



# “Dynamic equity in personal income tax design: Theory and application to Vietnam’s 2026 reform”

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# DYNAMIC EQUITY IN PERSONAL INCOME TAX DESIGN: THEORY AND APPLICATION TO VIETNAM'S 2026 REFORM

## Abstract

Static personal income tax governance in fast-growing economies can produce systematic equity erosion, as nominally fixed deductions and brackets gradually increase the effective tax burden on low- and middle-income households during periods of sustained income growth. This study develops a dynamic equity framework for evaluating personal income tax (PIT) design and applies it to Vietnam's 2026 PIT reform as an illustrative case. Drawing on welfare economics, optimal tax theory, and contextual equity arguments, the study constructs a normative framework that treats PIT parameters as adaptive variables and evaluates reform effects using welfare-theoretic criteria. The framework identifies equity lag, defined as the divergence between a fixed PIT schedule and evolving economic conditions, as a central governance failure. The Vietnam case suggests that five years of parameter stagnation are consistent with the emergence of a systematic equity lag among low- and middle-income formal workers, a pattern illustrated through simulation analysis rather than full empirical validation. In this sense, the deduction increases may be interpreted as a Kaldor-Hicks welfare improvement concentrated in the lower and middle portions of the formal wage distribution. However, a one-time adjustment without an embedded updating mechanism is unlikely to prevent the recurrence of equity lag as growth and inflation resume. Sustaining distributional gains, therefore, requires a shift from episodic legislative correction to adaptive PIT governance through indexation rules, mandatory review schedules, and regionally calibrated deduction thresholds.

## Keywords

personal income tax, dynamic equity, equity lag, optimal tax theory, fiscal welfare, adaptive tax governance, public finance, tax policy governance

## JEL Classification

H21, H24, H31, D31

## INTRODUCTION

Personal income tax (PIT) systems in fast-growing economies face a recurrent governance problem when deductions, exemption thresholds, and bracket boundaries remain fixed in nominal terms while incomes and prices increase. Under these conditions, taxpayers can be drawn into higher effective tax burdens without any corresponding improvement in their real economic positions. This problem is especially important for low- and middle-income households, whose tax relief depends most directly on the real value of deductions and exemptions.

Existing tax theories do not fully capture this problem. The optimal tax tradition evaluates equity and efficiency, mainly in a static setting. In contrast, the fiscal drag and bracket creep literature usually treats the erosion of fixed tax parameters as a revenue or macro-fiscal issue rather than as a progressive distortion of the original distributive purpose of the PIT schedule. Consequently, the literature still lacks a coherent framework for evaluating how a nominally fixed PIT structure departs from its intended equity function in fast-growing economies over time.

This study offers a theoretical contribution. It proposes a normative framework for evaluating PIT design over time and uses Vietnam's 2026 PIT reform as an illustrative case to demonstrate the analytical utility of the framework. It is not designed as a full empirical illustration in the econometric sense. The study addresses this gap by developing a dynamic equity framework for evaluating PIT design and applying it to Vietnam's 2026 PIT reform. This study aims to explain the conditions under which a fixed nominal PIT schedule generates distributional failure and to show how adaptive tax governance can correct or prevent such erosion.

## 1. THEORETICAL BASIS

### 1.1. Welfare economics foundations for dynamic equity

The dynamic equity framework is based on classical welfare economics, which provides normative criteria for evaluating tax reforms over time (Stiglitz, 1987). A Pareto improvement occurs when at least one individual is made better off without making anyone else worse off. However, this condition is rarely satisfied in practice because any non-trivial tax change generates both winners and losers (Stiglitz, 1987). The Kaldor–Hicks compensation principle offers a more operational benchmark: a reform is welfare-improving if the aggregate gains of the beneficiaries are large enough to hypothetically compensate those who lose, even if compensation is not actually paid (Kaldor, 1939; Hicks, 1939; Boadway & Bruce, 1984).

Horizontal and vertical equity give these aggregate criteria a distributional structure (OECD, 2006; Musgrave & Musgrave, 1989; Zee, 2005). Horizontal equity requires that individuals with the same ability to pay face the same effective tax burden, whereas vertical equity requires that those with greater ability to pay contribute more proportionally (Musgrave & Musgrave, 1989; OECD, 2006). Family-based deductions operationalize these principles by recognizing that households with the same nominal income but different numbers of dependents do not have the same real capacity to pay (Ramos & Lambert, 2003; Zee, 2005). When deductions are set too low relative to living costs, taxpayers with dependents face higher effective tax rates on comparable real disposable incomes than otherwise similar taxpayers without dependents, generating horizontal inequity (Ramos & Lambert, 2003).

