimation seems to be the replacement of current dollar income with the constant PPP income and the inclusion of governance factors. As is the case with these studies the devil is in the details. The analysis ignores, among other, the relative size of manufactures, which is often the source of faster growth and hence a predictor of enhanced tax revenue down the road. Another omission is the quality of tax administration, especially the level of IT innovations in the practice of tax compliance, which many hold to be of critical importance. Also missing are elements of the evolving economic structure beyond agriculture, e.g., the share of the informal economy and the level of public debt.

Shortcomings notwithstanding, Bhalla (2022) took an issue with earlier estimates from a smaller dataset, 2011-2019, that IMF used to predict taxable capacity for a set of countries that included IND, though not BDG. The predicted figure for IND for 2019 was 15.6%, whereas the actual take was 16.7%, indicating an excess tax effort of 1.1 percentage points. Bhalla went on to claim that IND may be taxing too much! Indeed, in Fiscal Year (FY)-20, the realised ratio of 16.7% for IND was much higher than that of many with much higher incomes percapita (e.g., CHN, IDN and MEX).⁴⁴ However using the IMF estimates, one could extrapolate that by FY22 for which we have actual data, the predicted IND tax ratio should have been 20.0%, all else equal, which is actually higher than the realised figure of about 18%.⁴⁵ The tax

⁴³ It is awkward that the classification of country income/development standing differs between the WB and the IMF. In contrast to WB groups (LIC, LMIE, UMIE, and HIE), IMF's Fiscal Monitor categorises 195 countries in its dataset into 41 'Advanced Economies' (AEs), 95 as 'Emerging Market Economies' (EMEs) and the remaining 59 as 'Low-Income Developing Countries' (LIDCs); see https://www.imf.org/external/datamapper/datasets/FM. BGD is here shown to belong to LIDCs, while IND is included in EMEs. The WoRLD appears to have adopted the IFM definitions. The World Economic Outlook, IMF's flagship publication appears to have moved onto a more inclusive definition of 'Emerging Market and Developing Economies' (EMDEs), where the latter encompass both BGD and IND.

⁴⁴ Our own analysis finds the FY20 tax-GDP ratio to be 16.1% (Table A2). Using the latter figure, it would seem that there was no real difference between the predicted level of 15.6 per cent and 16.1. Also note that the IMF data related to annual revenue, while the GDP ratios cited here is for the fiscal year.

⁴⁵ The 'extrapolation' arithmetic goes as follows. It is plausible that between 2019 and 2022, there has been no appreciable change in the non-income control variables (namely, corruption, governance effectiveness, the share of agriculture in GDP etc), and thus we start by assuming that the parameters estimated by Benitez et al (2023) would have remained stable by the addition of two more years of data. Recall that constant-2021 per capita PPP GDP income in IND rose from 7,964 to 8,594 between 2019 and 2022 (WDI data), i.e., an increase of 7.9%. The econometric results cited here indicate the mean GDP elasticity of tax revenue to be about 2.5 (Benitez et al 2023, Annex Table 2,

effort has stabilised at 18% even as write in 2024. Thus, any overreach in IND tax effort was not sustained!

(d) *The Tipping Point Literature*: Before turning to a review of actual tax yield data of BGD and LMIEs, let us touch upon a recent idea of a possible 'tipping point' in tax revenue, which underscores the criticality of a quantum of taxable tax effort for an emerging country. Gaspar et al (2016) asked if a minimum tax effort was associated with a significant acceleration in the pace of economic growth. Drawing upon econometric advances initiated by Card et al (2008), these authors use historical data to claim that the realised tax/GDP ratio is positively correlated with (i) GDP per capita (e.g., as in Wagner type hypothesis), (ii) legal capacity (measured by property rights parameters and regulatory quality), and negatively with (iii) the weakness of public administration (measured by corruption index as reported by the Transparency International).

Using "a novel contemporary database covering 139 countries from 1965 to 2011", Gasper et al find "... that once the tax-to-GDP level of the average country in our sample reaches around 12.88 percent, its real GDP per capita increases sharply and in a sustained manner over several years" (2016, p29). Based on their 'preferred' specification, these authors discover that real per capita GDP would stand at around 7.5 percent larger in a country just above the threshold after 10 years than a similar country just below it (p30). In view of the evident volatility of the per capita income over time even among similar countries, their 'standard recommendation' for "countries with low tax-to-GDP levels" is "to aim for levels about 15 percent" (p30).

While targeting a tax-effort figure as touted by Gasper et al (2016) appears to be consistent with the adequate provision of education, public health, technology, and physical infrastructure necessary for an LMIE embarked upon a growth trajectory, we find the underlying data used by these authors to be of questionable quality.⁴⁶ They have put together the database from a variety of sources, some reporting only central govt data, others for the entire fiscal system. A second, and more fundamental observation is that their findings are based on mere statistical patterns in the 'observed' data; the authors provide no logical argument how a threshold tax-GDP ratio of 12.75 % becomes a harbinger of faster future growth.

p29), the implied increase in the tax-GDP ratio would be about 19.8% higher, i.e., going up from 16.7 percent in 2019 to 20.0% in 2022. The actual tax revenue of IND in FY22 was 17.67% of GDP (Table A2 in the appendix below).

⁴⁶ For example, it claims BGD having crossed 12.88% threshold in 2011, which is grossly incorrect. OECD, which reports perhaps the most accurate data has been examining the tax record of BGD since 2007. In 2023, it reviewed data over the 2007-2020 period, and reported that "the highest tax-to-GDP ratio in this period was 10.8% in 2013, and the lowest 8.4% in 2008" (OECD, 2023). This has been further revised down in 2024 as we discuss further in section 5.2 below.





Source: Blog by Raul F. Junquera-Varela and Berard Haven, (18 Dec 2018), Photo: Tony Webster/Flickr. Graphic: Nicholas Nam/World Bank [https://blogs.worldbank.org/governance/getting-15-percent-addressing-largest-tax-gaps].

(e) *Inference for BGD*: If PPP income (i.e., per capita GDP) were to be the principal guide of how much revenue there ought to be as in the IMF studies cited above, BDG's obligations would be a notch below India's. Per-capita PPP GDP (constant 2021 figures) for BGD in 2022 stood at 7,805, about 9.2% lower than that of IND (8,594). On a linear interpolation,⁴⁷ the above arithmetic suggests that BDGs tax/GDP ratio in calendar 2022 should have been about 15.4% vis-à-vis the predicted value of 20.0% for IND. In sharp contrast, the 2022 BGD actual yield was mere 7.6% (Table A1 below).

To conclude this section, and pending further econometric analysis with accurate data, we conclude that the potential taxable capacity for BDG lies somewhere in the range 15-20% as of FY22. This necessitates a correction to the figure of '15%' marked on the flag hoisted on the summit in Fig 4! The above range encompasses the Gasper et al (2016) recommendation of 15% as its floor, the Benitez et al (2023) determination of taxable capacity of 20% as the ceiling and situates the 15.4% predicted by our interpolation methods vis-à-vis the IMF estimates in its interior. Thus, it is not overly dramatic to characterize the current state of BDG tax effort to be an

⁴⁷ Using the estimated tax-GDP elasticity of 2.5, the income differential translates to a 23% difference between the tax effort of the two countries, i.e., $20 \times 0.77 = 15.4$. It should also be noted that the present interpretation assumes that the level of control variables used by Benitez et al (2023) such as the share of the agriculture sector in the economy as well as the governance indicators are about equal between IND and BGD, which is broadly correct.

alarming one, more so that the ratio has effectively remained stagnant over the past five decades or so and has even registered a declining trend of late. (See section 5.2 below for additional details.) This contrasts sharply with a secular increase in the tax effort in IND over the past decade, except for the dip in COVID years, which has fully recovered and stabilised at about 18% by 2022 (Table A2).

5. The Lowness of Realised Tax Revenue

5.1 Some Preliminaries

(a) 'Basic services' vs the Welfare State: Given the persistent low tax yield in BDG, one may dismiss the above guidance on BDG taxable capacity of 15-20 percent of GDP as mere hyperbole. Let us turn the question on its head, and ask how much revenue would the Minister of Finance require in order to meet the demand for public expenditure? A blunt answer would be that this is the least that is needed to provide 'basic services' as interpreted above. Building a true welfare State must remain a distant dream. Following the discussion in the introductory section, below we engage in some arithmetic of the incremental revenue that would be required to deliver the State's commitments toward UHC, education, human capital and technology, and infrastructural investments consistent with the targeted faster growth of the economy.

A rapid assessment exercise yields figures in the 15-18% range of GDP as the desired tax-GDP ratio. In this pursuit, one can utilise the key figures put out by global agencies. WHO is known to call for raising the total annual health spending to 5% of GDP in LLMIEs to realistically embark on the path to universal health coverage (UHC). Setting a target of 50-percent as the public share of out-of-pocket (OOP) expenses would entail a budgetary allocation of 2.5% of GDP (against the current level of 0.66%), that is about an additional two-percentage points. Similarly, UNESCO calls for educational spending of between four and six percent of GDP. Taking the mean figure of 5-percent, the shortfall here is about 3.25 percentage ponts. This already takes the required tax effort from the current 7.5 percent range to about 13-percent. Adding in the gap in infrastructure spending (including IT) of anther two-to-three percentage points, we are already at the 15-16% level. While the nascent 'universal pension scheme' reaches a state of maturity, i.e., when the number of pension recipients contributors equal or exceed the number of eligible pensioners, this would add a new burden on the treasury, though it is too early to predict the likely figures.⁴⁸ The required level is therefore not too dissimilar from the potential taxable capacity as has been analysed in the preceding section, namely something in the 15-20% range of GDP.

⁴⁸ Note that the taxable capacity literature for emerging economies typically avoids bringing in social security obligations of the State into purview.

(b) *Data Issues*: Now, turning to a review of developing country revenue data, we must clarify a few points. First, note that most tax revenue data cited below relate to 2022, the latest available in terms of actual figures instead of some version of the 'target' data, commonly highlighted in BDG budget documents.⁴⁹ Next we recall that though 2022 was past the pandemic, arguably tax revenues may not necessarily have climbed back to their long-run path. Where possible, e.g., in the discussion of the tax structure (Section 6), we enquire into more recent data, e.g., FY23, and then only in the BGD-IND context.

Further note that internationally comparable and mutually consistent data is not easy to obtain; especially since WDI, which otherwise is an excellent source of time series data of an economic nature, typically reports fiscal data for the central government only, which for federal States, creates havoc.⁵⁰ Therefore, where possible we cite OECD tax data, which is more carefully put together, though it primarily focuses on its much-wealthier member countries. Additionally, most multilateral agency data relate to calendar years, while country-specific data are reported on a fiscal-year basis. Finally note that most tax data we highlight below exclude social security contributions (SSC). The latter revenue, being earmarked, cannot be used to fund general government expenditure.⁵¹

5.2 *How Low are Tax Revenues Today*? Some 60 years ago, Lord Kaldor (1963) cited the developed country tax effort to have been between 25-30%, while underdeveloped ones sitting in the range of 8-15%. How has that picture changed in the interim? In 2022, the OECD average level of taxation of its 38 members, mostly in the HIE group, was 34.0% of GDP as seen in Figure 5. However, even in that group, the actual range lay between 16.9% in Mexico (UMI) to 46.1% in France (https://www.oecd.org/en/data/indicators/tax-revenue.html).

What about LMI economies? Table 1 offers a comparative picture of the 2022 level of tax effort and per-capita incomes for selected regions including South Asia (SAS), the focus of the present discussion. The African average tax effort in 2021 is seen to be 14.1%, at least for the 33 countries in the OECD database (OECD, 2023).⁵² Asia-Pacific tax effort in 2022 stood at 17.8% of GDP, while for the Latin America and the Caribbean (LAC) zone it was very similar at 17.9%. SAS

⁴⁹ It is awkward that GoB (2024) continues to highlight 'target' data for FY23 (Table 4.1), while the verbal description on the same page reveals that the actual figures were significantly lower (as in Table 4.2). This lack of transparency makes it harder to discover the 'actual' data even *post-facto*. By contrast, in Indian budget statements, past data is routinely highlighted in actual terms (e.g., GoI, 2024).

⁵⁰ We have already remarked on similar gaps in the data utilised in IMF staff research, e.g., that undertaken by Gasper et al (2016).

⁵¹ SSC constitute a sizeable portion of total tax revenue in advanced economies but are negligible in most LMIEs as they are yet to embrace the pay-as-you-go (PAYGO)-type social insurance schemes where public pension entitlement of the currently older generation (i.e., the retirees) are borne by those currently young (i.e., workers of the day) via SSC. For the OECD group, SSC amounted to 9% of GDP in 2021, i.e., about 26.5 % of total tax revenue.

⁵² OECD is yet to update the African data for the 2022 calendar year.

average (10.8%), even counting only five of the richer nations, comes in at the bottom of the regional data in the Table.⁵³





In terms of the income status, the average LAC per capita GNI of about USD 8,500 puts it in the middle of the 2022 UMI range (4,096 to 12,695). SAS-5 average per-capita GNI stood at 2,800 in 2022, well above that of Africa (excluding high-income countries), though in tax effort, the former lags significantly behind. WDI data suggests that the mean per-capita GNI (Atlas, current USD) in 2022 for this group was about 1,650, i.e., near the bottom of the LMI range. Thus, we see that 60 years on, the tax effort of LMIEs, as evidenced by the recent Africa and SAS-5 experience, still sits in the 8-15% range observed for 'underdeveloped' countries by Kaldor.

South Asian Tax-GDP ratio (2022): OECD (2024) yields 2022 revenue figures for BTN (11.3), BGD (7.5), PAK (10.0) and LKA (7.4), but leaves out India.⁵⁴ Exploring national data sources for FY22 and FY23 allows us to arrive at the tax effort for 2022 calendar year for IND to be at 18.0%. The arithmetic is summarised in Table A2 in the appendix. When combined with the OECD data,

Source: OECD (2024)

⁵³ Though Maldives happens to be the only SAS economy in the UMI category, it is too specialised and is endowed with a very small population rendering it unsuitable for any reference in the discussion that follows below. Hence, we abstract from this case altogether.

⁵⁴ Using actual revenues only, we find the tax-GDP ratio of BGD in FY22 and FY23 to be, respectively, 7.73% and 7.38% (appendix Table A1), thus yielding the rate for calendar 2022 at 7.56%, which is very close to the figure posted by OECD at 7.5%. Note that BGD fiscal year runs from July 01 to June 30 of the following year.

we obtain the simple average of 10.8% for the SAS-5. The latter figure is however buoyed by the relatively high ratio for IND.

Indicators Group	Tax Effort (% GDP)	Per-capita GNI (Current USD)	Per-capita GDP (2021 Constant PPP)	Income Status (GNI Atlas) ⁵⁵
Africa (33) ^(a)	14.1	≈ 1,600 ^(b)	≈ 4,375	LMI (low)
Asia-Pacific (36)	17.8	≈ 13,500	≈ 17,500	UMI (high)
LAC (27)	17.9	≈ 8,500	≈ 19,000	UMI (mid-range)
So-Asia, SAS (5) ^(c)	10.8	2,800	9,878	LMI (mid-range)
BGD	7.6	2,820	7,805	LMI (mid-range)

Table 1: Tax Effort and Per-capita Income (2022 average)

Source: Author's construction based on data from OECD, WDI, GoB and GoI sources. *Notes*:

- (a) The tax effort data excludes social security contributions, if any. The figures in brackets in clolumn-1 denote the number of countries as reported in OECD (2024), though the African data related to calendar 2021, the latest available. In case of SAS, only 5 countries (namely, BGD, BHT, IND, LKA, and PAK) have been accounted for.
- (b) All GDP/GNI data is taken from WDI. The approximate equality (≈) sign indicates that the income in columns (3) and (4) were estimated by the author. Since the OECD country groups do not strictly match the WDI definitions of the same region, and often there are multiple definitions, we have taken the average over them all. Thus, the Asia-Pacific income data is the weighted average of 'East Asia and Pacific (EAS)' and 'South Asia (SAS)'. The African GNI/GDP figures relates to 2021 since its tax data relates to 2021.
- (c) South Asian tax data is based on OECD (2024) that left out IND. The author has constructed the reported figure from GoI-RBI sources (Table A2 below). Here we also use the BDG tax effort of 7.6% as determined using latest data as in Table A1 in the appendix.

Table 1 reveals that any nexus between tax effort and per-capita income, whether the GNI (Atlas) or the constant PPP, is tenuous at best. BGD and IND, having similar incomes, differ widely in tax effort. The relatively high tax effort in Africa may appear intriguing. Countries in North Africa such as Morocco and Tunisia distinguish themselves as high taxers, where the tax effort in 2021 was 27.1 and 32.5%, respectively. Their 2021 per-capita GNI was in the USD 3,500-3,600 range, which puts them at the higher reaches of the LMIE threshold.

While LKA has been sidelined by the recent economic crisis, the BGD tax-effort appears to have remained dormant in the most recent 16-year period for which we have comparable high-quality data (Table 6, OECD 2024). OECD has revised down the historical tax effort figures for BGD in its most recent data release vis-à-vis the 2023 publication (OECD, 2023 and 2024). It now states that "from 2007 to 2022, the tax-to-GDP ratio in Bangladesh increased by 1.2 percentage points from 6.3% to 7.5%. The highest tax-to-GDP ratio in this period was 7.7% in 2017, and the lowest

⁵⁵ The WB classification criteria for LIEs, LMIEs, UMIEs and HIEs have been spelled out in footnote 9 above.

6.2% in 2008" (http://www.oecd.org/tax/tax-policy/oecd-classification-taxes-interpretative-guide. pdf).⁵⁶ Thus the BGD tax effort is not only among the lowest anywhere, but it has also been stubbornly so over a long period.







5.3 *Hypotheses Behind the Lowness of Revenue*: The second 64\$ question we raise is why the tax yield is so low in LLMIEs, and glaringly more so in BGD.⁵⁷ Worse, the tax effort in BGD has essentially remained dormant over the past five decades or so; (see Ahsan, 1995b and the data presented there).

Some hypotheses on low tax-effort are taken up here for analysis.

H1: The tax yield is low in LLMIEs because they are poor, i.e., low per-capita GDP.

H2: The tax yield is low in LLMIEs because both the tax base and tax rates were too low.

H3: The tax yield is low in LLMIEs because they have larger share of the economy under the informal sector.

H4: The tax yield is low in LLMIEs because they do not have all the right 'tax handles', namely the tax structure is out of step with the evolving economy.

H5: The tax yield is low in LLMIEs because they have weak and corrupt tax administration.

H1 *Lowness of Income*: Both the preceding discussion of taxable capacity, and the comparative data presented in Table 1 confirm that the link between tax effort and the per-capita income is weak. Of course, HIEs generally have a higher tax effort in part due to their commitment to universal healthcare, education and social security. We also note Kaldor's reservation on the same hypothesis. He had remarked that the distribution of property income was skewed disproportionately accruing to the elite regardless of the economy's income status. And thus, the

⁵⁶ Since in the 2023 document it was claimed that the highest tax effort till calendar 2021 of 10.8% was reached in 2013, which has now been reduced to about 7.5%, this reconfiguration could not have been due to the rebasing of the GDP in 2021 which led to an increase of about 20% in the previously reported GDP data all the way back to FY16.

⁵⁷ The first 64\$ question we had raised, just to keep track of the parable, related to the operationalisation of the taxable capacity idea.

prevailing level of inequality would by itself signal the potential taxable capacity of a nation, which has clear implications for the contemporary BDG. The high land values, urban, rural, and even agricultural, are concomitant with rising rental incomes, and would result in land transaction values much in excess of inflation. Neither of these potential tax handles are exploited adequately given the weak tax code and even weaker enforcement.



Figure 7: Tax Effort and GDP per capita (constant 2021-PPP), in Asia-Pacific, 2022

Source: Author's construction based on OECD (2024) Asia Pacific tax data and (constant-2021) PPP GDP from WDI (downloaded on 30th July 2024).