These concepts provide a welfare-economic foundation for the dynamic equity framework. Equity

lag is defined as a situation in which a nominally fixed PIT schedule gradually violates horizontal and vertical equity as economic conditions evolve, such that the schedule that was once aligned with its original distributive purpose no longer satisfies that purpose. In this framework, the Kaldor–Hicks criterion is extended from evaluating one-off reforms to evaluating delayed or inadequate parameter adjustments over time, enabling assessment of whether PIT governance continues to protect welfare under changing economic conditions.

### 1.2. Optimal tax theory and the efficiency-equity trade-off

The second building block is optimal income tax theory, which frames PIT design as a social planner's problem of choosing a non-linear tax schedule to maximize the social welfare function subject to incentive and revenue constraints (Diamond & Mirrlees, 1971; Mirrlees, 1971; Saez, 2001). In the Mirrlees tradition, higher marginal tax rates at the top redistribute income toward lower earners but may distort labor supply, effort, and skill investment (Mirrlees, 1971; Sørensen, 2009). Later contributions also emphasize the extensive margin, especially at the lower end of the income distribution, where the decision to participate in formal work is highly sensitive to the design of deductions and the first tax bracket (Diamond, 1980; Saez, 2002).

For developing and emerging economies, the optimal tax problem has additional constraints to consider. Informal labor markets are large, and administrative capacity is limited; PIT enforcement reaches only a subset of the workforce (Tanzi & Zee, 2000; Takikawa, 2024). Under these conditions, higher statutory marginal tax rates may produce weaker redistribution than in advanced economies because workers can move outside the formal tax network. In contrast, deduction thresholds and exemptions have stronger implications

for participation, compliance, and welfare at the lower and middle ranges of income distribution (Bachas et al., 2024; Rodriguez et al., 2023). The Atkinson–Stiglitz theorem further supports this focus by showing that, under weak separability between labor and consumption, income taxation is a sufficient redistributive instrument and that adjustments to the tax base are among the least distortive policy tools available (Atkinson & Stiglitz, 1976).

These insights provide an efficient foundation for the dynamic equity framework. If PIT parameters are treated as fixed nominal values, the effective tax schedule can drift away from the incentive-compatible structure that justified it at the time of design. Therefore, dynamic equity requires that deductions, exemption thresholds, and bracket boundaries be understood not as static parameters but as adaptive policy variables whose trajectory affects both redistribution and efficiency over time.

### 1.3. Dynamic and contextual equity as an analytical extension

The third theoretical strand extends standard equity analysis from a static to a dynamic and contextual perspective. Classical welfare economics and standard optimal tax models evaluate a given tax schedule against a snapshot of income distribution and prevailing economic conditions (Stiglitz, 1987; Mirrlees, 1971). In fast-growing economies, however, nominal incomes, prices, and labor market structures change rapidly; therefore, the relevant question is not only whether a PIT schedule is equitable when adopted, but whether it remains equitable as those conditions evolve. Dynamic equity addresses this issue by requiring that a tax system preserve its intended distributional properties over time rather than only at a single design point (Deutsche Bundesbank, 2022; García-Miralles et al., 2026).

The literature on fiscal drag and bracket creep provides empirical support for this extension of the Laffer curve. When tax thresholds are fixed in nominal terms, income growth driven by inflation or productivity pushes taxpayers into higher effective tax burdens without a corresponding improvement in real welfare (Australian Parliamentary

Budget Office, 2022; García-Miralles et al., 2026). Existing studies usually interpret this process as a revenue or macro-fiscal phenomenon and recommend indexation to neutralize unintended tax increases (Altemeyer-Bartscher & Zeddies, 2017; Sanz Sanz & Arrazola Vacas, 2025). Simultaneously, contextual equity studies show that equal nominal incomes may correspond to unequal real living standards across regions with different costs of living, suggesting that deduction design may also require a spatial dimension (Ramos & Lambert, 2003; Loras-Gimeno et al., 2024).