Note: All OECD data excludes social security contributions (SSC), while the Indian tax data is taken from Table A2, unadjusted for any SSC, which would have been negligible in any case.

Figure 7 depicts the co-movement of per-capita GDP (in 2021 constant PPP) and tax effort (minus SSC), both for 2022, based on a dataset we have put together, which consists of 26 countries in Asia-Pacific for which we have comparable data.⁵⁸ As the figure illustrates, there is little pattern in the data, period. In the per-capita GDP below 10K (PPP), the tax effort varies between 7.5 to 17.9 percent for the largest four SAS economies; that between 10-16K, we have six countries with the tax effort lying in the range of 7.3 to 19.2 percent, and so on.⁵⁹ Thus, the first hypothesis can be expediently dispensed with as being false.

⁵⁸ The set consists of 26 of the original 36 countries included in OECD (2024) Asia Pacific study, for which we have consistent data on variables other than the tax effort (e.g., per capita PPP GDP, share of the informal economy etc). The 26 are ARM, AZE, AUS, BGD, BTN, CHN, GEO, FJI, IDN, IND, JPN, KAZ, KOR, KGZ, KHM, LAO, LKA, MDV, MNG, MYS, NZL, PAK, PHL, SGP, THA, and VNM. Since SSC data was not available for KHM, KGZ and LAO, Figure 7 is based on a smaller set of 23 countries.

⁵⁹ Using tax data inclusive of SSC, and hence a sample of 26 countries, also yields a similar outcome of no pattern between tax effort and income, which we do not present here for the sake of brevity.



Fig 8: Tax Rates and Tax Effort (Besley & Persson, 2014)

Source: Figure 8 is taken from Besley and Persson (2014), which in turn is based on data on statutory tax rates compiled by Gordon and Lee (2005) and from revenue data put together by Baunsgaard and Keen (2005) for a 67-country sample.

H2 *Low Tax Rates vs Low Base*: While this hypothesis mainly refers to direct taxes, which is still a modest source of revenue in LLMIEs, the scope of significantly raising the tax-effort in the near future has to pass through innovations in this front. Gordon and Li (2009) observe from their dataset, though somewhat dated by now, that large differences in the tax effort between rich and poorer countries cannot be explained by the differential statutory rates of taxes except for the PIT, where the highest MTR did indeed differ a lot between HIEs and LMIEs (43 vs 35 percent, respectively). For other taxes, the percentage rates were indeed similar, CIT (30 vs 27) & VAT/GST (15 vs 16).⁶⁰

It is plausible that given the relative newness of the culture of tax compliance, high tax rates, either PIT or CIT, would be resisted vehemently, and thus major changes would be politically infeasible. The highest PIT marginal rate in BGD stands at 25% while it is 30% in IND; both however also imposes a surcharge on very high incomes, at least on paper. Most companies in both these countries end up paying CIT at rates lower than their respective highest PIT rates; rate increases will be difficult in a scenario where business owners wield significant political power. Particularly

⁶⁰ In the BDG context, the highest rates of tax in FY 2023 (in percentages) were 25 for PIT, 20 to 27 for CIT, and 15 for VAT. There are of course the supplementary duties on imports and selected commodities.

in recent decades, a majority of lawmakers in BGD have been known to directly benefit from forprofit-business via *de jure* or *de facto* ownership.

Besley and Persson (2014) cite recent empirical evidence to suggest that the low tax yield in LMIEs is primarily due to the narrow tax base, and not the tax rate as similar rates yield a wide range of revenues across countries. For example, a tax effort of about 18% seems to accrue for a very wide range of PIT rates between 15 and 60 percent. The figure suggests that broadening the tax base, rather than changing the tax rates, would be the key to increasing tax revenues in LMIEs such as BGD (p.105). The issue of base broadening, in effect disallowing tax expenditures, is taken up later in the tax reform section.

H3 *Informal Sector*: How large are these and why they matter? Estimates of the size of the informal economy, often referred to as the underground (or shadow) economy, UGE, has been contentious with different sources yielding contradictory figures. Recently (9 January 2024) the World Bank Prospects Group released data on the share of UGE in GDP over the period 1990-2020 for a large number of countries (www.worldbank.org/en/research/brief/informal-economy-database). The group has developed estimates based on both econometric modelling as well as those obtained from observed labour force data and miscellaneous opinion surveys (expert, firm, or household). Below we highlight the two model-based estimates, namely the Dynamic General Equilibrium (DGE) and what they call 'Multiple Indicators Multiple Causes' (MIMIC) model. These methods utilised by the Prospects Group have been fully described in an earlier research document by Elgin et al, (2021). One advantage of using the model-based estimates is that these are available for the same date for all countries in the sample, while the surveys are historic data carried out, if at all, at different times for the relevant country and many have been done a long time ago. We use the UGE data for the latest period, i.e., 2020.

Figure 9 illustrates the consistency between the DGE (X-axis) and MIMIC (y-axis) estimates for the 26 Asia-Pacific countries as detailed above, where each dot represents a unique country with (x, y)-values. If the estimates were identical for each county, i.e., X=Y, we would have obtained a 45-degree line. Mutual consistency is guaranteed by the fact that none of the dots strays far from the trend line on either side, which appears a little flatter than 45-degrees, implying the scale effect, though not the gradient. In the DGE measure of informality, the values range from 8.0% for China to a high of 58.2% in Georgia, while in the MIMIC estimate, the lowest value goes to Japan (10.2), but GEO remains at the top with a score of 61.8%.

Let us turn to the evidence between informality and tax effort. La Porta and Schleifer (2014) argue that tax avoidance happens to be an important motive for remaining informal, which would suggest a strong inverse relationship between tax effort and UGE share of output. Gordon and Li (2009)

were among the first to examine the issue with data that would appear somewhat out of date now.⁶¹ The presumed lower tax yield in economies with large informal sectors must suggest that the 'net tax effort', i.e., tax effort as a share of formal GDP (not the total), would be much higher than the actual effort. Gordon & Li's data shows that the LIE's 'net' effort, assuming that all tax revenue is obtained only from the formal component of the economy for all countries, rich or poor, is about 19.2% (vis-à-vis the actual level of 14.1%) while that for the HIEs it was 29.1% (vis-à-vis 25%).⁶² Given that the gap in observed tax effort was 10.9 percentage points (i.e., 14.1% vs 25%), for the net effort, it now reduces marginally by one percentage point to 9.9, (i.e., 29.1-19.2).



Figure 9: Estimates of the Asia-Pacific UGE, 2020, the DGE and MIMIC

Source: Author's construction based on WB (2024) data

Figure 10 illustrates the 26-country Asia-Pacific 2022 tax data that has a mix of all income groups (LMIEs and above) and correlates that with the recent (2020) data on the share of UGE, where Bangladesh is represented by the point (x,y) = (25.7,7.5). This attests to a mild negative relationship, all else equal.⁶³ At face value, the data suggest that a 10-point decline in UGE (say for 30 to 20 percent), would result in a modest gain of 1.2 percentage points in tax effort. This is broadly consistent with the earlier finding of Godon and Li, suggesting that reaping revenue gains

⁶¹ They used income and tax data for the period 1996-2001 and Schneider's UGE data for 1999 (Schneider, 2002).

⁶² The methodology behind calculating the 'net tax effort' is open to debate. Gordon and Li implicitly assume that GDP configuration for both rich and poor countries adequately take into account the full scope of the informal economy, though taxes are levied only on the formal component. In fact, firms in the informal economy in all settings would end up bearing some indirect taxes, especially of the broad-based VAT/GST type, on the purchase of inputs (raw materials and intermediate goods) which they cannot claim back as the final product is sold in the informal mode. ⁶³ Figure A1 in the appendix presents a similar chart with the MIMIC measure of informality, which also reveals a negative slope, but slightly steeper than in Fig 10.

from chipping away at the UGE is a taxing proposition. Even then it would be imperative to examine how the various segments within the UGE can be brought under the tax net possibly aided by the adoption of new information technology.



Figure 10: Tax Effort and the Share of the Informal Economy (DGE), 2022

Source: Author's construction based on OECD (2024) Asia Pacific tax data and WB Prospects Group's data on the share of the informal economy in GDP in 2020.

We note that the limited data analysed above, namely just 26 countries, does not however allow much of a generalisation. Even then, it follows that the large gap in tax effort between the HIEs (e.g., OECD) and the LMIEs implies that there is more to the story than the difference in the level of informality in their economies. In other words, the path to exploiting the full taxable capacity of 20% or so, as per the analysis of Benitez et al (2023), LMIEs and Bangladesh in particular, must do more. The next two hypotheses may offer further insight.

H4 *Inadequacy of Tax Handles*: We firmly believe that countries with tax efforts much lower than their peers or vis-à-vis their predicted taxable capacity (say, as per the Benitez et al exercise), suffer from an inadequate and outmoded tax structure. In other words, the tax handles have failed to evolve over time in consonant with both the structure of the economy as well as the capability of the tax administration. Indeed, Musgrave and Musgrave observed long back that the paucity of tax handles explain the observed low tax effort in LLMIEs (1989, pp126-7). However, this is the subject of the next section, which adorns the title of the paper. We thus postpone this all-too-important analysis till later.

H5 *Weak & Corrupt Administration*: The political economy literature on the nexus between low tax effort and weak governance is vast.⁶⁴ In an important paper, Besley and Persson (2014) make several valuable observations.

(a) Empirically they find that corruption, presumably via tax avoidance and tax evasion, is correlated with a low tax effort (p107).

(b) The absence of a strong compliance norm means that any given statutory level of taxation will raise less revenue than would otherwise be expected (p.116).

(c) They compile evidence that supports the claim that for many developing country governments "the motive for holding power extends far beyond the ability to determine taxes" (p. 109). Focus on political expediency may require that the influential people be kept out of the reach of the tax laws, or more generally shield such persons from prosecution against financial fraud and the like. Such a pattern of governance would induce both poor compliance by anyone who feels politically empowered, and engender weak enforcement of the tax code, regulatory directives, and other laws since the relevant administrative personnel, upon observing the preferential treatment of some individuals, may take license to resort to corruption on a wide scale. In some other contexts, the dedication to raising revenue often gets muted by the dependence on foreign aid. However, the latter feature appears to have been on the back foot for some time in the BD context, though some countries still suffer from large aid-dependence in the LMIE group.⁶⁵

(d) Means Testing in Redistribution: Ordinarily citizens may accept taxes more readily if they believe that some of the funds would be spent on providing pressing transfers to the needy (e.g., those unable to work, the destitute, and the like). Enumeration of the needy (often termed those 'below the poverty line' in the South Asian context) may itself be fraudulently conducted by design. Thus, in a politicised context, the public may not be so forthcoming when it comes to complying with the tax laws in the apprehension that that "... transfers may instead be directed at key political constituencies, who often are not at the lowest income levels" (p.109).

The recent OECD (2024) report on Asia-Pacific tax revenue has also stressed, beyond the question of tax structure, the scope of tax policy and the capacity of tax administration in determining the tax effort of nations. Specifically, it claims that the capacity factors affect the size of the tax base,

⁶⁴ See the references cited by Besley and Persson (2013, 2014).

⁶⁵ Ther are concerns however that the promotion of the 'belt and road initiative', BRI, by China over the past decade has trapped some in the debt trap. The Wilson Centre estimates that 80% of China's government loans to developing countries have gone to nations in debt distress (https://www.wilsoncenter.org/blog-post/debt-distress-road-belt-and-road#). The Sri Lankan story is all too well-known, but the crisis there arose in part due to the government's effort to raise taxes in order to service the debt.

the level of satisfaction with public services and tax morale (i.e., the willingness of people to pay taxes). It also cites an earlier study by Aizenman et al (2019) which found that tax-to-GDP ratios in Asia were positively correlated with government effectiveness and institutional quality, points also made by Benitez et al (2023) in the taxable capacity context.

We thus conclude this section by observing that neither low income or nor low tax rates were *per se* the reasons for the low tax effort in an LMIE like BGD. Instead, (a) a dormant tax structure (to be more fully examined in the next section), (b) the substantial burden of an informal economy, and (c) weak/corrupt tax administration were among the chief culprits. While the above review identified the low tax base as also restraining the tax effort, that may be the outcome of either the absence of fundamental tax reform and/or governance weakness mainly in the form of low tax morale, tax expenditure, widespread tax evasion and tax avoidance. While the tax structure issues are dealt with next in section 6, we discuss the remainder of the issues under the 'tax reform' debate in sections 7 and 8.

6. The Tax Structure Question

6.1 *The Tax Structure Concept*: What do we mean by 'tax structure'? In a unitary system, the tax structure question merely boils down to the evolving *composition* of tax revenue within the overarching goal of reaching a certain share of GDP. In a federal system of government, in addition, one must also dwell on the relative scope of revenue to be raised by the central and subcentral entities (e.g., provinces). In the latter context, the choice of tax instruments and revenue mandates are often guided by constitutional provisions of the federation (e.g., in Canda/US).

In a growth context, it is evident that the tax composition ought to evolve with the pace and pattern of economic growth so that all available tax handles receive the keen attention of the Minister of Finance. In a mature economy, the determination of an ideal/optimal tax structure may largely imply the identification of revenue-neutral perturbations of the tax instruments so as to achieve the desired degree of 'efficiency loss' or 'equity' through the tax system. However, given the presumption of inadequate revenue yield of many LMIEs, the ideal tax structure issue entails that the taxing authority design the perturbations that prove revenue-enhancing. The latter may often require what may be termed fundamental tax reforms, not merely the adoption of modern technology, minimise in-person encounters in setting and settling tax liability, and related administration-compliance measures. The latter ... 'softer'... elements of tax administration may nevertheless succeed in generating much needed additional revenue, but we discuss that later in the paper (section 8). The key focus in this paper, indeed our third 'sixty-four dollar' question relates to the discovery of a suitable tax structure that befits an aspiring UMIE.

A priori, it would seem imperative that one track the faster-rising sources of economic gains in society as the economy progresses and design measures to tap these sources. Kaldor (1963) to his credit talked about the emergence of 'industrial and commercial wealth' as the economy develops and the necessity to tax these effectively. Design of workable PIT and CIT are critical to access such emerging incomes in society. Adequate taxation of capital income (i.e., interest, dividends, rents, and capital gains) by individuals as well as businesses, property income and related transactions would form core aspects of that suggestion. It also implies that the tax reform agenda has to be a nimble enough to be re-purposed as the necessity arises.

Hinrichs (1966) type of analysis however is a non-starter since it was backward-looking. Why must the emerging economies of today emulate the behaviour of the HIEs of yesterday? One does not learn how the tax structure ought to evolve just by observing how it has evolved in history. To wit, the service sector role in LMIEs 50 years ago were much lower than it is today! Later in his book however Hinrichs correctly observed that as the various tax bases change with continuing economic development, both the rates and as well as the forms of taxation ought to change. But he offered little in terms of concrete analysis of how the tax structure would or should evolve.

6.2 Lessons from Economic Theory: What does economic theory, and in particular, the optimal taxation literature tell us? One of the early recommendations has been to rely on, (i) lump-sum instruments (both taxes and transfers) to the extent feasible since these do not distort resource allocation (Burgess and Stern, *op cit*). In terms of lump-sum instruments, beyond rations, head/poll taxes, taxation of land emerges as a major example that can be of quantitative significance, though it may deter land development. We return to the latter topic in due course (section 7).

Monetary theorists recommend (ii) little or no reliance on the inflation tax ('*seigniorage*') in financing public expenditure, thereby not imposing any real cost to holding money balances (Friedman, 1969). ⁶⁶ Inflation tax has been argued to impose a disproportionate burden on the poor, who typically do not enjoy much indexation benefits, and on the savers. ⁶⁷ Even though economists

⁶⁶ Given the necessity of a positive real interest rate to go with positive output growth, Friedman (1969) argued that a country ought to optimally choose a deflation rate sufficient to generate a nominal interest rate close to zero, thus ensuring that there are no real costs to holding onto liquid cash.

⁶⁷ Obstfeld (2012) defines *seigniorage* revenue (e.g., denoted by, R_g) as the command over real resources that a sovereign government can acquire by printing/replacing fiat money (at negligible real cost) that the public demands for their transaction purposes (www.eml.berkeley.edu/~webfac/obstfeld/e202a_f12/seigniorage.pdf). Thus, the seigniorage revenue at time-t is given by $R_g^{t} = [(M_t-M_{t-1})/P_t]$, where M denotes the nominal money stock and P-the price level. Hence revenue arises out of monetary growth. Inflation at time-t (π_t), can be defined by $\pi_t = [(P_t - P_{t-1})/P_t]$, which, note the denominator, measures the loss of purchasing power as fraction of current prices, not the point-to-point inflation. Recognising that ($P_t - P_{t-1}$) = (1- π_t), we can rewrite the revenue equation as $R_g^t = [(\pi_t m_{t-1}) + (m_t - m_{t1})]$, where m denotes the real money balance held by the public, (M/P). Thus, it is seen that there are two sources of seigniorage; the first is the inflation tax (i.e., the capital loss incurred by those holding cash) and secondly, the desire to hold increased real balances on account of increased prices.

decry the reliance of the Treasury on *seigniorage*, Gordon and Li (2009) data reveals that such revenue accounts for between 22-25% of total government revenue of LLMIEs. Though the OECD data cited above (section 5) does not identify the inflation tax openly, it stays hidden inside all revenue categories (especially VAT and other taxes on goods and services). Thus, the scope of reaping seigniorage via money creation ought to be of limited scope due to the risks of high inflation as for example happened in South America in the 1980s.

In recent financial developments in BGD, the decision to fix interest rates both on bank borrowing (maximum 9 percent nominal) and lending by investors (maximum 6 percent nominal) has led to a major turmoil. The policy, in effect from April 2020 to Dec 2023, has been withdrawn. However, in its three-year reign, it played havoc with the macroeconomy. The flood of cheap money, aided by shocks of war in Europe and post-COVID supply adjustments, amounted to a perfect storm resulting in CPI inflation shooting above the 9-percemt mark by August 2022, and remaining elevated till now, 9.72% as of June 2024 (BB, 2024). This contrasts with the fact that over 2020-21, the twelve-month inflation rate had remained dormant in the 5.5-6.0 range. Thus, savers faced negative real return on their fortune for most of this period of monetary profligacy. This is precisely what Milton Friedman had warned against over 50 years ago. Therefore, as Burgess and Stern (1993, p769) remark, there are 'no viable, long-term, and substantial alternative' to raising actual taxes to finance government expenditures.⁶⁸

The optimal tax literature has dwelt separately on each of direct (e.g., Mirrlees, 1971a) and indirect taxation (e.g., Diamond and Mirrlees, 1971a, b) and combining the two in a holistic manner (e.g., Atkinson and Stiglitz, 1976). The overall thrust of optimal income tax models, which allows redistribution targeting the low-skilled, appears to be its non-linearity admitting many tax brackets, though not necessarily a traditional convex schedule. An awkward outcome of Mirrlees' findings is that the top rate on the most skilled falls to zero, thereby implying that once a high-income threshold (Y_H) has been reached, any further income attracts no additional tax at all, and thus the optimal tax system for this group becomes lump sum in nature. ⁶⁹ However the Mirrlees model had assumed a bounded skill distribution, and Saez (2001) has argued that once the skill distribution is assumed unbounded, the optimal rate of tax on high earners can indeed be very high, even in excess of 50%. Of course, there have been many innovations over the years upon the

⁶⁸ We have already discussed the issue of debt finance in the introductory section.

⁶⁹ Let us expand on the argument with an illustration. Let the most skilled person/group (say the IT folks), given a tax schedule T(Y) with positive MTR in all upper brackets, chose to earn Y_H . The tax payable on Y_H would be determined as, $T(Y_H)$, call it T_H , which is a fixed number, i.e., a scalar. If the MTR is now made zero for any excess income, say $Y^{*>}Y_H$, $T(Y^*) = T_H$ since $Y(Y^*-Y_H) = 0$. Thus, in response to the lowering of MTR, there will be no loss of revenue that the government earns from this group, T_H , per person. And if they choose to earn Y^* , the workers must be better off, a Pareto-superior outcome. Hence the original T(Y) with MTR > 0 on $Y > Y_H$, could not have been Pareto-optimal. "If those near the top elect to work more in response to the change, then they are both better off and pay more tax, so that the argument is reinforced" (Stern, 1984, p.358).

original Mirrlees contribution, but most analysts find the recommendations, being sensitive to model specifications, not practicable in most scenarios, let alone the LMIEs.

The story with the theory of optimal taxation of commodities is however entirely different. Many attempts have been made to implement the recommendations there. Gordon and Li (2009) point out the major recommendation, namely, (iii) uniform taxation of consumption goods, but no tariffs, nor any tax on capital income.⁷⁰ However, as Burgess and Stern point out, the case for uniform taxation of commodities lose grip on grounds of equity if the existing system of transfers in favour of the needy are inadequate. In such a situation, it is recommended that indirect taxes be adjusted in line with the consumption pattern of households differentiated by their means. LMIEs may encounter timely and reliable household spending data that needed to inform policymaking.

Though tariffs have long been held as selectively promoting infant industries, from an analytical perspective these are frowned upon since they distort both consumption behaviour (in case of imported consumption goods) and production, where the imported items include intermediate goods and/or industrial raw material. Hence any tariff on intermediate input ought to be rebated at the VAT/GST level. Burgess and Stern (*op cit*), however, observe that tariff elimination is a long-term goal, namely till adequate revenue can be raised from taxing final goods only via VAT/GST. Quotas are uniformly discarded by analysts as switching them to equivalent tariffs allows revenue to accrue to the Treasury at the expense of the intermediaries.

Input taxation would put the domestic industry at a disadvantage from the export competitiveness. The next advice is (iv) that there be no tax on intermediate goods, not even at uniform rate; otherwise, different producers would face different relative prices since the intensity in which such inputs are engaged in production varies from one industry to another. There is a presumption that distortionary taxation of inputs (including intermediate goods) into production would inflict greater DWL than raising a similar revenue from taxation of final consumption.⁷¹ Further, Diamond-Mirrlees (1971) optimal indirect tax analysis recommends that a tax structure will preserve production efficiency under plausible assumptions so that there will be no differential taxes on the domestic production of goods of different industries, which negates a role for (v) excise taxes, which are necessarily selective. However, it is easy to justify excise taxes on goods on grounds of external diseconomies, namely via consumption of energy, narcotics, and the like.

⁷⁰ Atkinson and Stiglitz (1976) showed that as long as an economy can flexibly choose the personal income tax rates, then it need not choose differential tax rates on the consumption of different goods. The suggestion of no tax on saving, i.e., capital, stems for the presumed efficiency of unform taxation of goods both for current consumption and in the future. The latter is necessarily financed by saving, a full-throttle discussion of which calls of an intertemporal model, which we shall mostly avoid in the present context, though see Appendix-2 on the choice of tax base, income vs consumption.

⁷¹ The argument also extends to the case of uniform tariff on imported intermediate inputs (Stern, 1984, p367).

The theoretical unease over CIT has simply been that all corporate income ultimately belongs to individuals in the shape of bond interest and dividends, and hence PIT is adequate for the purpose. The undistributed profit namely retained earnings, which serves as the source of capital gains, also accrues to the shareholders once they liquidate their assets, in effect injecting a time lapse between the accrual of gains and their realisation. Some liken the CIT as a withholding tax to be credited once individuals file their income tax returns disclosing all corporate source income. Nevertheless, the CIT remains alive and well. In the advanced economy context, with the free flow of capital, and for that matter footloose corporate head offices, corporate profits seem to have gravitated toward countries with low tax rates. In July 2021, a landmark agreement was announced at the G20 finance minister's meeting which pegs CIT at the rate of 15%, modestly higher than then existing Irish rate of 12.5%. The accord has been embraced by 138 countries to date (including Ireland). The rates in LMIEs are typically much higher. However, with capital controls in place, mostly do not yet face the transborder issues of profit shifting except in case of FDI and joint ventures, which over time can be sources of significant revenue loss unless remedial measures have been planned.

The above review of economic theory provides a rough guide to the design of tax policy in a developmental setting. The suggestions of a greater reliance on lump-sum taxes (including the land tax) and redistributive transfers, whenever feasible, and minimal recourse to the inflation tax in garnering revenue are very well taken. No tax on intermediate goods is another non-controversial idea. Gradual weaning out of tariffs towards the taxation of final consumption goods is also a well taken advice. Uniform commodity taxes (e.g., VAT/GST) is to be generally practiced, though exceptions are permissible on distributional grounds.⁷² Excise taxes typically do not fall in the latter category, *au contraire*, they typically hurt the poor disproportionately. Theory is generally ambivalent about the design of the PIT, while a low rate is recommended for CIT as seen above.⁷³

6.3 *Empirical Research*: While the above remarks mainly relate to the analytical literature, many reputed economists have indulged in numerical estimation of DWL of specific taxes, especially in the advanced country contexts. Arnold Harberger, a pioneer in such work, undertook estimation of the efficiency loss of many taxes both for the US as well as for Chile.⁷⁴ In particular, he had estimated the DWL of the CIT in the US (in the 1960s) to be of the order of 0.5% of GDP. Given that the CIT revenue counts for about 6% of GDP (i.e., about USD 443 billion in 2023), this would

⁷² These ideas are also evident in the advice that World Bank and IMF have been generally recommending in recent times, which are also aligned with the analysis of Newbury and Stern (1987).

⁷³ Modern public economics scholars recommend cash-flow basis for taxing both personal as well as corporate incomes, and in section 7 below we shall review both the logic as well as its feasibility in an LMIE context.

⁷⁴ Harberger's role in promoting research on the measurement of efficiency loss of economic policies had become so entrenched in the literature that the DWL triangles have been named after him, 'Harberger triangles', even though in some contexts the triangles transform into other shapes such as trapezoids.

translate the DWL to come in at about 8.3 percent of revenue raised by this tax (about USD 37 billion in 2023), not an insignificant magnitude.⁷⁵ Hines (1999) believes that the Harberger estimates have stood the test of time surviving the many sophistications that later writers have brought forth in the measurement methodology.

Laffont (1998) had argued that in a developmental context, the efficiency loss of taxation are much higher than those in advanced countries since tax reforms, both of the tax administration and of the underlying tax structure, remain deficient.⁷⁶ He believed that administrative reforms (e.g., audits and inspections) are difficult primarily due to a lack of qualified human resources and by corruption, while the tax system adds to the woes by remaining detached from its latent optimal structure that would be compatible with the available information technology due to political resistance by the agents of influence.⁷⁷ We examine the latter issue in the context of tax reform below.

6.4 *The Evidence so far*: The observed picture is however quite different from what the 'high' theory tells us. Gordon and Li observe that almost no real-world tax system resembles the predictions of economic theory cited above. The HIE tax systems however do carry some flavour, exhibiting very low tariffs and low net revenue from CIT to ward off capital flight (typically via generous offset of capital losses and low tax on capital gains). Furthermore, even though HIEs have retained selective excise taxes (e.g., on tobacco, gasoline, and alcohol), one can rationalise these by making a favourable argument of internalisation of consumption externalities.

What about LMIEs? Table 2 illustrates the 2022 tax structure of BGD in a global perspective. For the tax categories, we shall use OECD acronyms as follows: Beyond PIT and CIT cited above, we have social security contributions (SSC), value-added tax (VAT), goods and services tax (GST), other taxes on goods & services (OTGS), and other taxes (OT). We can further group the first three (PIT/CIT/SSC) as direct taxes (DRT), and the next three (VAT/GST/OTGS) as indirect taxes (IDT). Note that SSC too are assessed on earnings, i.e., employment income. However, as noted already, the SSC revenue remains earmarked for the actuarial integrity of social insurance programs, and thus, are not available for the exchequer for general expenditure.

⁷⁵ The calculations cited here utilizes 2023 US GDP of 27.26 trillion USD as reported by the Bureau of Economic Analysis (BEA).

⁷⁶ Jones, Tandon, and Vogelsang (1990) offer an expedient review of the work, typically at the behest of the World Bank, on the efficiency loss of taxation in the developmental context.

⁷⁷ Laffont (1998) credits the analysis of Ahmad and Stern (1991) as embodying the type of tax reforms developing countries should aim at in order to eliminate the 'historical anomalies' in their tax structures.

Share of Tax Revenue	Development Status	Direct Taxes, DRT	Indirect Taxes, IDT	Other Taxes, OT
Country/Crown	(WB)	[PIT/SSC]	[VAT/GST]	
Country/Group BCD	I MI	33	66	Negligible
	(mid-range)	[13]	[40]	Regligiole
IND	LMI	38.4	61	Negligible
	(mid-range)	[17]	[33]	
Africa	LMI	44	52	4
	(lower end)	[25]	[28]	
Asia-Pacific	UMI	45	49	6
	(upper end)	[24]	[25]	
LAC	UMI	45	46	9
	(mid-range)	[26]	[28]	
OECD	HIE	60	32	9
		[50]	[21]	

Table 2: The BGD Tax Structure in 2022 in Global Perspective

Source: Author's construction based on OECD (2024). For additional details see Fig A2 of the appendix. Notes: (i) The figures in each cell in the last three columns are the share (%) of the tax category in total tax. It is noted that while most data are for calendar 2022, the African and OECD tax data relate to 2021. OECD advises that the OT category may include income tax unallocable to PIT or CIT.

(ii) Indian tax shares relating to FY23 have been estimated by the author utilising the central government data from GoI (2024a) and states' own tax revenue details from RBI (2023, appendix 1, p189). Also see Table A2, appendix, below.

(iii) The CIT share in India was 17%, while the 38.4 figure for direct taxes included some state-level direct taxes.

(a) *Direct vs Indirect Taxes*: In view of the broad superiority of direct taxes (DRT) over indirect taxes (IDT) on grounds of economic efficiency, the disproportionate reliance of the BGD tax system on IDT at 66% vis-à-vis a figure of below 50% in UMIEs cited in Table 2 draws attention. The distance between BD and the UMIE average as captured in Table 2, in percentage points, is an underperformance in DRT of 12 points, while the overindulgence in IDT is 18.5 points. However even within the DRT components, the contribution of PIT-SSC is abysmally low in BGD (13%, all PIT) against 25% in UMIEs. On the composition of IDT, the share of VAT/GST is healthy at about 61%, somewhat better placed than the UMIEs listed in Table 2. The issue however lies with the relative share of IDT as emphasized already. Thus, it would seem that in order to march toward the UMI-status, not only the tax effort, but the tax structure itself has to undergo a major overhaul. Reaching 50:50 between the share of DRT: IDT would appear consistent over the medium term while the economy strives toward the UMIE level.

The African tax structure, which is virtually identical to that of the two large groups of UMIEs in the table, is indeed intriguing especially given its low income. Further examination of this phenomenon on this occasion would take us far afield.⁷⁸

The CIT share in BGD in 2022 (at 20%) is has been coincidentally in line with all comparator groups, except of course for the OECD (at 10%, Figure A2, appendix).⁷⁹ The Indian figure here is a bit lower at 17%. While the analytic review above is suggestive of a lower emphasis on CIT going forward, we beg to differ on this score, especially in the historical BDG context. Once we recognise that a large chunk, if not most, of new investment made by firms has long been financed by bank credit rather than by retained earnings, the standard complaint that the CIT is in effect a tax on equity capital loses standing.⁸⁰ This is simply because in the case of bank finance, the cost of capital is written off against gross operating revenue, and hence the CIT becomes a tax on pure profit, which does not create any distortions in the choice of technology or between capital goods of varying economic life.⁸¹ Such a tax will have no effect on the output of the firm either in the short or in the long-run.⁸² Thus until the culture of equity capital financing new investments takes hold, a relatively high taxation of net income from the corporate sector is unlikely to inflict significant inefficiency in the economy.⁸³

Though broadly the BGD and IND tax structures appear similar along the direct-indirect line, there are major differences. In federal India, states' own taxes contributed 37% of all tax revenue, of which 87% came from indirect taxes (e.g., state GST, sales, and excise), biasing the overall outcome against DRT. Focusing on the central government taxes in isolation, the Indian DRT: IDT shares, 54:46 (with PIT and CIT each claiming equal role in DRT), appear to better reflect the analytical prescriptions reviewed above. Since reliance on CIT for

⁷⁸ The interested reader may however look up Enache (2020) for further illustration.

⁷⁹ Figure A2 (appendix) illustrates that the CIT revenue share in Africa, Asia Pacific, and LAC, respectively, have been 19, 21, and 19 percent of total tax revenue.

⁸⁰ Indeed, Rahman et al report that about three-fourths of all investment in the country is financed by commercial bank credit (2019, p22). The WDI data also suggests that domestic credit in BGD has exceeded gross fixed capital formation (GFCF) since 2000, and this is in a context that credit to the private individuals is highly limited except in construction, the latter being a component of GFCF. Foreign loans also play a role in the financing of private investment, which has been on the rise over the past decade or so.

⁸¹ Strictly speaking this also requires that the CIT code allow depreciation charges that matches the true economic depreciation, namely the economic value of physical wear and tear. Let us adopt the following notation: the true cost of capital (r), bank interest rate (i), debt (B), total investment capital (K), the true economic depreciation, (δ), and the opportunity cost of equity capital (ρ). Then we can write the cost of capital as rK = iB + ρ (K-B) + δ K. Dividing through by K, we obtain r = i β + ρ (1- β) + δ , where we have defined β as the debt-capital ratio, (B/K). Thus, as β approaches unity, the cost of capital becomes merely the interest on debt plus true depreciation, r = ($i\beta$ + δ).

⁸² The short-run result follows definitionally from the fixity of capital, while the long-run result emanates from the non-distortion on the optimal capital-labour ratio before and after taxation of pure profits (see the preceding footnote). Given a neutral deprecation policy, the composition of capital would not change either.

⁸³ The case of FDI and join-ventures is taken up in the tax reform discussion below (section 7).

increased revenue is likely to face headwind soon, PIT emerges as the only viable means of raising the share of DRT in tax effort. Consequently, reforms would be necessary to accomplish that.

While BGD, or most LMIEs for that matter, do not have any SSC revenue, the prospect of rolling out universal social insurance schemes, either for benefits during bouts of unemployment or old-age pension appears remote.⁸⁴ The latter are common in UMI/HIE scenarios, where the benefits are financed by payroll taxes, i.e., SSC, as defined earlier in the paper. We observe in passing that the recently introduced universal pension scheme in BGD (UPSB), in spite of the name, is not an example of the social insurance program cited above. UPSB is more in the nature of state-subsidised private pension often promoted by the government primarily because the state-administered social insurance programs may fail to provide adequate security in old age.⁸⁵ The UPSB is quite different in that two workers with similar earnings may choose to contribute very different amounts each month to the pension plan and the eventual pension benefits would also reflect one's contribution profile. The payouts have been worked out guaranteeing a rate of return on the invested funds as well as a top-up by the State to encourage individuals to subscribe to the scheme. The latter elements, as well as the insurance aspect, are suggestive of the implicit subsidy which must be funded by general revenue of the exchequer, which can be significant over time depending on how popular the plan turns out to be.

(b) *Trade Taxes*: When the tax administration apparatus is in its infancy, trade taxes appear as the low-hanging fruits from the perspective of revenue collection. Even advanced industrial economies relied heavily on customs duties on imports in the early stages of industrialisation. In 1848, the year of Mill's *Principles*, the British revenue system was heavily reliant on two items (a) customs duties yielding 37% and (b) excise taxes raising another 25% of revenue, thus adding up to 63% of the tax effort of the nation (Ekelund and Walker, 1996, p.560). As of late-1980s, BGD revenue system too was overly dependent on the same two items, with import duties contributing 51% and sales tax on domestic goods and services (read: mainly excises) adding in another 26% of revenue, i.e., the total share reaching in excess of three-fourths (Ahsan, 1995b). Note that the data on both supplementary duties and VAT in Figure 11 lumps together these levies at the import as well as that on the domestic level. However, detailed NBR data shows that overall trade taxes (inclusive of VAT and supplementary duties payable on

⁸⁴ There need not to be any confusion over the discussion in the text with transfer programs for the aged or defined groups of disadvantaged that have been in operation in many LMIEs including BGD. Though highly limited in scope, such benefits can be of immense value to the target population if administered in a non-corrupt manner.

⁸⁵ The registered retirement saving plan (RRSP) and the tax-free saving account (TFSA) in Canada and the 401-K and the individual retirement account (IRA) in the US are some of the well-known examples of the taxpayer subsidised private pension plans in HIEs.

imports) have come down from the 50-perent range in the late 1980s, having stabilised at the 30-percent level over the entire past seven year or so (i.e., FY17 to FY 23).⁸⁶

Though progress has been made vis-à-vis the 1980s, Figure 11 illustrates that the process has been halting over the past decade or so. Within IDT, most of the OTGS category of revenues is still attributed to import duties and charges (e.g., the supplemental duty) for LMIEs, but it is primarily excise and like taxes on sin goods (e.g., alcohol, tobacco, and narcotics) in the richer world (Fig A2, appendix). Even compared to IND, BGD appears to extract a disproportionately higher share of taxes from imports, 28.4 vs 14.3% in FY23 (GoI, 2024a and GoB, 2024).⁸⁷ In terms of customs duty alone (i.e., excluding VAT/GST on imports), the relative figures are 10.2 and 4.4 percent, respectively. The latter rises to 7.0% if focussed on central government taxes alone in the Indian case. By contrast, trade taxes occupy less than one percent of total tax revenues (TTR) in OECD countries.

(c) *Excise Tax revenue*: In the category of excise taxes, BDG raised a mere 2.7% of TTR as excise, while in India it was 11.7% with about 44:56 contributions by states and the centre.⁸⁸

Overall, therefore, the key differences in the tax structure of the LMI economies vis-à-vis UMIE-HIEs lie in (a) a much lower share of direct taxes, and within the latter category a higher reliance on CIT, or in effect a much lower scope of PIT, (b) a much higher share of trade taxes and correspondingly a relatively lower share of taxes on final consumption goods (i.e., VAT/GST), (c) a much higher reliance on seigniorage revenue.

6.4 *Stagnancy of the BDG Tax Structure*: Ignoring the incomplete data for FY24, Figure 11 presents the chief categories of taxes over the 7-year span, FY17-FY23.⁸⁹ Broadly speaking, there have been little change in the structure of taxes even though the economy has witnessed sustained growth over the period. The only perceptible change is a feeble shift toward the VAT tax-share from about 37% at the start of the period to 40% in FY23, contributed jointly by the import and domestic components. The combined share of PIT and CIT appears to have remained stable in the

⁸⁶ The post-COVID exchange rate realignments have seen BGD currency to depreciate by about 30 percent or more since FY22. This is bound to result in increased yield of all trade taxes by a similar percent, except as moderated by the reduced demand for imports in view of the increased cost of imports and difficulties posed by a shortage of the foreign currency available for opening L/C accounts. Sattar has made remarks along these lines in recent writings (see for example, 2024).

⁸⁷ The composition of GST in India between domestic and imports are not shown in GoI (2024a). The relevant information was taken from an article by Ashwini Mahajan in *Fortune India* on 07 May 2024 (www.fortuneindia.com). Excluding state revenue altogether, the customs plus import GST amount to about 22.8 % of Central govt taxes in India.

⁸⁸ The vast Indian liquor industry possibly explains the imbalance in the role of excise tax revenue between the two countries; see Rajaraman (2007).

⁸⁹ In prior years, the source document, *Bangladesh Economic Review* (GoB, 2024), an annual publication of MoF used to be published both in English and Bangla. This year the English version has yet to appear on the website.

31-33% range; it may however be noted that this share was stuck in the 21-22% range as of the late 1980s.⁹⁰ Customs duties too show persistence, while revenue from supplementary duties (SD) has come down the most in proportional terms among all categories identified in Figure 11. The latter applies both to imports and more heavily on domestically produced goods, thus the reduced emphasis would imply fewer distortions in production.