These strands form the foundation of the proposed framework. The dynamic equity framework integrates welfare criteria, optimal tax theory, and the time path of PIT parameters into a single analytical structure to evaluate whether tax governance preserves the original equity intent of the schedule. Within this structure, the equity lag is understood as the cumulative divergence between nominally fixed PIT parameters and the evolving economic conditions they are meant to reflect. This makes adaptive PIT governance a theoretical necessity, rather than merely an administrative preference.

## 2. RESULTS

### 2.1. Dynamic equity framework as a theoretical result

This section presents the dynamic equity framework as the principal theoretical result of this study. The framework evaluates PIT design in economies where tax parameters are fixed in nominal terms but economic conditions change rapidly. It starts from the premise that the welfare properties of a PIT schedule depend not only on its statutory design at a given point in time, but also on whether its key parameters continue to match the income, price, and household conditions they are intended to protect over time. A tax schedule that is equitable at the moment of adoption may therefore become progressively misaligned with its original distributive purpose if deductions, exemptions, and bracket thresholds remain unchanged while nominal incomes and living costs increase.

The central analytical concept yielded by this framework is equity lag. Equity lag refers to the cumulative divergence between fixed nominal

PIT parameters and the evolving economic reality that they are meant to reflect. This divergence produces a progressive gap between the intended distributional logic of the tax schedule and its actual welfare effects. In practical terms, equity lag arises when nominal income growth or inflation reduces the real value of deductions and exemptions, causing taxpayers to enter taxation earlier or face higher effective average tax rates even though their real economic position has not improved. Under such conditions, the PIT schedule ceases to perform the distributive function for which it was originally designed.

The first result of the framework is the identification of three evaluation dimensions that together constitute its analytical core. The welfare dimension asks whether a parameter adjustment improves aggregate welfare under the Kaldor–Hicks criterion, that is, whether the gains to beneficiaries are large enough to justify the fiscal cost of adjustment. This study extends the Kaldor–Hicks criterion, originally developed for evaluating one-off reforms (Kaldor, 1939; Hicks, 1939; Boadway & Bruce, 1984), to assess the cumulative welfare cost of delayed parameter adjustment over time. The efficiency dimension asks whether the evolution of PIT parameters preserves a reasonable balance between redistribution and work incentives, particularly in the lower and middle income range where labor force participation is most sensitive to threshold design; building on optimal tax theory (Mirrlees, 1971; Diamond, 1980; Saez, 2002), this dimension treats the time path of parameters, not only their level at a given point, as a determinant of incentive compatibility. The contextual dimension asks whether the deduction design remains consistent with actual household needs and regional cost-of-living variation over time; prior contextual equity studies focus on spatial inequality at a single point in time (Ramos & Lambert, 2003; Loras-Gimeno et al., 2024), whereas this framework adds a temporal dimension by requiring that deductions remain contextually adequate as economic conditions evolve.

Second, on this basis, the framework yields three conditions under which a nominally fixed PIT schedule is likely to generate systematic distributional failure. The first condition is sustained nominal income growth or inflation, which erodes the

real value of deductions and exemptions and silently expands the effective tax base; empirical evidence from both advanced and emerging economies confirms that this process is both persistent and regressive (Deutsche Bundesbank, 2022; García-Miralles et al., 2026). The second condition is an institutional setting in which PIT parameters are revised only through infrequent legislative action rather than by automatic or rule-based adjustment, a governance structure that converts what would otherwise be a technical indexation problem into a recurring distributive failure. The third condition is the presence of structural heterogeneity, including household dependency burdens, regional cost differences, or a narrow formal tax base; this study argues that heterogeneity amplifies the welfare consequences of delayed adjustment asymmetrically, concentrating the burden on groups whose tax relief depends most directly on the real value of fixed deductions (Tanzi & Zee, 2000; Bachas et al., 2024).

A third result concerns the prescriptive implications of the framework. This study argues that equity lag is not a purely mechanical by-product of inflation but a governance failure, one that arises from the absence of institutional mechanisms capable of preserving the intended distributive role of the PIT schedule over time. This reinterpretation carries a direct normative implication: adaptive updating mechanisms are not merely administrative conveniences but a necessary component of equitable tax design. Prior contributions have recommended indexation primarily as a revenue-stabilization tool (Altemeyer-Bartscher & Zeddies, 2017; Sanz Sanz & Arrazola Vacas, 2025); the present framework extends this rationale by grounding the case for indexation, whether through CPI-linked rules, mandatory review cycles, or wage-linked formula adjustments, in the welfare-theoretic obligation to preserve the original distributive intent of the PIT schedule. In this sense, the framework shifts the analytical focus from static tax design to adaptive tax governance, treating PIT parameters not as fixed legislative choices but as adaptive policy variables whose trajectory is itself a dimension of distributive equity.

Taken together, these three results, namely the three-dimensional evaluation structure, the three conditions for distributional failure, and the prescriptive case for adaptive governance, constitute

the dynamic equity framework as an original theoretical contribution. Rather than merely describing bracket creep, the framework reinterprets parameter stagnation as a welfare-theoretic and governance problem, offering a structured basis for evaluating when a PIT schedule departs from its original equity purpose, how that departure can be identified, and what types of institutional responses are normatively justified. The following sub-section illustrates how this framework applies to a concrete reform episode.

## 2.2. Illustrative application: Vietnam's 2026 PIT reform

The purpose of this sub-section is not to provide a full empirical validation of the framework but to illustrate its analytical utility through a well-documented reform episode. The Vietnam case was selected because it provides a clear and well-defined instance of parameter stagnation followed by a corrective reform, making it suitable for demonstrating how the framework's concepts apply in practice.

Vietnam's 2026 PIT reform provides an illustrative case for demonstrating the analytical usefulness of this framework. This case is appropriate because PIT deductions were last adjusted in 2020 and then remained fixed for five years despite substantial growth in per capita income and consumer prices, creating a clear period in which equity lag could accumulate. GDP per capita rose from approximately USD 3,552 in 2020 to USD 5,026 in 2025, an increase of 41.5 percent over five years, while the average consumer price index in 2025 increased by 3.3 percent relative to 2024, continuing a pattern of sustained cumulative price growth since 2020 (VGP, 2026; GSO, 2026a, 2026b). Prior analyses of Vietnam's PIT system have documented the growing misalignment between statutory deduction levels and actual household living costs during this period, underscoring the need for a normative framework capable of evaluating such accumulated divergence (Nguyen Huu & Nguyen Thuong, 2023). Therefore, the 2026 reform represents a well-defined corrective intervention following a phase of sustained parameter stagnation.

The most important change in the reform was the increase in family-based tax deductions. The personal deduction rose from VND 11 million to

VND 15.5 million per month, and the dependent deduction increased from VND 4.4 million to VND 6.2 million per month under Resolution No. 110/2025/UBTVQH15, effective January 1, 2026 (Standing Committee of the National Assembly, 2025). Alongside this adjustment, the progressive PIT schedule was simplified from seven brackets to five, with statutory rates of 5, 10, 20, 30, and 35 percent (PwC, 2025; Vietnam Briefing, 2025a). The 2026 reform introduced five major structural changes to Vietnam's PIT framework, affecting both the deduction structure and the schedule of taxable brackets (LuatVietnam, 2026). These measures widened the tax-free zone and lowered effective tax burdens in the low- and middle-income ranges without changing the top marginal rate.

Viewed through the dynamic equity framework, the reform illustrates the analytical utility of the framework in three respects. First, it shows that fixed nominal deductions no longer correspond to the income level required to protect minimum household welfare, especially for taxpayers with dependents in urban formal employment. Second, it shows that the burden of parameter stagnation was concentrated in the lower and middle ranges of the formal wage distribution, rather than at the top. Third, it demonstrates that a one-time upward adjustment of deductions can function as a corrective redistribution mechanism, even when the statutory progressivity of the upper schedule remains unchanged.

The simulation results are consistent with this claim. Effective average tax rates (EATR) fell most sharply among low- and middle-income workers with dependents after the reform. For example, the EATR fell to zero for one-dependent taxpayers earning VND 20 million per month, declined by approximately 71 percent for one-dependent taxpayers earning VND 30 million per month, and decreased by about 34 to 47 percent at the VND 80 million level, depending on the number of dependents. These results indicate that the largest proportional welfare gains were concentrated in the income range where the accumulated equity lag was most severe. In this respect, the Vietnam case supports the framework's prediction that deduction-based corrections are most powerful where bracket creep has silently shifted formal workers into tax burdens that no longer reflect their real capacity to pay.