CD VAT SD IT Others

Legend: CD (import/customs duty), VAT (value-added tax, domestic and import), SD (supplementary duty, domestic and import), IT (PIT and CIT)

Structure of BDG GDP: Figure 12 illustrates how the GDP components have evolved over a much longer 37-yr period, FY86 to FY23, the FY24 data being provisional, i.e., incomplete. We notice a significant increase in the share of industry, the middle column (+18 points, rising from 19.1 to 37.7 percent of GDP), while a commensurate decline in (-20 points, from 31.2 to 11.3 percent) in agriculture, the figures in the first column. The service sector growth has been a stabilising one; starting from 49.7% in FY86, it expanded to 55.6% in FY06, and moderating thereafter to a more agreeable 51% by FY23. Growing share of industry can be seen as a bulwark against the spectre

Source: GoB, (2024, p35)

⁹⁰ Calculations based on detailed data as reported in Tables 1, 2 and A1 differ slightly from that depicted in Figure 11. For example, our calculations show direct taxes in FY23 to have been 33.4% of all tax revenue, a bit lower than what is shown in Fig 11.

of premature deindustrialisation, an emerging concern in the development economics literature (Ahsan-Ahsan, 2018 and 2021).



Fig 12: Sectoral Share of BGD GDP (in Constant Prices), FY1986-2023

Source: GoB, (2024, p16)

The gains in industry would ordinarily imply increased employment of both machinery and workers. Does the revenue picture capture these changes at all? None that we notice, certainly not in the most recent 7-yr phase (Figure 11); the reliance of the revenue system on indirect taxes have not budged at all, remaining stuck at about 66% of total revenue. To round up the discussion on Bangladesh tax structure, we note that it stands a fair distance away from that befitting a UMIE. We had already observed that the direct-indirect tax mix of 50:50 share ought to be a normative goal, while raising the share of final taxes among indirect taxes, namely VAT, on domestic consumption goods and lowering the scope of taxation of imports. A modest excise tax revenue (say up to 5% of TTR) may serve as an anchor focussed on sin goods.

Summing Up: We conclude this section by acknowledging that even though the economy has been making impressive strides in annual growth of output, both the tax-GDP ratio as well as the tax structure had remained dormant for long. Absent any fundamental reform, narrow and low tax base fuelled by tax expenditure, little innovation in discovering new tax handles, a low degree of compliance, selective/ indifferent enforcement of the tax code (and law, generally) have landed the tax system in a 'bad equilibrium' in the political economy speak.

7. Fundamental Reforms of the BGD Tax Structure

In this section we outline what we term as *fundamental reforms* of the tax system, necessary to both raise the tax effort and transform the tax structure mirroring a modern UMIE.⁹¹ These reforms would incorporate broadening the base of all major taxes, namely PIT, CIT and VAT so as to achieve the objective of restructuring the tax system. This process would in effect bring in a large chunk of the shadow economy under the tax net. It will also be necessary to design new tax handles that can track the emerging growth sectors of the economy. Finally, along with fundamental reforms just outlined, (softer) reforms in administrative, governance, law enforcement, as well as the technology of tax assessment and tax compliance would be necessary to accomplish the overall tax reform agenda (section 8). Indeed, without an appreciable improvement of the softer dimensions (often called the 'compliance gap'), it would be very hard to implement any of the fundamental reforms envisioned here.

Tax Effort (TEF) or	FY 2023	Target Scenario:	
Tax Shares (TXS), %		FY 2035	
Tax Effort (GDP share),			
TEF	7.3	18-20	
PIT Share	13	25	
CIT Share	20	20	
Other Direct, ODRT	Negligible	5	
Total DRT			
(% of TTR)	33	50	
VAT (Domestic) Share	25	35	
Taxes on Imports (IMT)	28.4	7.5	
Share ^(a)			
OTGS Share	12.8	7.5	
(e.g., domestic SDs, excise)			
Total IDT	66.6	50	
(% of TTR)			

Table 3: Possible Medium Term Tax Reform Goals

Source: The figures in column 2 have been constructed by the author based on data in GoB (2024) *Notes*: (a) IMT revenue consists of import duties, VAT on imports, and supplementary duties.

7.1 *The Revenue Goals*: The order of business is to mount reforms to move the BDG tax system at two levels, first (a) to gradually but steadily raise the tax effort (TEF) to the 18-20 percent range over the next decade or so, i.e., more than double the present share, a tall order indeed. This presumes that the economy continues to grow on a sustained basis over the medium term, say at least averaging 5% annually in real terms. Secondly, (b) the tax structure has to evolve in order to

⁹¹ Sometimes, the pending reforms are characterised as filling in the 'policy gaps' (e.g., see Hutton, 2017).

broadly conform to that of an UMIE. We have characterised the latter to require (i) gradually increasing the share of PIT to about 25% of TTR from the current figure of 13%, (ii) retaining the CIT share at about 20%, and (iii) while collecting about 5% or so from other direct taxes, essentially land and property. On the indirect side, the task of meeting the eventual 50% goal may be reached by a combination of (iv) raising the share of VAT on domestic consumption goods from the present 25% to 35%, while (v) lowering the tax on imports to yield about 7.5%, and allowing excise taxes to contribute the remainder, 7.5%. Table 3 presents a summary of these goals. The task may appear ambitious, but without a target on the horizon, a firm roadmap would become harder to craft and execute.

A word on supplementary duties (SDs) is in order. Bangladesh has been practicing an elaborate structure of supplementary and regulatory duties, ranging from zero to 500 percent in addition to the VAT (again, varying from zero to the standard rate of 15%) on all imports, domestically produced goods as well as services. Focussed on luxury and 'demerit' goods, the revenue significance of SD on imports has been modest, yielding mere 3% of revenue in FY23. Since these are in effect import tariffs, many are scheduled for elimination over the next several years on account of LDC graduation as per UN provisions. However, insofar as domestic commodities are concerned, the tax share of SDs is significant at 10.1%. The thrust of the reform ideas to be explored below would seek to replace some of these by a more broadly based VAT regime.

Before we explore the reforms of the tax system, we dwell on some broad strategies that can be instrumental in the design of reforms.

7.2 *Presumptive Valuation as a Taxation Strategy*: In an LMIE context often the records are incomplete, and whatever information is available to the taxation authorities are not reliable, and one alternative strategy would be to rely on presumptive values in assessing tax liabilities.⁹² The strategy has to be, by its nature, eclectic, since the object of taxation can be estimates of the value of real assets, income, profit, or sales from a profession or trade. In particular, the idea can be helpful in dealing with land and property values both in agricultural and urban contexts. In principle property records and changes thereto can be easily linked to a person's identification number (e.g., National Identification Number, NID/Tax Identification Number, TIN) and monitored without difficulty in the digital age. However, in practice without local knowledge and with the cooperation of the municipal authorities, can one expect to disentangle the anonymity of beneficial owners, invention of holding companies and the like.

⁹² Ahmad and Stern defines the term presumptive taxation as "procedures under which the `desired' base for taxation (direct or indirect) is not itself measured but is inferred from some simple indicators which are more easily measured than the base itself" (1991, p276).

Presumptive basis can also be useful in determining the viability of taxing informal sector firms, who would often have little or no formal record of their accounts and thus otherwise avoid taxation altogether. Accordingly, Ahsan (1995b) recommended that the principle be applied to both income and expenses of informal firms in order to arrive at net income or profit.⁹³

Given the interrelated nature of the elusive data that the taxation authority needs, the national authorities, NBR in BGD, has to be the agency entrusted with the warehousing and refinement of the same since the proposed databank has to be both unique and comprehensive in addressing property, various income/sales, and financial assets. This also implies that NBR has to add a Property Taxation division to its organogram even if it lacks that now. This is necessary for it to offer municipalities (via Divisional Municipal Boards, DMBs, see below) access to relevant data as well as keep liaison with the municipalities in the collection of capital gains tax on the transfer or sales of real property.

The key task is the determination of presumptive values from various indicators, which will have to be chosen on a conceptual basis. Importantly these indicators, in as much as possible, ought to be either market determined and/or otherwise based on observed data including banking records.⁹⁴ Wherever practicable, the exercise can be undertaken professionally by an expert committee made up of members from both within and outside the government to determine the relevant values. The latter modality would tend to minimise the room for errors (of both omission and commission) on the part of tax assessors. Further all stakeholders must get an opportunity to review and comment on these presumptive values and the associated indicators before finalisation. The final figures in turn ought to be revised in regular intervals to take account of both inflation and economic growth over time.

One of the greatest virtues of the principle of presumptive valuation is that taxation then becomes lump sum in nature and therefore it does not distort the behaviour of activities subject to such taxation. Presumptive valuation would serve as an incentive for firms to strive for cost and/or operating efficiency thereby augmenting their profits and owe no additional tax beyond that set by the authorities in advance. However, it is important to ensure that the tax does not become onerous on the taxpayer, create inequities, and hurt morale, which calls for erring on the side of caution and set the presumptive values a shade lower than what would have been presumed fair. Thuronyi

⁹³ Thuronyi (1996) observes that the principle (i.e., *forfait* or lump sum) had often been in use in France for small traders dealing with both income tax and VAT liability. This paper, along with Thuronyi (2004), provide a rich list of references dealing with the practice of presumptive taxation around the world.

⁹⁴ Thuronyi (1996, 2004) examines the scope of alternative measurement methodologies (e.g., net worth, expenditure approach, banking data, gross receipts, asset values) and their consequences on taxpayer incentives, revenue implications, distributional consequences, and related administrative issues.

(2004) makes a strong case in support of taxpayers' natural right to equitable taxation under law and thus have the right to challenge the presumptive assessment before competent authorities.

It also needs to be underscored that the presumptive mode of taxation in many cases ought to be in the nature of a stop gap measure, to be replaced by standard tax code once the accounting and reporting standards rise to the required levels and a greater share of the economy comes under the formal sector. Thuronyi (2004) goes on to enumerate some additional advantages of presumptive taxation in this regard. Beyond easing the burden of compliance on taxpayers, the principle would encourage taxable units (especially, informal firms) to keep track of records for their own sake and eventually graduate out of the presumptive mode.

7.3 Innovating Tax Handles: The simple idea here is that an emerging LMIE struggling to augment its low tax effort ought to innovate newer tax bases whenever the evolving structure of the economy may allow such an opportunity. Sustained economic growth over the past two decades or more along with urbanisation and fast growth of metropolitan areas have led to unprecedented real gains in land values and structures thereon. Growth of manufacturing must also have led to sustained return on capital invested in most export-oriented industries, such as RMG, textiles, pharmaceuticals, footwear, and leather goods. However, most of these potential income and wealth gains have evaded taxation due to a failure in designing suitable tax handles, deliberate granting of tax exemptions, and a weak tax administration incapable of executing the task. Absent proper taxation, much of this wealth has been reportedly converted into luxury consumption and capital flight. The World Inequality Database, it its most recent release, estimates that over the 1995-2022 period, while the share of wealth of the top 1% of Bangladeshis had hovered at about 25% of total, that of the bottom 50% together was a mere fifth of that total, about 5%.95 What is glaringly obvious from the graph is the massive gap between the very rich (i.e., the top 1%) vs the masses (i.e., bottom 50%), not to speak of the very poor. Secondly, the idea of the wealth distribution remaining stable over the 27-year span may suggest a sort of social harmony, the plausibility of large capital flights, especially over the more recent decade, puts a lie to that veneer.

What are some of these potential tax handles here? As has been well recognised in the literature, tracking incomes of the wealthy in an LMIE context has been a losing battle, and hence a tax on real property or other identifiable assets (e.g., bank deposits) may prove to be a viable alternative. Luxury consumption may also be identified in this context as proxies of high income and wealth, thereby innovating both direct and indirect taxes to ameliorate the low tax effort conundrum. Below we elaborate on some of these ideas, starting with direct taxes.

 $^{^{95}}$ The actual numbers were 4.7 and 25.4% in 1995, respectively for the two groups, which became 4.8 and 24.6 % in 2022 (www.wid.world).

Figure 13



Net personal wealth | Bottom 50% | share | adults | equal split
Net personal wealth | Top 1% | share | adults | equal split

7.4 *PIT Reform*: We have noted that the middle-income tax structure calls for a much higher dependence on direct taxes, especially on personal income. Let us note that while we presently focus on PIT here, there has been a large modern literature that questions if the personal income were truly the ideal tax base on grounds of economic efficiency, namely the discouragement of saving induced by PIT. The alternative here is a direct tax on consumption, which does not suffer from disincentive issue in question. However, most LMIEs do not have the requisite institutional base for such a reform, and hence we relegate that discussion to the appendix-2 below.⁹⁶

Benitez et al (2023) report that PITs raised 2.5 percent of GDP in LIDCs as of 2021, up from 1.5 percent in 2005. In contrast the BGD take was about 0.83% of GDP (i.e., about one-third of LIDCs), possibly among the lowest among LMIEs, and worse, it has not shown any change over the past two decades? Thus, the old PIT must undergo a fundamental overhaul. Recall that income in this context means all 'personal' income, namely wages, capital, and property incomes (e.g., interest, dividends, capital gains, rental) and hence all components have to be brought under the radar of the Minister of Finance. There is also the issue of benefits in kind, which ought to be monetised and accounted for.

Some innovations we propose are as follows:

⁹⁶ In an intertemporal setting of consumption-saving choices, taxing the return on saving (via the taxation of interest implied by PIT) lowers its net return and thus discourages saving. In contrast, a general tax on consumption in each period does not suffer from the same anomaly when it can be designed to raise the same revenue as PIT (i.e., in present value terms). Therefore, a fundamental reform by instituting a direct tax on consumption may have many advantages, which we briefly outline below (Appendix-2).

(a) *Base Broadening*: The taxable income can be generally broadened in multiple ways, (a) by gradually including types of income/benefits previously ignored (e.g., presumptive values of company car, health insurance/allowances, and housing), (ii) by eliminating exemptions or at least disallowing some deductions as one moves up the income scale, (iii) by bringing in the informal sector/UGE under the tax net, and by even (iv) cutting the top marginal tax rates so as to discourage tax-avoidance activities. The latter is not a viable option in the BGD context since the top marginal rate of 25% is already low even by LMIE standards. The first two elements cited above amount to rationalising the tax expenditure features presently embedded in the PIT system. NBR itself has estimated (via simulation exercise based on a sample of returns) that an amount of BDT 404,990 million (i.e., about 1.15% of GDP), which was well in excess of actual revenue collected under the head, was incurred on account of tax expenditure in the PIT system in FY21 (GoB, 2023b). The pattern appears to have gained further momentum as divulged in FY 24 budget documents (GoB, 2024) Thus, the data indicates that indeed there exists a wide scope to broaden the tax base.

(b) *Tax Schedule and Progressivity*: While the current (FY25) annual exemption level of BDT 350K may be deemed too low in the context, as the IMF has recently argued.⁹⁷ It proposes that the threshold be raised to 500K, with the MTR on the first taxable slab (income between 500 and 800K) be set at 10%. In effect they recommend doing away with the narrow first bracket that exists now, whereby income between 350K to BDT 450K is taxed at 5%. We find this to be a worthwhile idea. Varying MTR by moving along narrow bands have been argued to add to administrative costs with little to be gained in terms of revenue. Besides most advanced country PIT reforms have tended to minimise the number of tax brackets while attempting to widen the base. The taxable income can be enhanced by the gradual disallowance of certain deductions, i.e., tax expenditures (e.g., age/pension amount) in higher brackets which would effectively render the tax system more progressive even in a low MTR environment. The progressivity shortfall can be sought elsewhere, mainly via the taxation of luxury consumption, property, and inheritances; see below.

(c) *Personal Capital Income*: We have already remarked that it is in this area that innovative new tax handles have to be discovered and experimented with till they yield adequate revenue. The macro picture is very clear; aggregate return to capital is about 50% of national GDP in LMIEs such as BGD (Sinha, 2017). At mere 10 percent flat, assuming all capital income is being taxed, this would yield 5% of GDP in revenue. In actual practice, we have already noted the FY23 PIT yield at a shade below 1.0% of GDP (Table 3), and presumably most of that is attributable to wages and salaries, and thus a negligible part is being raised from personal

⁹⁷ See the Daily Star newspaper report of 5 March 2024.

capital income. Clearly not all capital income is distributed back to the personal sector in the form of interest, dividends, and capital gains. Hence there is the scope of CIT falling on the undistributed net income of companies, which collected about 1.5% of GDP. Thus, the total tax on capital income in FY23 would have been just above 1.5% of GDP, a third of what a 10% flat tax on such income would have yielded. While the 10% target illustrated above is just that, it shows how far behind the curve things stand presently. The target may then be enhanced once an adequate number of functioning tax handles have been discovered.

One must also keep in mind that a substantial part of capital income would be in the form of rentals. Thus, it is clear that most capital income accruing to the personal sector goes untaxed. In view of the foregoing, one sees that there are many elements at play here and only a brief discussion can be offered in each category.⁹⁸ Given their potential, property and land taxation are discussed under a separate heading.

Rental Income: Rental of home and business premises (shops, warehouses, clinics, hospitals, and, where relevant, factories), especially located in urban areas, would be the subject of most rental income. Municipalities can be tasked to audit such units and in cooperation with tax authorities, they would identify their beneficial owners, and a tax can be assessed on the presumptive rental values (say at 15-20% flat rate).⁹⁹ Tax officials can establish such values by a survey of renters directly and seek prompt enforcement. The issue of corruption etc are dealt with separately below (section 8).

Interest, Dividends and Capital Gains: Given that capital income recipients have been reluctant to file credible tax returns, the practice of withholding taxes, as if these were advance taxes (ATS) to be finalised once returns have been turned in, is a good practice. It encourages the honest taxpayers to come forward and seek a final settlement by declaring all other incomes, especially if they happen to be in a lower bracket. The current withholding rate of 10-15% of the interest income from banks/NBFIs seems appropriate.¹⁰⁰

Withholding taxes on dividends in Bangladesh appears to be similar (i.e., tax rate between 10 to 15%) to the treatment of interest income, at least for private individuals and a different

⁹⁸ The author is not familiar with actual practices of the National Borad of Revenue (NBR) in each and every instance, and hence the recommendations are mostly to be interpreted as points of principle to be duly triangulated with experience on the ground and adapted accordingly.

⁹⁹ Property owners maybe allowed a flat 20% of total presumptive rent as 'expenses' before determining the taxable amount of rent. In terms of the rate structure, one can start off with a 15% flat rate, and once data quality improves, a higher slab (at 20%) can be applied on rental units yielding in excess of BDT 100K per month.

¹⁰⁰ The higher rate applies to those not able to provide proof of a completed tax return.

regime for companies receiving such incomes. Here one can make a case for a presumptive expense deduction (say, of 10% flat) of gross dividends received.

There are good reasons to have a more nuanced tax regime for capital gains. As has been proven time and again (especially in frothy times), many 'investors' without any knowledge of the concept of common shares, appear take risky gambles of purchasing shares in the hope of large profit in short order. While there is a strong case for public education in the matter on an ongoing basis, taxation can serve a useful instrument to guide prudence. Accordingly, measures may be taken to discourage itinerant shoppers by imposing a tax on short term capital gains (those holding it for less than 365 days) at 20% of net proceeds. The rate may then be relaxed for longer term investments, say to 15% for a holding period up to five years, and 10% on gains for a period in excess of five years. Capital losses ought to be allowed to be carried forward, i.e., to be redressed against future capital gains, for at least several years (say between five and ten). A set of measures as proposed here would encourage both true investment in the stock market and provide much needed capital to the industry, but at the same time, rein in reckless behaviour on the part of the adventurous.

Treatment of Pension/Provident Fund Contributions: There is a risk of double taxation here unless care is taken in advance. Though there are two different means of dealing with this (i) tax prepayment or (ii) tax post-payment, the choice has consequences. In the tax-prepayment mode, all pension contributions are made upfront, i.e., out of post-tax (or, disposable) income, and therefore all pension withdrawals (including all interest and other capital income, if any) on maturity/eligibility go tax-free. In tax post-payment scheme, individuals are allowed to claim a tax deduction in their PIT return of that year for the eligible amount of investment in a provident fund or the new UPSB, for that matter. However, all withdrawals (capital and return thereon) would be treated as taxable income and face taxation under the relevant MTR as per the tax code in force. The recent IMF mission, as cited above, is apparently in favour of the second alternative. We view that to be a reasonable position to take on the ground that such a modality conforms to the 'cash-flow' concept of taxation, which has been more fully discussed in Appendix-2 of the paper. All equal, it tends to encourage saving. It is to be noted that one other difference between the two approaches is in the concept of equity implicit here. The prepayment mode ensures ex-ante equity, while the post-payment allows ex-post equity. The investment outcome, good or not-so-good is addressed in the latter (as the tax liability would vary depending on the magnitude of return on investment) but ignored in the former.

(d) *Is a Progressive Inheritance Tax Viable*? John Mill spoke eloquently on the virtues of a progressive inheritance tax primarily to bring about a 'diffusion' of wealth ownership in society. Given that achieving much of progression via the PIT mode is unlikely in the BGD
context since even the tax code does not aim that, this avenue requires urgent policy attention. The issue boils down to a mix of political will, the capacity of the revenue authorities, and the technological apparatus at the latter's disposal. While each element of the enabling environment plays themselves out, groundwork can be laid to explore the scope of such a tax.

The chief difficulty here lies in identifying an act of inheritance. Clearly inheritance does not have to wait for the event of death; a parent can transfer ownership of any property (including membership of exclusive social clubs) to a child (adult or otherwise, law permitting) at any time. Challenge here is that, in view of the tax liability, attempts would be made to make a non-market transaction (say, inheritance) appear as a market one (i.e., a transaction between anonymous agents). A clever tactic would be to tax all transfers, including mutation, of any property (including intangible ones like memberships and intellectual property), each of which would improve upon the allocation of wealth in society. Mutation usually signals a change in the ownership structure. Such a strategy can be further strengthened against malfeasance by requiring that everyone must, at little or no additional cost, update their ownership documents (i.e., registrations) every ten years or so, thereby detecting de facto transfers hitherto remaining hidden from the authorities. The latter can be subjected to a late registration penalty. The entire exercise would pre-suppose every municipality, if necessary under the guidance of the proposed DMBs, to have a high-quality audit of all properties within its jurisdiction to be updated on a regular basis. In such a scenario the idea of a tax on inheritance would effectively be rolled into a re-vamped property transfer tax (PTT), ideally using presumptive figures in all cases. The latter issue is further discussed below.

7.5 *CIT: What Reforms Here*? Given that we propose to keep the share of CIT at 20% of revenue, which is where it is today, do we need further reforms here? The goal is to reach 20% of the target revenue of 20% of GDP in a decade, and thus the share of CIT would have to rise to 4% of GDP vis-à-vis 1.5% as of now. Again, a steep climb is in order. It is interesting to note that the NBR tax expenditure study reports that in FY21 the CIT expenditure amounted to BDT 853,150 million, i.e., about 2.4% of GDP (GoB, 2023b). The latter figure puts the CIT tax collection of the year (about 1.5% of GDP) to shame. The tax base can thus be, as was seen for PIT as well, expanded significantly by eliminating many of the tax expenditures.

One other aspect of the CIT is that whatever tax that can be raised under this head, this would almost always be viewed as redistributive in nature. Both theoretical and applied work on the incidence of CIT concur that the tax is ultimately borne by capital owners and possibly shifted onto the price of goods produced by the corporate sector. It has been further argued that the poorer sections in society mostly consume non-corporate goods. The impact of the tax on workers' wages is also believed minimal (Harberger, 1962; Shoven and Whalley, 1984). Besides, as argued above,

in a loan-financed investment scenario as in BGD (and under fair depreciation rules), the tax falls on pure profit of the company, which cannot be shifted onto anyone else.

One other aspect of the dominance of bank credit in the BDG corporate sector is that it discourages the development of the equity market. Given that a large share of loans is never paid bank, at least in recent history, it is socially necessary to entice companies to lean on equity as the source of investment capital while at the same time, seek to expand the corporate tax base. A second major area of reform lies in the curtailment of tax expenditures. Let us explore these and related avenues more fully.

(a) *CIT Tax schedule*: The existing CIT schedule in BGD seems to be on the high side on a global comparison, though these were reduced in the 2024 budget.¹⁰¹ The tax yield for 2022 as share of GDP of 1.5% is however woefully inadequate going forward (Table 2). With a focus on encouraging equity finance, the newer rates would appear reasonable.

The relationship between tax rates and revenue yield is affected by complex interplays between the domestic and global economic outlook (especially for export-oriented manufacturing firms). In this context, it may be instructive to examine a recent Indian experiment whereby the CIT rate was cut by 10-percentage points in 2019. The pandemic shock that ensued masked the immediate fallout. However, a close examination of recent data shows that even post-COVID, the CIT revenue share of GDP is still struggling to reach levels reached before the cut (Appendix-3). Vis-à-vis the high of 3.5% in FY19, the revenue level climbed up to 3.1% of GDP in FY23 from a low of 2.3% in FY21. This evidence possibly offers a vindication of sorts in support of the position taken in this paper that moderate levels of CIT rates in economies dominated by bank financing does not pose a strong disincentive to new investment and corporate employment.

Global CIT Compact of Oct 2021: In this context, it is useful to ask what one makes of this agreement. Capital mobility in the advanced countries allows the exchequer only a slippery grasp on the CIT revenue. The recent accord, as cited above, adopted a CIT rate of 15 per cent, while forcing large multinationals to pay taxes at the destinations, i.e., where they conduct business. While the richer OECD countries used to apply much higher rates (often between 25 and 32% earlier, counting both central and sub-central levels of government), in view of the generous depreciation and capital gain/loss provisions, the effective tax rates are believed to

¹⁰¹ The statutory rate for domestic companies has been reduced from 27.5 to 25% effective 01 July 2024 which can be even lower (between 20 and 22.5%) for companies listed on the stock market depending on the depth of their exposure.

have been much lower than the statutory rates. However, the 15% rate is surely even lower, but it eliminates the anomaly of tax burden shifting across borders.

In view of capital controls, the global rate structure need not detain an emerging LMIE like BGD from designing the CIT as it sees fit, except that it has to be competitive in attracting joint ventures (JVs) and FDIs. Rather than dwell in the past and frame separate rules for foreign entities by each, it may be profitable for South Asian economies, e.g., via the auspices of South Asian Association for Regional Cooperation (SAARC) or more widely in collaboration with the non-signatory members of East Asia to the global accord cited above, to offer a common tax regime (say a base rate of 20% paid to the destination country) for foreign capital.

(b) *Encouragement of Equity Capital*: Somewhat uniquely BGD offers a rebate on the CIT rate for businesses that are listed in the stock market. It is unclear what the goal of this practice is. Some countries however offer a rebate for 'manufacturing' companies whether listed on the bourse or otherwise, (e.g., CAN and IND), presumably in the belief that being labour-intensive, this policy would promote well-paid employment generation. Manufacturing companies also happen to be export oriented in the BGD context. If the goal instead were to promote equity financing to entice firms away from their overexposure to bank borrowing, the right policy would have been an innovative deduction approximating a historical average return on the equity portion of their investment in that year in calculating taxable profit of the company. Alternatively, a deduction of an imputed cost of capital, on all new investment regardless of mode of finance, could be announced in advance say every three years (to allow an element of certainty). That would also have levelled the playing field between corporate borrowers and non-borrowers, effectively rendering CIT as investment neutral.¹⁰²

(c) *Minimise CIT Expenditure*: BGD, like many LMIEs, engage in costly tax expenditures in the shape of investment incentives (e.g., reduced rate taxes, tax holidays, subsidised utility charges, and the like) both for domestic firms and otherwise target similar packages in order to attract FDI. These are widely believed to be ineffective and subject to abuse. These, along with the depreciation policy in force, ought to be examined *de novo* and amendments made accordingly.

7.6 *Land and Property Taxation*: Historically, both Smith (1776a) and Ricardo (1817) were among the early proponents of a tax on land values as a source of revenue as a well as a tool of efficient resource allocation. The reasoning went as follows. Land values are determined primarily by its location (e.g., urban vs rural), which in effect suggests that any investments in public capital by the State (roads, sanitation, highways, navigation ...) raises the value. Since it is not transferable

¹⁰² See footnote 81 above.

in a physical sense, taxation of land cannot alter incentives to have less of it, and thus the landlord has to bear the tax, and there is no DWL here. Indeed, taxation may induce recalcitrant landlords to make improvements or devise better use of the asset in order to raise their net income. On the efficiency aspect of the tax, as the Economist newspaper aptly stated, "the tax drives the land price down by the capitalised value of the future levies— theoretically even to zero—until someone finds a use for the land. Collection is cheap. Unlike profit, you cannot massage land away or move it to Luxembourg. If you do not pay, it can be seized and sold."¹⁰³

Following the classicists, Henry Geroge (1879) became an ardent believer in the land value tax. Kaldor (1963) too championed the idea especially on grounds of equity since the distribution of land ownership is most unequal of any known asset. Besides such revenue can be utilised to lower other taxes that may affect the poor harshly. He underscored the role land tax played in the early economic growth of Japan (i.e., following the Meiji Restoration of 1868). In an agricultural context, Kaldor argued that even if not large in relative magnitude, land revenue allows the reallocation of land from inefficient to the more efficient farmers thus augmenting agricultural productivity, and at the same time raising the demand for employment. He was among the few who also called for land tax progressivity, more on that later.

Thus, it is abundantly clear that a tax on land value is eminently desirable on grounds of equity and a superior allocation of resources.¹⁰⁴ In discussing the viability of an inheritance tax earlier in the paper, we stumbled on to the proposition that all property, both tangible (e.g., land and structures) and intangible (e.g., intellectual property) be taxed whenever such property actually changes hands or are deemed to have done so, e.g., when mutated to new owners whether in the event of death of a prior owner or otherwise. This tax, dubbed PTT (property transfer tax) stands as a major component of property taxation regime that we put forward here. In section 7.4 above, we have also highlighted the scope of including fair rental incomes on property, especially in urban centres, under the taxation of personal capital income under the PIT rubric. The latter remains outside the scope of the present discussion focussed mainly on land. The additional context to be analysed below is the case for an annual tax on the use value of land (i.e., agricultural, commercial, and industrial) and property as well as the progressivity issue.

¹⁰³ 'Why Henry George Had a Point', *The Economist*, Apr 2nd, 2015. We return to the administrative difficulties of executing the land tax in developmental context, where the tax collection cost is not necessarily 'cheap' nor is the 'seizure/sell' a feasible option most of the time.

¹⁰⁴ Land Tax vs an Export Tax on Agriculture: We can easily dispense with a debate in the literature about the relative merits of an export tax on agricultural goods vis-à-vis the land tax as a land revenue strategy especially given yield risks due to weather or due to relative administrative ease (e.g., Hoff, 1991 and Skinner, 1991). In the BGD context, since most of BDG exports are of non-agricultural origin, indeed manufactures (with ready-made garments alone accounting for over 80% of all export earnings), there is little scope of an export tax from the agricultural sector.

(a) *The Tax Structure*: Land taxation (both urban and agricultural) in Bangladesh, consists of several elements, (i) the 'land development tax' (LDT), (ii) the 'holding tax', and (iii) a nonjudicial 'stamp duty', and (iv) a capital gains tax. The last two components are applied at the time of land/property transfer. LDT revenue has generally suffered due to infrequent and/or inconsistent (across and within regions) revisions over time that failed to keep up with the evolving market values. In contrast the 'stamp' tax has to a large extent been inflation proof since it is assessed on deed values which more or less reflected market transactions. By statutes, the stamp duties cannot fall below the 'mouza' rates, which represent the lowest price, determined by the municipality in question, at which land can be bought and sold. These rates are theoretically meant to reflect the presumptive minimum land prices, where the most recent exercise was done in FY24. There are good reasons (e.g., more efficient land use) to set the mouza values close to market prices as much as practicable as a policy in itself without necessarily twinning it with the goal of enhanced revenue collection.

A new Land Development Tax (LDT) Act was promulgated of 2023, which is to take effect from 01 July 2024 (i.e., FY25). This Act exempts agricultural land, jointly owned by a 'family' (see below), measuring up to to 8.25 acres or 25 'bighas' from paying the land development tax. However, once the holding size exceeds this limit, the entire holding is subject to the tax. Given its annual nature, ideally it ought to be based on the presumed and imputed rental value of land. The valuation issue is taken up further below.

Capital Gains in Registration Fees: The registration costs for land/property transactions include (i) a 1% of the land value registration fee, (ii) 1.5% stamp duty, (iii) 2% local government tax, and (iv) a 4% or 3% capital gains tax.¹⁰⁵ However, in the FY24 budget the capital gains component have been doubled to 6 or 8% depending on the location. The capital gains component in the land registration appears to be a misnomer! From media reports it appears that it is assessed on the deed value and is imposed on the buyer of the property. If the market for such transactions were fully competitive, the assignment of the liability would have been immaterial since the eventual tax incidence would have fallen on both parties. However, the property market is far from competitive in most instances and thus it would be fairer to assign the liability on the prior owner, and then assess the amount of actual gain over the duration in question, not on the amount of the deed. Once the presumptive valuation mechanism is in place, it would be easy to figure out the magnitude of true gain since the date of the preceding acquisition. Given the well-known constraints on compliance with tax liabilities, it would be a no brainer to collect the full capital gains tax at the time of property transaction in a withholding

¹⁰⁵ For new flats, the buyer also must pay a VAT (between 2 to 4.5% of the value), depending on size of the premises.

mode if you like.¹⁰⁶ The seller will have the full rights to declare this in her PIT return and claim any capital loss in other transactions if relevant to lower their net tax payable.

By contrast, the anomaly in the current gains tax practice at the registration is manifold. Ostensibly, it is 'source/withholding tax', but if the information in the preceding paragraph was correct, imposed on the wrong person, the buyer. The seller in theory is supposed to declare the actual capital gain in their PIT return and pay the capital gains tax due but claiming a deduction for the source tax at registration, even though the latter was paid by someone else!

PTT: If the proposed PTT is to be built around the land registration fees, which component of the registration charges can we claim to be a property transfer tax? It is clear that the 'registration fee' has been designed to defray administration costs of maintaining property records and the like by the municipality. Secondly, that the 'municipal charge' is a transfer to the municipality in question to augment their resources necessary to provide their designated services. We have already recommended that the capital gains component be restored to its natural meaning and be widened to reflect true capital gains tax payable. Thus, the net accrual of revenue to the exchequer consists of the (i) the stamp duty payable by the acquirer of the property (whether an heir or otherwise) and (ii) the capital gains paid by the prior owner of the title. To this we propose to add (iii) a transfer tax, say 2% of the property value in question, payable upon all events of mutation regardless, which would be an entirely new tax. Thus, these three elements combined can be dubbed the proposed property transfer tax, PTT, embedding elements of an inheritance tax whenever the transacting parties belong to the same family. Further, as proposed above, if each property owner is required to have a registration document to be renewed every ten years, all transactions, whether registered or properly mutated or not, would be revealed in the process.

While the PTT designed as above is not progressive, given the accounting and compliance norms of an LMIE, this maybe a good starting position. Even the rates are on the low side, namely (i) 1.5% stamp duty, (ii) 2% mutation levy, and (iii) capital gains tax (15%), if applied rigorously and under a revamped presumptive value regime, fully discussed below, has the potential to raise substantial revenue. Innovations may be undertaken over time in light of revenue yield and evolving governance structures.

Wealth Surcharge: There is the curious case of what is known as a wealth surcharge but as we discuss below this is merely a surcharge on the income of 'wealthy' people. Calling it a 'wealth surcharge' is misleading given that the tax base is current income. Thus, as we discuss below,

¹⁰⁶ In the event that one is selling a property at a capital loss, obviously no payment would be necessary at the registration time, and the usual rules for the disposal of losses would apply as per current laws, namely it can be taken forward to be defrayed against future gains.

the surcharge cannot be claimed to be a property tax in any shape or form though Bhattacharya (2023) appears to enumerate this as an additional element of the property tax in BGD.

The Holding Tax: The municipal 'holding tax', not to be mixed up with LDT, is what in most advanced economies are known as annual 'property' tax, a proportional levy based on the valuation of the property located in that municipality (residential, commercial, or industrial). These revenues are essentially the primary, if not the only source of local government finance and the overall burden is determined by the cost of services provided by the municipality in question (e.g., running of elementary and secondary schools, maintenance of roads and bridges, public parks, waste disposal). Municipalities may also receive supplemental revenue transferred by the central or the relevant sub-central government (e.g., provinces in a federal system). In the BDG context, the 'holding tax' is designed much as in advanced economies to defray municipal expenses (though running schools is not within their purview). The levy is conceptually based on rental value of housing units, though valuation anomalies and capacity differences at the local level do not present a coherent system throughout the network of municipalities across the nation. The revenues, however, are not counted by the GoB in its revenue accounts essentially because there is no net revenue flowing to the national exchequer (Bhattacharya, 2023). But this is a terrible practice; the data should be included in the revenue profile, and the same be made available in the public domain, monitored, and widely disseminated so that the interested public and the media may critically examine the efficiency with which different municipalities utilise public money and provide their services.

(b) *The Revenue Potential*: Revenue yield of land taxes have fallen globally over the years. Even allowing for the fact that the share of agriculture in GDP has fallen rather dramatically in developing countries, the yield decline is palpable, except in a handful of Latin American countries (Skinner, 1991). Bird (1974) has noted that even in the first half of 20th century India collected over a third of its total revenue from land tax alone, while this figure now stands at about one-fifth of one percent of GDP (Awasthi and Nagarajan, 2020). The BGD story is not too dissimilar; the budgetary contribution of land taxes has been on a declining path for all its history. In the early 1960s, the land revenue alone (i.e., excluding the stamp duty) accounted for about 20% of total tax (i.e., in excess of one percent of GDP), which fell dramatically in the mid-1980s. In FY86, the two land taxes, LDT and the 'stamp duty', combined yielded only 5.5 of total revenue, or less than 0.5% of GDP (Ahsan, 1995b, pp214-5). In FY22, (i) LDT contributed 0.29% of total tax revenue, while the share of (ii) stamp duty came to 1.13%,

(Bhattacharya, 2023). Together the contribution of these two components adds up to 1.42% of total tax revenue, or 0.11%, i.e., a little less than one-ninth of one percent, of GDP.¹⁰⁷

How can then one expect to raise any meaningful revenue as set out at the start of the tax reform discussion? Or equivalently, why devote space to an issue of such negligible significance? The point is that this tax handle has been so neglected with piecemeal legislation lacking any coherence, that it is time for a significant makeover. Recall that we have proposed the FY35 target revenue goal from agricultural land and property to be about 5% of all tax revenue, i.e., about 1% of GDP, which actually happens to be the average figure for the OECD group with a much smaller share of agriculture in GDP.¹⁰⁸ Getting there, once reached way back in the 1960s, we believe can be viable in the BDG context if the tax regime can be reformed as we examine presently, especially in view of the elevated land values seen in the recent decades.

(c) *The Valuation Challenges*: The first challenge is to get the prices right. Earlier we advocated the case for presumptive value as the basis of all property taxation in BDG. It is widely recognised that fairly determined presumptive tax on property values would also promote efficient allocation of the same. It seems commendable that municipal authorities have a fairly accurate and detailed description of all legally held land units (with or without structures *in situ*). All is needed are periodic (say quinquennial) surveys using random samples. The setup costs of developing a scientifically designed presumptive land/property value assessment mechanism is likely to be a significant investment in any context. The latter exercise ought to focus on both capital value as well as the annual return on the property, e.g., rental values, regardless of the existing utilisation of the same, vacant, or otherwise. Though the one-time cost can be significant, in view of multiple tax handles that can be attached to this 'data bank', the effort is worth it. The future administrative costs of implementing the tax system can be greatly alleviated in the process.