The reform can also be interpreted as satisfying the Kaldor–Hicks criteria. The Ministry of Finance estimated an annual revenue cost of approximately VND 21 trillion; however, the gains from higher disposable income were concentrated among low- and middle-income formal workers and households with dependents, the group for whom tax relief has the strongest welfare significance (VGP, 2025). In a setting where PIT contributes a relatively modest share of total revenue and is concentrated among formal wage earners, widening the tax-free threshold is a less distortive instrument than increasing statutory redistribution through upper-bracket redesigns (Rodriguez et al., 2023; Bachas et al., 2024). Therefore, the Vietnam case is consistent with both the descriptive and normative dimensions of the framework, but also its normative claim that restoring the real value of deductions can constitute a welfare-improving reform.

Simultaneously, the case is also consistent with the governance argument of the framework. The 2026 reform corrected the accumulated equity lag, but it did not eliminate the institutional conditions that produced the problem. If deductions and thresholds remain fixed while incomes and prices continue to rise, the same pattern of distributive erosion will recur. Vietnam, therefore, illustrates both sides of the framework: first, how equity lag

emerges under static tax governance, and second, why adaptive updating mechanisms are necessary if distributive intent is to be preserved over time.

Table 1 summarizes the progressive PIT schedules and family-circumstance deductions in force before and after the 2026 reform. These statutory parameters provide the basis for further simulations reported in Table 2.

Using the schedules and deduction levels reported in Table 1, this study simulates annual PIT liabilities and effective average tax rates (EATR) for representative income and family profiles before and after the reform (Table 2).

Calculation procedure:

1. Annual gross income = monthly income  $\times$  12.
2. Social insurance (SI) contribution deducted at the employee rate of 10.5% of gross salary (capped at 20 times the base salary).
3. Personal deduction: VND 132M/year (before); VND 186M/year (after).
4. Dependent deduction: VND 52.8M/year per dependent (before); VND 74.4M/year per dependent (after).

**Table 1.** Personal income tax schedules and family-circumstance deductions in Vietnam before and after the 2026 reform

Period	Bracket	Taxable income per month (VND million)	Tax rate
Before reform (2020–2025)	1	Up to 5	5%
	2	Over 5 to 10	10%
	3	Over 10 to 18	15%
	4	Over 18 to 32	20%
	5	Over 32 to 52	25%
	6	Over 52 to 80	30%
	7	Over 80	35%
After reform (from 2026)	1	Up to 10	5%
	2	Over 10 to 30	10%
	3	Over 30 to 60	20%
	4	Over 60 to 100	30%
	5	Over 100	35%

*Note:* Before the 2026 reform, Vietnam applied a seven-bracket progressive personal income tax schedule together with family-circumstance deductions of VND 11 million per month for the taxpayer and VND 4.4 million per month for each dependent. From the 2026 tax year, the family-circumstance deductions were increased to VND 15.5 million per month for the taxpayer and VND 6.2 million per month for each dependent under Resolution No. 110/2025/UBTVQH15. The post-reform five-bracket PIT schedule applies from the 2026 tax year under the amended PIT law and related official guidance. In this study, the “before reform” scenario uses the 2020–2025 schedule and deduction levels, while the “after reform” scenario uses the 2026 schedule and deduction levels.

**Table 2.** Simulated annual PIT liabilities before and after the 2026 reform in Vietnam

Source: Own simulation based on the Vietnam PIT schedule (National Assembly of Vietnam, 2007, 2025; Standing Committee of the National Assembly, 2025).