Once the mechanism is well understood and seen to function well, the costs of periodic revaluations and necessary amendments would be of an incremental nature. Often such revaluation can be done by means of indexation based on a mix of GDP deflator and estimates of land/property/rental inflation on a regional basis.¹⁰⁹ While we have in principle argued that presumptive values be based on market data, in the specific context of agricultural land and

¹⁰⁸ The OECD share of agriculture in GDP is about 3.4 % while it is 11% in BGD.

¹⁰⁷ See Table A1 (Appendix-1) for annual tax revenue data. Bhattacharya (2023) reports slightly higher figures as he adds in the 'wealth surcharge'. Further it may be pointed out that the share of the capital gains tax on land/property registration, presumably negligible, is not readily available as this is typically lumped up, possibly along with other sources of capital gains on financial wealth etc, with the PIT revenue and reported as such.

¹⁰⁹ Even though Skinner (1991) claimed that as of 1986, the presumed cost of a five-early revision of cadastral survey would have exceeded the likely additional revenue, this cannot be the case in the age of digitization.

rental thereof, economists put emphasis on metrics such as the distance from market, soil quality, access to irrigation and associated costs as serving valuable anchors, all of which are easily accessible. Accurate data of the size of the arable land (whether placed under cultivation or not), crop type, costs of inputs, and crop prices are important in the process. Further in an attempt to improve record keeping, Besley and Persson (2015) propose triangulating land registration records with formal credit market data, which would allow related economic activities to be brought forth to the attention of taxation authorities (p111).

BGD Practice: The critical lapse, as observed by media as well as researchers, is the gap between market values and mouza records, and secondly the wild variations in holding tax rates as well as the tax base (namely, the presumed rental values) observed across municipal jurisdictions.¹¹⁰ Bhattacharya (2023) claims that "especially in rural or peripheral areas, mouza rate is higher than current market price".¹¹¹ It is to be noted however, even in a well-designed framework, one cannot possibly carry out a survey, or revisions thereof, in all jurisdictions at a given point in time. Thus, even in a high-quality valuation exercise some discrepancy is bound to persist between locations in all these matters.

(d) Multiple Taxes on the Same Base: In the recent debate on property in BDG, the possible anomaly of multiple taxes being assessed on the same base has come up. Bhattacharya (2023) suggests that "multiple property taxes share the same bases – creates double/triple taxation issue", since taxpayers are liable to pay wealth surcharge are also subject to pay holding tax along with income tax on income earned from building ownership". It is pertinent to clarify why this need not be an anomaly at all, especially if due diligence is applied to the definition of the distinct tax bases. Let us take an illustration. If someone's only source of income or wealth is a dwelling, for which we assume that there is good data on the capital value of the asset in historical time as well as the imputed rental income. Under the current tax laws, the owner is liable to pay (i) the municipal (holding) tax on the property regardless of whether the property is used as owner-occupied or rented out. If rented out, the owner is also liable to declare the net rental income, where ordinarily the holding tax will be shown as an expense and pay (ii) the PIT due on such rentals. This is universal practice, and there is no double taxation so far. When the same property is sold to a third party, the question of (iii) registration fees etc come up, as well as the (iv) capital gains tax. The latter elements (i.e., iii and iv) are based on the value of the asset on disposal, and not rental income. Moreover, the stamp duties

¹¹⁰ *Prothom Alo* (13 Oct 2017) reported that both the holding tax rate and rental values were significantly lower in Dhaka city via-vis smaller ones like Chittagong, Khulna, N'ganj, and Rangpur.

¹¹¹ In a spot survey conducted by the Centre for Policy Dialogue (CPD), for the nine locations in Dhaka city and its surroundings, reveal that the average "mouza rate is only 29% of the actual market price of land", with the actual mouza values ranging between 5% to 57% of market values across locations (Bhattacharya (2023).

etc are based on *current* value of the asset at the time of sale, while the capital gain is ideally measured by the *appreciation* of asset value during the term of current ownership. The latter are therefore distinct tax bases, both conceptually and factually. Thus, there is no double taxation implicit here either. In advanced countries with reliable data on asset ownership, typically capital gains are exempted from taxation on only one home (say out of several one may own for rental or recreation purposes) which the owner may declare as self-lived. In view of data integrity and viewed from a redistributive perspective, an LMIE like BGD can tax capital gains on all property sales, however making sure that the presumptive data is as reliable as can be and that the rate of tax is modest so as not to be burdensome on an average owner.¹¹² More nuanced taxation of capital gains may be permissible once the data quality improves.

(e) *Tax Expenditure & Anomalies*: On the property tax expenditures, Bhattacharya believes that the "exemptions are not clearly defined by law, inarticulate, inconsistent (changed every 2/3 years) and not known to general public." We further note that even the new Land Development Tax Act of 2023 appear to offer public authorities unlimited discretion to alter or forgive land revenue taxes without offering any guidelines for the basis of such goodwill.¹¹³

Moreover, the new LDT Act of 2023 offers an inconsistent definition of the taxable unit, the 'family'. The landholding by a 'family' consists of land held/recorded under the names of the household head, the spouse, his/her parents, all dependent male children (including adults and their wives as relevant), and latters' children, if any.¹¹⁴ It leaves out the scope of any unmarried or divorced/widowed daughters (and their children) living in the paternal extended household.

(f) *The Progressivity Issue*: Bird has argued against individualizing the land tax with a progressive structure believing that would deliver neither equity nor much additional revenue (1974, p 213). To wit, we can revisit the disastrous impact of a graduated rate schedule (of six brackets) that BGD experimented with in the early 1980s.¹¹⁵ In constant 1969/70 prices, the

¹¹² It is well known that a good part of the capital gain on long-held assets is an outcome of inflation and hence not real gain, which is the basis for lenient treatment of such gains in taxation matters. The counter argument of course lies in the fact that analytically there is a subsidy implicit in the practice of taxation of capital gains only on *realization* and not upon the act of true *accrual* of gains. Thus taxes 'owed' are allowed to be delayed till the act of sale.

¹¹³ The Bangla original of the 2023 act (law # 31, 18 Sept) states in paragraph 5 that that regardless of the contents of paragraphs 3 (LDT on agricultural land) and 4 (LDT on non-agricultural land), government retains the right to forgive LDT on land, agricultural or non-agricultural, belonging to any person, a class of people or an institution for that matter by means of an official gazette notification. Here the translation and interpretation are due to the present author. ¹¹⁴ For some reason, dependent adult but unmarried daughters, dependent sons-in-law (and their children) have been left out of the definition, presumably in the belief that married daughters will be included in their husband's family. Though a matter of detail, it is conceivable and possibly commonplace, that divorced or widowed daughters may often

choose to live with parents than parents-in-law. Ideally the joint family ought to have included all dependent children (regardless of gender) and their dependent children, if any, ordinarily residing with the patriarch's homestead.

¹¹⁵ The tax rate on agricultural land was increased in 1982, whereby the tax rates ranged from a low of BDT 3/acre for holdings of 8.25 acres and above to BDT 145/acre for land in excess of 25 acres (Skinner, 1991).

annual yield plunged from BDT 170 million in late 1960s to mere BDT 40 million the FY83, i.e., a drop in excess of 75%. Indeed, most authors argue in favour of a presumptive tax at a simple proportional rate without any exemption, which is believed to increase the chances of viable implementation (Bird, 1974, Newbury and Stern, 1987, Ahmad and Stern 1991, and Skinner 1991).

The land size exemption announced in the 2023 Act is a step in the right direction, which would remove a majority of farmers off the tax roll. However, for the LDT to retain its revenue potential discussed above, the land records would require significant strengthening. Insofar as agricultural land is concerned, the evolving fragmentation of holdings whereby even modest landowners own multiple units, and the historical record of land parcels registered in the name of long-deceased ancestors lead implementation of LDT extremely arduous, essentially ruling out the viability of a progressive tax. Historically, these ownership features have rendered the tax assessment process to little more than 'discussion and imagination' (Skinner, 1991, p. 505). The current rates (for agricultural land) appear to be (i) zero if 'family' holding size up to 8.25 acres (i.e., 25 bighas), (ii) BDT 50/acre for land between 8.25 and 10 acres, and (iii) BDT 100/acre for acreage in excess of 10. In that case a flat rate BDT 75/acre would have been a better idea making it easier to comply with perhaps no negative impact on the tax yield.

Registration Dues: Even without a graduated rate schedule, the taxes and like dues payable for land registration can be a sizeable burden on any. With the heightened rates of 'capital gains' announced in FY24 budget, the combined charges as already cited, add up to a figure between 10.5 to 12.5%. For new apartments, there is also the VAT to be added to the above. In view of the anomalies in the practice of 'capital gain at source' cited above, that liability should be removed from the buyer of the property on to the seller. This correction by one stroke would bring the registration costs to a reasonable level of 5.5% (i.e., made up of (i) 1% registration fee, (ii) 1.5% stamp duty, and (iii) 2% municipal charge), except for the buyers of new flats. Once the proposed presumptive valuation regime is in place, the mouza values would reflect market rates better as discussed above, and if necessary, the above rates can be rationalised to offer a relief to the poorer sections of society.

7.7 *Coming to Grips with the Informal Sector*: In order to understand the informal economy, a key question to ask is how the informal sector comes into existence in an LMIE context in the first place and continues to grow. Data cited above suggests that the share of the informal economy in BGD lies somewhere in the vicinity of 25-30% of GDP, significantly ahead of both IND and VNM. In such an environment, the primacy of cash transactions can become the norm, in part encouraged by low-level of financial intermediation and just as well, to keep the taxman at bay. Licensing/registration rules and difficulties in securing formal credit keep many small businesses

run entirely on cash. Any borrowing is either those at arms' length or of the informal variety, which are known to incur much higher interest cost than available through formal financial intermediation. Lacking access to 'standards and certification', they typically produce for the home market than for exports. What to do in this situation?

From a taxation standpoint, the potential tax handles at play here would be mostly entrepreneurial income (or 'profit') and VAT on goods and services sold. There is little in terms of wages as an object of taxation since the salaried employees would be earning below or near the minimum taxable threshold. How to bring them under the tax net?

(a) *Access to Formal Financial Services*: Gordon and Li (2009) hypothesize that firms in developing countries receive much smaller benefits (vis-à-vis those in richer countries) from potential access to the formal financial services than what they expect to save by remaining out of the tax system. If this were true, LMIEs can gain tax revenues by ensuring the ready availability high-value financial/payment/transaction services to their doorsteps. Innovations in both microfinance, specialised and commercial bank's targeted outreach to this sector can play a pivotal role in this context. A prerequisite for that to happen would be make it very simple to licence/register erstwhile informal entities allowing them to exist on a sound legal footing without undue harassment by taxation authorities. At the same time, it will be necessary to formulate friendlier tax regimes facing such firms to ease their entry into tax compliance. Thus registration/licencing, access to formal finance,¹¹⁶ and light taxation of profits and sales will constitute a three-pronged strategy in this context.

(b) *Inflation Tax*: Though perverse in many senses, as Gordon and Li observe the inflation tax appears to be an effective strategy to deal with the informal sector, first by exploiting their exposure to cash via seigniorage revenue and secondly by inducing them to park funds in the formal banks in lure of high nominal interest rate on savings. The latter process thus allows the tax authorities to glean some valuable information on these firms so long as the government maintains tight monitoring and oversight over the banking system. Indeed, they estimated that between 1996-2001, low and lower-middle income countries raised between 20 and 25% of their tax revenue from seigniorage. However, we have already discussed the inflation tax avenue earlier (section 6.2) and have argued against it on grounds of longer-term harm to the economy of sustained inflation.

(c) *Preferential VAT on Service Sector*: Allowing the service sector to flourish on their own, Piggott and Whalley (2001) have argued for lower taxes, e.g., VAT/GST, on services relative

¹¹⁶ Gordon and Li (2009) go on to suggest that improvements in the financial sector may well be a prerequisite for fundamental tax reform.

to manufacturing to dampen the process of service-oriented firms from switching over to the informal economy. This an idea we endorse as discussed further below.

7.8 *VAT/GST Reform*: Turning to the indirect taxes, we start off with the VAT. OECD defines the term 'VAT revenue ratio' (VRR) as the proportion of VAT revenue that countries collect out of a theoretical magnitude "if VAT were applied at the standard rate to the entire potential tax base" (OECD, 2024, p.26). A VRR of 1 suggests no loss of revenue on account of tax expenditure, fraud, rate reductions and exemptions, tax evasion and the like. Bangladesh performs poorly (with a VRR of 0.287) in this measure of fiscal marksmanship, say vis-à-vis Vietnam (at 0.73), BGD's export competitor. This record implies that roughly 71% of potential VAT revenue is lost in the process, i.e., for each Taka the VAT authorities collect they miss out over two Taka in lost revenue (Figure 14). For a benchmark, note that the OECD average in 2020 was 0.56. In order to reach the tax effort goals cited above (i.e., VAT revenue share of 35% of total tax, or, 7% of GDP), it would be a priority to set a goal of achieving at least 0.5 VRR by FY35, roughly where Indonesia stands today.





It is therefore plausible that most of the potential VAT revenue losses, much as in the case of PIT and CIT, are due to tax expenditures, with corruption and evasion activities make up the remainder. A recent analysis by Nandi and Khondker (2016) finds that a broadening of the VAT base by using the market price of a selected set of domestic commodities (in place of historical data in tariff documents) led to a doubling of revenue for FY14. The VAT on these commodities accounted for about 24% of all domestic VAT. In terms of FY23 data, if the same coefficient and the VAT

Source: OECD (2024)

structure remained intact, the revenue gain in question would have been about 0.44 percentage points of GDP, a modest step in the right direction.¹¹⁷

While a precise roadmap to attain the goal of attaining 0.50 VRR must await a more detailed analysis with data that is not publicly available, some ideas of how to broaden the VAT base are set forth below.

(a) *Reaching the Small Traders*: In lieu of reliable data, the notion of presumptive valuation ought to be extended to the case of small traders in estimating their sales. Location wise *price data*, as just noted, can be easily gleaned from simple surveys, and even adjusted for any seasonality. In view of price fluctuations some averaging may be recommended. The *quantity data* can also be obtained via sampling and market surveys along trade lines and a pilot implementation would be a good way to verify the viability of implementing VAT on such a basis on small businesses.

(b) *Service Sector Firms*: We have just made the case that VAT structure should perhaps be diluted for service-oriented firms in order to entice/prevent the latter firms from remaining or switching over to the informal sector. However, this cannot be a blanket rule as this would lead to substantial revenue loss. Some sort of a targeting strategy would be required. A nuanced approach would be to make an inventory of the kind of firms that are either already in the informal sector and those that may slide in that direction just to avoid the VAT and then apply the policy accordingly.

(c) *Rationalisation of the Rate Structure*: Since a good portion of the tax expenditure seeps in via exempt, zero-rated, and reduced rate categories of goods and services, it would be a priority task to carefully examine the rationale behind these features and remedial measures undertaken.¹¹⁸

(d) *Luxury Consumption*: The idea dates to the times of Ricardo and Mill. One elementary way would be to tax large expenditures (e.g., business class travel, weddings, and such events) at source (say a category 'VAT on luxury items'), which may be viewed as 'unproductive

¹¹⁷ Given the selected goods' share of domestic VAT of 24% and noting that domestic VAT altogether accounted for about 25% of all tax revenue in FY23, the revenue significance of the experiment comes to 0.44 percent of GDP (i.e., $0.24 \times 0.25 \times 0.074 = 0.0044$), where the FY23 tax-GDP share of 7.4% has been used. The revenue augmentation in the process had doubled, and thus the gain was also 0.44% of GDP. However, there was also a cost associated with the exercise of updating prices as duly recognised by Nandi and Khondker (2016), which if accounted for would reduce the net gain.

¹¹⁸ Recently Ahsan Mansur and Ashikur Rahman have proposed the elimination of "... the complexity created by having multiple tax rates on the same products at different stages of production. This would reduce the scope for evasion and so boost revenues, and also discourage the vertical integration of firms and support the SME sector through subcontracting by large enterprises" (24 May 2024, *The Daily Star*).

consumption' à la Ricardo. Presently some revenue is collected from taxation of air travel. The structure of these taxes may be revisited with a higher rate applicable on large expenses (e.g., interpreted to include all premium class fares and trip packages priced above USD 2,500 per person, the latter regardless of the class of travel). Compliance with such a strategy would require measures along the 'compliance gap' route to be fully explored below.

7.9 *Tariff Realignment: How to make up for the revenue loss*? There has been some discussion in concerned circles on this issue. Since BGD has graduated out of the 'least developed', as per UN nomenclature, to a 'developing country' status in 2023. With various duty privileges slated to be phased out over the next few years, it has been negotiating with EU and other industrial country partners for more extended withdrawal of prior benefits than warranted by the statutes. Such claims would possibly gain greater traction in view of the political events of summer 2024 so that the incomes and employments can be stabilised in short order. Nevertheless, trade policy analysts argue that BGD will have no choice but to pursue free-trade or similar agreements with bilateral or regional partners in order to maintain its share of trade. Razzaque et al (2021) have argued that fostering preferential trade regimes may lead to substantial tariff reductions unless remedial steps can be readily adopted. Presently BGD employs an average tariff rate of about 27%, while the LMIE average is in the high single digits (Sattar, 2024). Hence by FY35, the country has to look forward to substantial liberalisation in its trade outlook over the interregnum, and with it a falling revenue share of import duties.¹¹⁹

In section 7.1 we have proposed that the share of import taxes in total tax revenue (including import VAT and supplementary dues) be reduced from the current level of 28.4% to about 7.5% by FY35. This goal has been set not merely because of tariff realignment due to LDC graduation, but more importantly in view of efficiency losses in both consumption and production induced by import taxes. Thus, not only should BDG seek out coordinated cuts in import duties with trading partners as stated already, but also unilaterally. It has been argued that the many of the tariffs foster import substitution economic activities enriching their benefactors, but that have no merit on grounds of economic efficiency, and hence are welfare reducing in the aggregate. Elimination of such tariffs would lead to export-oriented output growth (Sattar, 2024). The lost revenue gap can be compensated through faster expansion of trade and output growth, and by reforms of PIT (with special focus on personal capital income) and the VAT structure. The latter strategies however would take time to design and implement. Hence there is an important role for intermediate measures.

¹¹⁹ Sattar (2024) points out that "… in light of the nearly 40% exchange rate depreciation over the past 18 months that has resulted in an across-the-board equivalent (40%) spike in all tariff rates … Shaving off half this spike should not be revenue reducing but will have a disinflationary impact" on the economy.

Short- and Medium-Term Measures: The pace of decline in import tax revenue can be slowed down by a combination of strategies. These include (i) negotiations with trading partners (e.g., EU/NAFTA/bilaterally) on the terms of LDC graduation as currently underway, (ii) entering into new trade accords thus widening the value-added share of trade in GDP so that even with lower rates of duties, revenue does not fall dramatically, and (iii) at the same time, attempting to make up some of the loss from additional taxation of domestic goods and services (DGS) via VAT by a gradual broadening of the VAT base.

7.10 *New Tax Handles*: In the foregoing we have already identified several sources of economic gains in society (e.g., personal capital income, property transfers and mutations) that have hitherto attracted little in the way of tax revenue. However, there is scope for additional sources of revenue as we discuss below.

(a) *Tobin Tax*: Originally due to Economics Laureate James Tobin, the idea was to put a small tax (e.g., between 0.1 to 0.5 %) on transactions targeting the foreign exchange market in order to deter excessive speculation. Since then, the concept has bene extended from stock market transactions to all the way to any or all financial transactions exceeding some size. Indeed, in 2012 France became the first country to implement the Tobin Tax whereby the legislators passed a law will apply a 0.1% tax to all transactions of shares of French companies that have a market capitalization of more than one billion euros.

Is there a prospect for such a tax in the BDG context? We believe that unless this is tried out on a pilot basis we would never know. Deposit money banks (DMBs) in BGD presently charge a host of fees on financial transactions, typically on transfers/deposits from external entities, not to speak of foreign currency transactions. Here the treasury's take is merely the VAT on such 'services'. The Treasury however directly imposes, beyond withholding tax on interest earnings of account holders, what appears to be an annual excise tax of BDT 3K on any account showing a balance of BDT one million (or equivalent in foreign currency accounts) at any time during the year. Thus, it is clear that the banking public is already accustomed to small fees and the like as a fact of life. Further, since neither the stock nor the currency market is a feature of everyday banking in the BDG context, it may be a more relevant to institute a Tobin-type tax, say at 0.1%, on any transaction of BDT one million or more (i.e., a charge of BDT 1K per such activity) in lieu of the present excise tax.¹²⁰ The latter can be argued to discourage the saving motive, which cannot be any part of a goal of tax policy.

(b) *An Annual Wealth Tax*? The existing concept of a 'wealth surcharge' in BGD's PIT scheme, as implied above, is a show of half measures with conceptual lapses to match.¹²¹ Income tax

¹²⁰ To prevent misuse, banks may be empowered to apply the tax whenever even multiple transactions on a given account add up to BDT one mullion or more within any 72-hour banking period (or some such bunching rule).

¹²¹ Many of these anomalies have been discussed well in the business media over the past 18 months or so.

surcharges exist in many countries but that is always determined by a person's taxable income with no reference to wealth. However, in the BDG context, those wealthy enough (in excess of BDT 40 million as per the proposed Finance Bill 2023, the magnitude measured by the *initial* value of assets when acquired) were declared eligible for the surcharge at progressive rates starting at 10%. A further anomaly, beyond the proper pricing of assets at current market value, was that the tax base was the income tax payable in the current year.

Presently we explore a new idea, namely that of an annual wealth tax. If the taxation authorities have a database of 'wealthy' person, as they must since the tax has been in operation for some time, it will need updating in terms of valuation on a presumptive basis as already emphasized. For illustrative purposes, let us stipulate that BDT 50 million were the threshold amount of wealth when taxation becomes due, (the latter to be indexed by the GDP deflator every five years), say at an initial rate of 1% of wealth valued at the end of last calendar year. Thus, someone just exceeding the threshold by one taka will face a tax invoice amounting to BDT 0.5 million. Eligible taxpayers would know the likely magnitude of tax due well in advance and they can be encouraged to pay the same in quarterly instalments if convenient and be obliged to clear the entire amount payable within 60 days of the end of the tax year, presently the calendar year. The wealth tax has the awkwardness of creating a cash-flow crisis especially for those whose wealth is mostly tied up in landed property or owner-occupied homes. However, the if one were to start at low rates as illustrated above, and in view of the advance knowledge, they ought to be able to arrange the liquidity in question. Earmarking the tax, say to fund children's in-patient care, may add further appeal encouraging compliance.

7.11 *A Sum UP*: Below we attempt a summary of the reform goals and recommendations examined above.

(i) *FY 2035 Goal and Tax Shares*: With the goal of achieving UMI status in the near future, it is prudent for BGD to single-mindedly focus on achieving a tax effort of 20% of GDP by FY35, while engendering a significant shift in the structure of taxation so that by FY35, the share of both direct and indirect taxes become equal at 50% each. The target revenue ratio for PIT is 25% of all taxes (and thus half of direct taxes), while VAT would emerge as the primary vehicle of indirect taxation, raising 35% of all tax revenue.

(ii) *Presumptive Value Paradigm*: The reforms analysed in the paper call for a large role for presumptive taxation in order to overcome the informational constraints on property values, house and land rents, and even sales of informal sector firms. We offer a methodology of how to set up such a data base at NBR to be updated as feasible, say quinquennially.

(iii) *Strategies of Tax Reform*: In order to raise the tax effort by such a large amount, it will be necessary to (i) bring about significant reforms in all major tax instruments primarily by broadening the tax base rather than rate increases, and secondly, by (ii) initiating new tax handles targeting the emerging sources of economic gains in society (e.g., personal capital income, real estate and other wealth, and luxury consumption), thereby inducing elements of income and wealth redistribution in society.

(iv) *PIT*: Here we recommend a reduction of the number of tax slabs as well as the broadening of the tax base, primarily by clawing back tax expenditures and by widening the concept of income to include all personal capital income and capital gains.

(v) *Inheritance and Property Taxation*: Discussion of the viability of an inheritance tax led us to recommend a revamped property transfer tax (PTT) that would encompass all property transfers (including intangible ones like memberships and intellectual property) and acts of mutation of real assets, all at presumptive values as per the data bank. Even at modest rates, these measures are likely to yield significant new revenues to the State while at the same time improve upon the allocation of wealth in society and result in lower inequality over time.

(vi) *Capital Gains*: We recommend a unified treatment of capital gains and losses (again based on presumptive values except for financial market transactions) between real and financial assets and that the taxes due on net capital gain in a year be fully paid by the respective asset owner within 60 days of the end of the tax year.

(vii) *CIT Reform and Encouragement of Equity Finance*: We recommend disbanding most tax expenditures in the CIT code and introduce a standard deduction (prorated to the estimated value of new investment undertaken by the firm in the tax year), regardless of the mode of finance, reflecting the cost of capital. This policy ought to discourage reliance on bank borrowing and render the CIT investment neutral.

(viii) *Informal Sector*: In order to bring informal sector entities under the tax net, we propose a threepronged strategy encompassing (i) easy registration/licencing, (ii) ready access to formal finance, and (iii) light taxation of profits and sales as per eligibility, and especially for providers of services.

(ix) *VAT*: OECD research finds that about 71% of potential VAT revenue is lost in Bangladesh annually mostly to tax expenditures. We believe that a good fraction of these losses can be recouped by a judicious blend of policies (i) initiating the entry of the informal sector firms and other small traders/service sector firms under the VAT net, (ii) rationalisation of the rate structure, and (iii) a new tax on luxury spending.

(x) *Import Tariff Cuts*: We foresee a dramatic decline in the tax revenue from imports (import duties with VAT and supplementary dues added in) from abut 28.4% of tax revenue to about 7.5% by FY35. The tariff cuts would remove the bias in favour of import substitution, pave the way for more export-oriented growth of industry, allow faster economic growth, which along with PIT and VAT reforms can make up the lost revenue over time.

(xi) *Additional Tax Handles*: Over and above the preceding measures, we also propose instituting (i) a modest (say 0.1%) tax on all financial transactions exceeding BDT one million (a 'Tobin tax'), and (ii) an annual wealth tax at the rate of 1% on all owners who possess net assets exceeding BDT 50 million (to be indexed every five years).

8. Tax Administration, Compliance and Evasion

We now turn to the softer aspects of tax reform, namely that of tax administration, that take the tax code as given, and employs various modalities (e.g., audits, inspections, staff morale and discipline) to implement the tax instruments the best it can. At various stages in the foregoing analysis, we have noted the large potential losses of revenue from most major tax instruments (e.g., PIT, CIT & VAT), part of which is due to the lapses on account of the code (i.e., tax expenditures), but a significant portion was due to what has been termed as the 'compliance gap', resulting from ineffective and corrupt tax administration. A World Bank study analysed FY19 VAT revenue losses and concluded that while it collected roughly a third of potential tax, the share of the compliance gap was "... 42 percent while it ranges from 5-10 percent in South Africa and 28-31 percent in Costa Rica".¹²² Evidence of this genre leads Hutton to claim that even when LMIEs get the tax policy right, the compliance issues emerge as the villain of the piece (2017, p8).

Below we briefly analyse how the compliance challenges can be met and the fallout minimised over the medium term, so that the tax effort target of 20% of GDP can be realised by FY35. In order to save space, we do not review why no real effort has been made by the public authorities over the past 25 years or so to reform the tax system in a meaningful way or ask why the operational effectiveness of the tax collection process have remained unattended to (or, more correctly, interfered with) by successive governments. An excellent account of the latter has been compiled by Ahmed (2020).

8.1 *Administration*: Institution building is a long-term project, but a start has to be made soonest. Building an upgraded professional and dedicated tax administration cadre of officials to be engaged in NBR would be the first step toward developing a functioning modern tax system

¹²² Quoted by Daily Star, 03 April 2024.

befitting a middle-income economy. Many observers claim that presently NBR lacks the staffing both in quality and in quantity. We offer the following observations and recommendations.

(a) *Staffing*: Recruitment may be combined with that for the Central Bank staff and thus detached from the general administrative services (the BCS cadres) since the background preparation would have to be more specific (e.g., maths/stats/computer science, economics/ commerce/ accounting, and ethics/law).

(b) *Training and Capacity Building*: Over and above knowledge of the role of tax policy in economic development, public economics focussed on tax avoidance and tax evasion, familiarity with the tax laws, Excel/Stata capability/accounting/stats, and a strong grounding in ethics ought to form the core curriculum. Beyond the probation period, staff should be exposed to regular training on both evolving analytical developments and how technology, including AI, can aid in the daily work of tax administration.

(c) *Compensation*: Basic compensation should be similar to that of Bangladesh Bank (BB) ranks, while efforts should be made to reward relative performance (judged by peer review) but not individually, rather to a collective, a team. Ideally each member would always be attached to a team of a few colleagues with joint responsibilities and goals. Team and departments excelling in their functions, e.g., where the target revenue receipts under their immediate watch surpass a set threshold may be rewarded by a suitable bonus scheme. In senior ranks, the team concept may be expanded to all those they supervise. Team members may also be moved around laterally to different chores (i.e., to new teams) so as not to degrade overall staff morale, since the idea is not to build silos of excellence, but to have excellence go around and enrich all. Here regional and other country experiences may be examined for evidence of what works and what does not.

(d) *Control of Corruption*: Strict enforcement of disciplinary measures against corruption by staff ought to be maintained. "With pervasive corruption, the average citizen may be less inclined to support higher taxation and to comply with those taxes already in place" (Besley-Persson, 2014). This of course relates to corruption both within tax administration and in the overall economy. Internal peer review/audit of staff behaviour ought to be a routine matter. The senior management ought to guard against politicisation and make all acts of malfeasance a sufficient ground for dismissal. A clear statement to this effect may be made part of the Mission Statement of the tax administrative body (i.e., NBR), which each staff member may be asked to pledge to in writing while being appointed afresh and upon all subsequent promotions.

(e) *Professionalism*: The kind of reforms that have been advocated above, namely the reliance on presumptive valuation of assets, sales, and some incomes (e.g., rents) would require honesty of a level which tax officials have hitherto not been likened to. How to forge the new morality? Reward, recognition, and reprimand are the known answers.

8.2 *Technology*: The other major task for the NBR would be to invest in technology and promotion of electronic communication in all spheres of its activities. While the upfront costs of this innovation will be high, it would eventually lead to greater economies in routine operations. All communication between a taxpayer and an official, except with those manning reception desks/information kiosks etc, must be in writing delivered by post or electronically as feasible. It must expand and eventually universalise the practice of online submission, online payment, and online delivery and receipt of relevant documents. The relevant tax forms ought to be simplified as much as possible for easy compliance. The practice of an individual meeting between a prospective taxpayer and a tax official must be avoided, except for land/property registration processes where municipal officials meet with the two parties and their legal agents. Even the capital gains tax due upon property transfers at registration can be deposited at a bank directly by the property seller. Ultimately such endeavours would allow newer tax bases to become feasible. Investment in technology would also require adequate safeguards of all data of a prudential and fiduciary nature; more on this follows below.

8.3 *Managing Presumptive Valuation Databank*: We have argued for a comprehensive databank at NBR, which must also incorporate presumptive valuation of land and structures, rental incomes, and sales of small firms including informal ones), which would have to be initially carried out with outside help. The data methodology would also lay out the modalities for quinquennial update to all records, not just financial values since the municipal records will require updating as well. A dedicated team within NBR will have to manage the dataset and make amendments as new information come to light. While NBR is not envisioned to mediate in property tax collection by the municipalities, it is the only body who can liaise with them in the provision of technical expertise and verify data adequacy. See below for additional details. This will be a significant new undertaking.

In case of informal firms however more routine updates as well as induction of new entrants ought to be a continuous process. Gordon and Li (2009) suggest that monitors go around and physically inspect informal firms, e.g., estimate the number of employees, the size of the establishment, the amount electricity usage etc in order to double check the data on sales and costs. Innovations need to be continued to effectively use the databank to aid in the assessment of PIT/CIT/VAT, as appropriate, on the part of small businesses. We however recommend all basic work by NBR staff be done in teams (of say three members).

For property data, the updates would entail recording factual details, which awkwardly happens to be stored and maintained by multiple agencies, such as Upazila Land Office, Upazila Settlement Office and Sub-Registry Office, causing complexities in cross-checking and validation of the same. Historically the issue with information in developmental contexts has been that it lacked authenticity (Bird, 1989). More recently, Bhattacharya (2023) points out that the cross-checking of multi-source data flounders due to the absence of an *intra-operable* data system. Both interoperable and intra-operable data systems would help in dealing with the issue of multiple usage of similar databases.¹²³ Finally, let us observe that over and above using up resources, the maintenance of the databank and its implementation in assessing taxes due would require staff integrity of the highest order. The latter has been touched upon already but bears repeating.

8.4 *Inducing Voluntary Tax Compliance*: Economists often point out that tax collection often suffers in LMIEs due to taxpayer resistance (e.g., Alt, 1983, p200). The latter can also add to the costs of collection. The key question therefore is how to induce voluntary compliance. Several ideas may be tried out in this context.

(a) *Public Awareness*: First of curse is greater public awareness/education of why taxes are necessary to fund essential public goods and services. Public signboards may be put up by the new project sites (e.g., roads/hospital/clinics/schools/water treatment plants and similar infrastructure etc) citing the usage of tax funds allocated to the project. Identification and redressal of loan defaults and or money laundering be made widely publicised to give an indication of the government's total commitment to the rule of law.

(b) *TPIR*: Ahmed (2019) points out that 'third party information reporting' (TPIR), widely used by the tax administrations around the world as a tax enforcement device, has so far remained unutilised in the BDG context. He cites an OECD source which States that such information reporting (i.e., name and tax ID of the recipient plus the amount and date of payment) has been legislated as an obligation on the part of the payer in many countries. This kind of information can be utilised by tax officials to match the returns submitted by the payees in question and triangulated with other tax records available with them on such persons to detect underreporting of incomes and also to identify the non-filers (2019, p18). This is particularly

¹²³ Web sources offer the following interpretation of accounting terms used above. *Data interoperability* refers to the ability of different systems and technologies to exchange and use data effectively. In the context of agriculture ... data interoperability enables seamless integration of weather data, soil data, crop data, financial data, ... to provide a comprehensive view of the farming environment. *Data intra-operability* refers to the ability of different components within a system to communicate and share data effectively. For example, intra-operability enables different IoT sensors to communicate with each other to provide accurate and timely data. Note that IoT refers to the 'internet of things', which 'refers to the collective network of connected devices and the technology that facilitates communication between devices and the cloud, as well as between the devices themselves' (www.aws.amazon.com).

relevant when dealing with the self-employed and the owners of small and medium enterprises (SMEs).

(c) *Monitoring Technology*: The compliance regime may have to randomly monitor the monitors and auditors to detect unprofessional conduct. Data intra-operability procedures when fully entrenched in the NBR modalities would make it easier to detect unusual developments in some teams or zones dealing with similar tasks. The team concept cited above is also expected to alleviate the incidence of errant behaviour.

(d) *Tax Evasion and Avoidance*: Focussing on tax evasion and tax avoidance, both induce very similar losses in economic efficiency by misallocating resources among activities that differ in the scope for tax reduction. One must however contrast between the concepts of tax planning/tax avoidance and tax evasion since the administrative tools to fight each may well differ (Ahsan, 1995a, p116). Since tax planning erodes the tax base and hence the design of tax instruments ought to be sensitive to such leakages, e.g., by minimising tax expenditures in all major tax handles and above all, by avoiding high rates of graduated tax schedules. Keeping evasion in check, beyond tax design (e.g., enshrining enhanced use of presumptive values), would also require a team of dedicated and well-trained professional staff of high morale.

(e) *National Identity*: Besley-Persson (2014) argue that "tax-compliance norms may also emerge in part from a strengthened sense of national identity". Such fervour is believed to have allowed the raising of substantial revenues in pre-20th century episodes (Napoleonic and other wars). In the BGD context, though identity of the nation had never been a question mark, the new start in the backdrop of the recent youth-led movement toppling the unpopular regime must be seen as ushering in a new phase of optimism for the old and the young alike. If there is a moment to capitalise on such enthusiasm, time is now so long as the nation can ease the universal tension that exists between the haves and the have-nots.

8.5 *Financial Innovation*: We have argued above that financial innovations may be a prerequisite of a successful tax reform. Simple saving and loan products along with secure online transaction via applications accessible on the cellular phone must be tailored to the needs of the small and informal traders and businesses.

8.6 *Tax Tribunals and Disputes*: With more vigorous enforcement of the tax code, tax assessments according to the evolving presumptive paradigm, and implementing newer tax handles are likely to lead to many concerns and complaints by the tax-paying citizens. These must be dealt with professionally with care and in a timebound manner. In view of the shortage of skilled staff, contractual appointment to such tribunals can be offered to retired specialists including judges and magistrates. Tribunals may also be tasked with the offering of advisory services on the side to

allay public's concerns such that many complaints can be settled in a mutually amicable manner without actually going through formal hearing process and judgement.

8.7 *Compliance Challenges in Specific Areas*: Over and above what has been said above, we now examine a few additional aspects of compliance as they relate specifically to PIT, VIT, and the property tax.

(a) *PIT*: Enrolling New Taxpayers. The effective tax base can also be broadened by gradually adding new taxpayers. While in BDG, as of FY23 a mere 2.1% of citizens filed an income tax return, the comparable figure in IND has reached 5% in FY25.¹²⁴ The BD figures, a good trend no doubt, has improved of late due to the requirements of both TIN number and evidence of filing tax return in order to open bank accounts and access government issued saving instruments. But it is believed that many of these returns are devoid any meaningful data as they are rarely examined by NBR staff. Lack of adequate staff strength is a likely reason for the lapse. Making use of available data would permit cross-checking and thereby assist in collecting the revenue due. Holding an awareness campaign targeting the self-employed need to be explored.

Withholding Provisions: Here the accounting practices in private employment of salaried persons hold a key. The withholding rates can also incorporate slabs depending on the level of salary paid. Any excess of withheld tax, upon submission of a satisfactory return, ought to be refunded back to the taxpayer promptly.

Audits & Scrutiny: Ideally audit teams ought to be set up by grouping along major professions, which should survey the average income of professionals and those in self-employment (e.g., dentists based in a certain location). Further details are too elaborate to enter into a discussion in the present context. While audits may target a rough percentage of taxpayers depending on profession etc (e.g., salaried vs self-employed), practically 100 % of all returns should receive some review.

Enforcement: Historically NBR has been unable to realise PITs due of a given date within a reasonable time (Ahsan, 1995b). It should set targets for the recovery of taxes due utilising all available options as per the tax laws including legal ones. Attempts ought to be made to expedite pending disputes.

¹²⁴ BGD media quotes NBR officials as stating that although the number of TIN holders has exceeded 10 million, only 3.5 million individuals (out of a population of about 170 million) filed an income tax return in FY23, which works out to a mere 2.1% (01 Feb 2024, BDNews24.com). The IND figure of 73 million taxpayers (out of a population of 1,451 million in 2024), highest on record, relates to the more recent data of 31 July 2024 vide a press release dated 02 August 2024 of the MoF, Govt of India (https://www.pib.gov.in).

(b) *CIT*: Here too the major crisis is that many business firms do not file returns or pay little. In view of the evidence of speedy collection of CIT dues within the same tax/ calendar year in the past, in sharp contrast to the PIT experience, many believed that these assessments were effectively negotiated between the taxpayer and the tax collector indicative of pervasive corruption (Ahsan, 1995b). NBR must guard against such allegations, as pointed out above, by minimising any face-to-face contact between taxpayers and tax officials. Smaller firms may be assessed taxes on a presumptive basis if they were unwilling to come forward with a credible return.

(c) *Property Taxes*: Many practical difficulties in the implementation of the property taxes lie in the inadequate database of property records, which we have dwelt with at length in the preceding section of the paper. Historically even the costs of collecting LDT has taken a heavy toll on the meagre resources at the disposal of most municipalities (Skinner, 1991). Once the database as suggested above is up and running, coupled with greater digitisation, most misgivings can be seen to largely dissipate over time. Nevertheless, there remains one major administrative aspect that requires further attention.

Municipality Size Issue and DMBs: There is a concern of the differential managerial capacity of smaller and larger municipalities and resources at their disposal. In this context, Awasthi and Nagarajan (2020) have suggested the establishment of a Municipal Revenue Board to support and manage the technical- and policy-related aspects of the property tax at the state level. In the unitary context of BDG, we propose the setting up of Divisional Municipal Boards (DMBs) at the division level, which will liaise between NBR and the municipalities within its jurisdiction, especially on technical details of data sharing and provide all other help, especially to smaller municipalities, in matters of property tax administration. DMBs may also be entrusted to deal with all disputes about LDT and property registration. Setting up the DMBs is likely to also moderate and eventually eliminate the issue of political influence in manipulating tax assessment and the corresponding loss of public trust in the system.

(d) *VAT Compliance*: The much higher noncompliance here vis-à-vis direct taxes, as measured by the tax expenditure ratio, is the smallness of firms, both formal and informal. Some of the latter may not be well connected with the formal financial institutions. A first task, as reviewed above, would be to make an inventory of such entities and have them registered following easy procedures. They ought to be made aware that one benefit of registration is that they will be able to deduct VAT paid on inputs and supplies in determining their net business incomes. Their ability to engage with formal financial institutions would also help pave the way to inculcate a culture of tax compliance.

The idea of automation of tax services, while essential, in and of itself, is unlikely to lead to higher revenues, unless more businesses sign up, and a minimum alternative tax (determined presumptively) is made binding for all non-compliers. But, as elaborated upon earlier, that would presuppose an up and running presumptive databank, which will take time to build. Nandi and Khondker (2016) have analysed an automation scenario whereby some growth takes place autonomously in registration annually resulting in a modest concomitant gain in revenue.

8.8 Fiscal and Legal Capacity of the State: The smooth operation of tax administration in any context requires parallel developments of the rule of law at the national level. "A society that condones noncompliance with tax laws may also be expected to prove reluctant to punish the defaulters" (Ahsan, 1995b, p117). Surely the coercive authority of the State must be enhanced to raise adequate revenue. To this end it would be necessary to restore public perception that law and order is being enforced universally and not selectively or indifferently. To quote Besley-Persson (2014), "... with pervasive corruption, the average citizen may be less inclined to support higher taxation and to comply with those taxes already in place". While clever auditing may help in identifying tax evasion and an appropriate penalty structure can in principle serve as a deterrence against any future commissioning of a similar offence, lax law enforcement practices of a developmental State may render the civil and penal provisions of the tax code totally impotent (Ahsan, 1995a). Encroachment of public land, destruction of forests and hills, wilful default of bank loans, non-transparent public procurement events, and the like stand out as common examples of weak State capacity. Addressing the latter cannot be part of an exercise of tax reform, but it provides a reminder that the general equilibrium nature of the problem, namely success of reforms in one aspect of economic exchanges depends on how the rule of law is respected and violations thereof dealt with in the rest of the economy.

8.9 Tax Compliance Summary: In this section we have proposed several tax compliance measures.

(i) *Administration*: We recommend a major overhaul of NBR, with significant changes in recruitment, training and capacity building, and in the compensation structure with a view to raising the level of professionalism in the cadres and at the same time weeding out endemic corruption. We also call for the setting up of Divisional Municipal Boards (DMBs).

(ii) *Technology*: A top priority for NBR would be to invest in technology and promote electronic communication in all spheres of its activities. Face-to-face interaction between a taxpayer and a tax official ought to be discontinued forthwith, except for the advisory services.

(iii) *Presumptive databank*: It is recommended that NBR continually update and manage the databank and explore its wider applicability, e.g., to the direct taxation of SMEs and VAT for small holders.

(iv) *Voluntary Compliance*: Launching (a) an awareness campaign on the role of taxation in economic development, (b) promoting third party information reporting, (c) installing functioning auditing and monitoring modalities, (d) detecting tax evasion, and (e) reliance on national identity and pride are suggested as means of inducing voluntary compliance with the evolving tax system.

(v) *Financial Innovation*: Parallel with tax reforms, we recommend that simple saving and loan products be designed with secure online accessibility on the cellular phone to meet the needs of the small and informal traders and businesses.

(vi) *Advisories, Tax Tribunals, and Dispute Resolution*: It is recommended that, along with advisory services, the modalities in respect of disputes be streamlined for timebound outcomes without undue harassment of the taxpayer.

(vii) *Property Tax Compliance*: In view of the greater role of taxation of property and capital income endorsed in the paper and in view of the managerial capacity of smaller municipalities, we propose the setting up of Divisional Municipal Boards (DMBs) at the division level. DMBs would liaise between NBR and the municipalities within its jurisdiction, especially on technical details of data sharing and property tax administration (including capital gains as appropriate).

(viii) *Fiscal and Legal Capacity of the State*: The chances of inducing greater compliance with the tax laws making tax reforms a success would require a simultaneous strengthening of the universal application of the rule of law in the rest of the economy (e.g., dealing with wilful loan defaults).

9. Conclusion

The political economy literature suggests that significant improvement in tax effort can only come after the State commits in earnest to improve the relevant institutions than merely undertake tax reforms. A more balanced position, in light of the discussion presented above, would be that tax reform must be undertaken while at the same time initiating serious measures to repair the weaknesses of tax administration, and more generally, the rule of law in all matters of the State. Given that institution building/strengthening is a slow process, a match has to be found, perhaps by trial and error, so that one comes up with a tax system that can actually be implemented to yield the desired revenue share so that we move away from a bad equilibrium to a hybrid state, if not jump altogether to a good equilibrium.

Appendix-1: Some Background Tables

Year	FY 21	FY 22	FY23	$CY 22^{(a)}$
	(BDT, Cr)	(BDT, Cr)	(BDT, Cr)	(BDT, Cr)
Categories	[GDP %]	[GDP %]	[GDP %]	[GDP%]
(1) Tax Rev-	259,882	300,179	319,731	309,955
NBR	[7.36]	[7.56]	[7.20]	[7.38]
(2) Tax Rev	5,916	6,704	7,994	7,349
non-NBR	[0.17]	[0.17]	[0.18]	[0.18]
Total Tax Rev	265,798	306,883	327,725	317.304
(TTR)	[7.53]	[7.73]	[7.38]	[7.56]
(3) Non-Tax	58,862	33,056		35995
Rev	[1.67]	[0.83]	38,933 [0.88]	[0.85]
Total Rev	324,660	339,939	366,658	353,299
	[9.20]	[8.56]	[8.26]	[8.41]
(4) GDP	3,530,200	3,971,700	4,439,273	4,205,487
(Current Price)				

Table A1: BGD Revenue (Actual): 2015-16 Base

Note: Given the July-June fiscal year, we calculate calendar year (CY) figures for 2022 as the simple average of FY22 and FY23, i.e., CY22 = (0.5)*[FY22+FY23].

Source: Author's construction based on data (both revenue and GDP) as reported in Table 4.2 in GoB (2022, 2023a, 2024).

Year	FY 21	FY22	FY23	CY2022 ^(d)
	(INR, Cr)	(INR, Cr)	(INR, Cr)	(INR, Cr)
Categories	[GDP %]	[GDP %]	[GDP %]	[GDP %]
(i) Central Tax Rev ^(a)	2,027,104	2,709,315	3,054,192	2,939,233
	[10.24]	[11.45]	[11.33]	[11.38]
(ii) States' Own Rev ^(b)	1,172,000	1,521,000	1,802,296	1,692,333
(iii) Tot Tax Rev (IND)	3,199,104	4,230,315	4,856,488	4,647,764
	[16.16]	[17.67]	[18.02]	[18.0]
(iv) Non-Tax Rev ^(a)	432,406	625,498	607,481	613,487
(i) Total Rev (Central)	2,459,510	3,334,813	3,661,673	3,552,720
(v) GDP (Current Price)	19,800,914	23,597,399	26,949,646	25,832,230
(vi) Total Rev (all IND)	3,631,510	4,855,813	5,463,673	5,245,053
(vi) Total Rev/GDP (%)	18.34	20.32	20.27	20.30

Table A2: IND Revenue Pattern, FY20-FY23

Notes: (a): Central government revenues (actual) are reported in Annual Financial Statements, Ministry of Finance, GoI (2021-2024a).

(b) State revenue data is obtained from the latest Reserve Bank of India document (RBI, 2023), which was released on 11 December 2023.

(c) The GDP figures are taken from GoI (2024b). However, note that the FY23 GDP in current prices is the first revised estimate (FRE) released on 31 May 2024, and thus not the final.

(d) The calendar annual (CY) 2022 data is calculated as being equal to [(1/3) FY22 + (2/3) FY23] since the fiscal year starts in April.



Figure A1: Tax Effort and the Share of the Informal Economy (MIMIC), 2022

Source: Author's construction based on OECD (2024) Asia Pacific tax data, and WB (2024) data on the share of the informal economy in GDP (MIMIC) for 2020.

Figure A2: BGD Tax Structure in 2022



* Data for 2021 are used for the Africa (33) average and OECD average as 2022 data are not available.

Source: OECD (2024)

Appendix-2: Encouragement of Savings via Consumption/Expenditure as the Tax Base

Championing the case for a (progressive) tax on consumption/expenditure has been claimed as perhaps the oldest tax reform proposal in history (late 17 century, 1670 to be precise).¹²⁵ In more recent times, both Irving Fisher (1939) and Nicholas Kaldor (1955) called for replacing the income tax with a progressive expenditure tax. He argued, mostly on intuitive grounds than via economic modelling, that such a switch would enhance both equity and economic efficiency in society.

The case for equity arose by the prevalent norm in the British income tax code of the day to leave capital gains, commonly disproportionately larger than earnings for wealthy individuals, out of its purview. This is at a time when public finance scholars had settled on including capital gains in the definitions of what is known as the 'comprehensive income' as advocated by Robert Haig (1921), Henry Simons (1938), and Georg Schanz (1896).^{126,127} The modern view of the expenditure/consumption tax would end up taxing all capital gains at the point of consumption where bequests would also be treated as consumption in the same period. Any amount left unspent at death would also be presumed bequeathed and hence consumed and thus fully taxed before the proceeds end up in the estate of the deceased (Ahsan, 1990 and Ahsan-Tsigaris, 1998 and 2003).

Efficiency gain vis-a-vis the income tax arises due to a number of factors. First, Kaldor argued that a progressive tax on consumption will have a less deterrent effect on work incentives than an income tax since the net wage rate remains unaffected by the tax. The income tax also discourages saving by lowering its reward, the net-of-tax interest rate, while the expenditure tax leave that unchanged. He also believed that investors would take more risks under his proposal than under the income tax.¹²⁸ He viewed the latter two eventualities make the expenditure tax more growth friendly than the income tax.

Formal modelling of capital risk in the choice between income and the consumption tax, thought mostly under the proportional tax regimes have been extensively analysed by many authors.¹²⁹ The economic efficiency claims made by Kaldor mostly survive this analysis. In models of consumption-saving choice under capital risk, it is seen that income tax discourages saving, while the consumption tax, under reasonable risk-aversion hypothesis, leaves it unchanged (Ahsan, 1990). Ahsan-Tsigaris (2003) also find that a cash-flow consumption tax leads to a Pareto improvement allocation of welfare vis-a-vis the earnings/endowment tax.

¹²⁵ Lowell Harriss (1956) made the claim though without being specific. Coming to the 20th century, Joseph Schumpeter (1929/30) also advocated a direct tax on consumption.

¹²⁶ Comprehensive income "... equals gain in net worth plus consumption during a given period" (Musgrave, 1967).

¹²⁷ See our earlier remark on Haig's original preference for the consumption tax base (section 3).

¹²⁸ George Break (1956) however contested that formal modelling of risk behaviour, as performed by Domar and Musgrave (1944), shows that risk-taking need not be discouraged by proportional income tax with full loss offsets FLO). As clarified later by Ahsan (1974, 1975), if the tax base is the excess return on risk-taking (e.g., capital gains), household optimally adjust the asset mix by taking additional risk so that the distribution of net wealth remains unaltered before and after taxation. Such results have been extended for more general consumption-saving models by Ahsan (1990). ¹²⁹ See refences cited by Ahsan and Tsigaris (2003).

How to administer the expenditure tax? Thus, while most academic economists favour the consumption tax over the income tax. But they differ in their assessment of the ease of administration. Kaldor's contemporaries, as if following the footsteps of JS Mill, Marshall, and Pigou, mostly reacted negatively the new proposal (Goode, 1964, p25).¹³⁰ In part Kaldor himself believed that its implementation would require taxpayers to report spending (e.g., purchase of durables, imputed rental value of owner-occupied housing and the like). Simons, however, did not buy into this line of argument. He believed that the tax base will probably have to be determined as income minus savings, and thus would entail all the complexities of estimating annual income, plus those of measuring annual net saving or dis-saving (Jacoby, 1967).

Modern writings on the issue, however, dispels the doom predicted by Kaldor's sceptics. Recall that comprehensive income (Y) is defined as

(1)
$$Y = C + \Delta W,$$

where C and W denote the consumption and wealth at a given date while Δ denotes the change in value since last period. One can merely transfer terms and state:

(2)
$$C = Y - \Delta W.$$

The elementary observation is then since the components of both comprehensive income and consumption are identical, how can a consumption tax be harder to implement than the income tax (Ahsan-Tsigaris, 2003, p.243)? It turns out that "it is the consumption base that has its most obvious administrative advantage" (Bradford, 1980, p.85).

To understand the above remark, it is helpful to conceive of the working of the consumption tax system. Heuristically speaking, all individuals will be required to deposit all non-wealth receipts, E, (i.e., earnings, inheritances, and transfers), e.g., as in the case of wages automatically deposited to a registered bank account by the employer. Ideally all investments etc elected by the account owner would take place within the same account, so that all investment income (dividends, capital gains, and interest), collectively denoted by rW, r being the overall rate of return. Total income in a given period would thus be written as

$$Y = E + rW.$$

None of these funds would attract taxation on an accrual basis, except the amount of withdrawal in that period (Δ W). The amount of withdrawal by definition is consumption/spending in that period, which would be taxed at source. It is not necessary to figure out what component of the withdrawn finds came from wages or from investments, a complex task, though the latter is necessary to execute the comprehensive income tax. As Bradford put it, "if no cash transaction takes place", as Bradford puts it, "there is no need to be concerned about those forms of wealth in calculating the base of a consumption tax. It is that simple" (1980, p.85).

¹³⁰ Though Schumpeter was an exception. "The technical difficulties", he declared, "... are big, but not nearly as big as it is stated". He believed that proof of investments would be furnished readily by taxpayers through 'savings accounts and deposit registrations' (1929-30, [1985], pp. 125-26).

The LMI Context: Though Kaldor had proposed the consumption tax of the Indian economy as well, the large share of the informal economy in most LMI context suggest that the scope of revenue extraction is low via direct taxes. Even then he believed that large property income, accruing to a relatively few, in developing countries mostly evade income taxation for lack of records and inefficiency in revenue collection. He also believed that most such income was destined for luxury consumption at home and abroad. However, in the cash-flow format of the tax described above, it would be hard to account for such property income unless voluntarily complied with. The key that registering such income would not incur an immediate tax unless withdrawn may appear as kind of amnesty and thus might encourage compliance so long as individuals begins to trust the tax authority.

The low-saving environment in a developmental context may also get a boost under the consumption taxation once investor realise this to be an inducement too good to pass up. Given that registering their liquid assts in a financial intermediary which allows them to invest freely to seek risk-adjusted higher return, or, whatever their investment goals happened to be, which would accumulate free of tax indefinitely unless withdrawn. In the BGD context, we note that the nascent Universal Pension Scheme Bangladesh' (UPSB) that offers anyone below the age of 50 to start building up a pension account may be fashioned as a registered account. This way one can keep track of an individual's saving prior to age 60, and render that tax-exempt on an annual basis, while subjecting to all future withdrawals upon eligibility taxable (i.e., postage 60), much like the RRSP in Canada. Once the built-in social insurance concept becomes widely understood to potential subscribers, this would entice individuals to participate in the UPSB and become part of the tax system.

In the same breath we must however raise a word of caution. A full-fledged cashflow type consumption taxation would impose an inordinate fiduciary burden on the weak financial system in many developmental contexts. The State mandated UPSB is one thing but allowing a general system of such registered saving accounts through banks, trust companies and brokerages may be premature. Most analysts of the financial sector view it is much too inefficient, beset with endemic corruption, very poorly supervised, and even when culpabilities are discovered, in most cases the guilty manages to get away without having to shoulder any real accountability.

Appendix-3: India's Bold Experiment with the CIT Rate Cut of 2019

India cut its corporate tax in Sept 2019 by a whopping 10 points: What has been the outcome? Bhalla (2022) describes the event as follows: "In September 2019, Finance Minister Nirmala Sitharaman, going well against Indian established conventional wisdom, lowered the corporate tax rate by around 10 percentage points. This was one of the largest corporate tax cuts in world history. Unfortunately, the pandemic struck the world a few months later and disrupted world economies. However, now, three years later, we can assess the efficacy (or not) of this bold experiment..." (p28). He continued, "... for the three months April-June 2022, corporate tax revenues, y-o-y, are up 30 per cent. Using fiscal 2019-20 as a base, corporate tax revenue has increased by 66 per cent, GDP by 33 per cent — an average tax buoyancy of 2.0 over three years. (p29)"

Bhalla spoke too early; his exuberance was exclusively based on post-pandemic lift that marked sharp increases from the depths of despair. We now have the hindsight of actual economic performance over the entire FY22 and FY23. Table A3 illustrates the evidence, where all values are in nominal terms. The y-o-y decline in CIT revenue of 16% in FY20 reflects mostly the impact of the rate cut (while GDP rose by 6%), since the FY ends in April, just coinciding with the start of the pandemic in South Asia. CIT revenue continued to plummet by another 18% the following year, FY21, as did GDP though by only one percent nominal.

FY23 figures thus appear to reflect a fairer outcome of the CIT experiment. In terms of buoyancy, it simply is not there. Over the 5-year period (FY19-FY23, inclusive), revenue rose by annual compound rate of 4.5%, while output growth was faster at 7.4% over the period, yielding an average buoyancy of 0.61. On the larger question of whether the tax rate cut led to increased or no loss in revenue as the supply siders would like to see, the clear answer is that the policy change is yet to meet the moment. *Ipso facto*, we see that over the two years prior to the reform (FY17-FY19), CIT revenue was indeed growing much faster, by a compound rate of 17.0 percent annually vis-à-vis a rate of 10.9 for the aggregate GDP (a buoyancy rate of 1.56) and revenue reached 3.5% of GDP. In FY23, the latter figure stood at 3.06%.

Categories	CIT	GDP (in Cr)	CIT	GDP	CIT/GDP
	Revenue		Growth	Growth	ratio
Year	(actual), Cr		у-о-у	у-о-у	
FY17	4,84,924	15,362,386			0.0316
FY18	5,71,202	17,098,304	1.18	1.11	0.0334
FY19	6,63,572	18,886,957	1.16	1.10	0.0351
FY20	5,56,876	20,074,856	0.84	1.06	0.0277
FY21	4,57,719	19,800,914	0.82	0.99	0.0231
FY22	7,12,037	23,664,637	1.56	1.20	0.0301
FY23	8 25 834	26 949 646	1 16	1 14	0.0306

Table A3: The Indian CIT Experiment (2019)

Source: Author's calculation based on actual revenue reported in Annual Financial Statements, Ministry of finance, GoI (2018-24) and related budget documents of relevant years. All data in current rupees.

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