Monthly income (VND m/mo)	Annual income (VND m/yr)	Dependents (no.)	Annual PIT Before (VND m)	Annual PIT After (VND m)	Tax saving (VND m/yr)	EATR Before (%)	EATR After (%)	EATR Reduction (pp)	% Change in EATR
<b>Monthly income: VND 15 million/month (Annual: VND 180 million)</b>									
15.0	180.0	0	2.40	0.00	2.40	1.33	0.00	1.33	-100.0%
15.0	180.0	1	0.00	0.00	0.00	0.00	0.00	0.00	
15.0	180.0	2	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Monthly income: VND 20 million/month (Annual: VND 240 million)</b>									
20.0	240.0	0	7.80	2.70	5.10	3.25	1.13	2.12	-65.2%
20.0	240.0	1	2.76	0.00	2.76	1.15	0.00	1.15	-100.0%
20.0	240.0	2	0.12	0.00	0.12	0.05	0.00	0.05	-100.0%
<b>Monthly income: VND 30 million/month (Annual: VND 360 million)</b>									
30.0	360.0	0	25.80	11.40	14.40	7.17	3.17	4.00	-55.8%
30.0	360.0	1	17.28	4.98	12.30	4.80	1.38	3.42	-71.2%
30.0	360.0	2	9.36	1.26	8.10	2.60	0.35	2.25	-86.5%
<b>Monthly income: VND 50 million/month (Annual: VND 600 million)</b>									
50.0	600.0	0	78.00	40.80	37.20	13.00	6.80	6.20	-47.7%
50.0	600.0	1	64.80	27.96	36.84	10.80	4.66	6.14	-56.9%
50.0	600.0	2	52.68	20.52	32.16	8.78	3.42	5.36	-61.0%
<b>Monthly income: VND 80 million/month (Annual: VND 960 million)</b>									
80.0	960.0	0	178.20	118.20	60.00	18.56	12.31	6.25	-33.7%
80.0	960.0	1	162.36	97.92	64.44	16.91	10.20	6.71	-39.7%
80.0	960.0	2	146.52	83.04	63.48	15.26	8.65	6.61	-43.3%

Note: EATR = Effective Average Tax Rate = Annual PIT / Annual Gross Income × 100. Tax saving = Annual PIT before – Annual PIT after. Simulated annual PIT liabilities and effective average tax rates (EATR) before and after the 2026 reform for selected income and family profiles in Vietnam. Profiles include taxpayers with 0, 1, and 2 dependents; the one-dependent case is the primary baseline unless otherwise indicated. Before reform: self-deduction VND 11M/mo, dependent deduction VND 4.4M/month (2025 parameters). After reform: VND 15.5M/month and VND 6.2M/month (2026 parameters).

- Taxable income = Annual gross income – SI contribution – Personal deduction – Dependent deductions.
- PIT liability computed by applying the progressive schedule to taxable income.
- $EATR = \text{Annual PIT} / \text{Annual gross income} \times 100$ .
- All figures rounded to two decimal places.
- Simulations assume no other deductible items and full-year formal employment.

The concentration of EATR reductions among low- and middle-income workers with dependents in Table 2 is consistent with the dynamic equity framework, which predicts that equity lag accumulates most severely in this segment of the formal wage distribution.

Three conclusions follow from the simulation results. First, the 2026 deduction reform effectively eliminates the PIT burden for low-income taxpayers with dependents, demonstrating that deduction-based corrections can function as targeted welfare instruments even within a nominally progressive schedule. Second, the proportional EATR reductions are largest precisely where bracket creep was most severe, among households in the VND 20–50 million monthly income range with one or more dependents, confirming the framework's prediction that equity lag accumulates asymmetrically across the formal wage distribution. Third, the persistence of positive EATR values at higher income levels, combined with a narrower reduction gap, indicates that the reform's distributional impact is concentrated in the lower and middle segments, leaving the upper schedule structurally unchanged. Together, these patterns support the normative claim that a well-designed deduction

adjustment constitutes a Kaldor–Hicks welfare improvement without requiring a comprehensive restructuring of statutory marginal rates.

### 3. DISCUSSION

The findings are broadly consistent with the existing literature on fiscal drag, bracket creep, and optimal tax design but extend that literature in several important respects. Prior studies demonstrate that when PIT thresholds are fixed in nominal terms, income growth and inflation increase effective tax burdens and generate unintended revenue expansion, particularly in progressive systems (Deutsche Bundesbank, 2022; García-Miralles et al., 2026; Altemeyer-Bartscher & Zeddies, 2017). However, the present study demonstrates the applicability of this mechanism in the Vietnamese context. Here, five years of parameter stagnation progressively increased the effective tax burden on formal wage earners without any corresponding improvement in their real economic positions.

However, this paper diverges from the existing fiscal drag literature in its normative interpretation of this process. Most prior contributions treat bracket creep primarily as a macroeconomic or revenue phenomenon and prescribe indexation as a technical correction (Australian Parliamentary Budget Office, 2022; Sanz Sanz & Arrazola Vacas, 2025). The proposed dynamic equity framework reinterprets this process as a progressive divergence between the intended distributive function of the PIT schedule and its actual welfare effects. This reframing shifts the analytical focus from measuring unintended fiscal tightening to the normative evaluation of tax governance over time.

The results also extend the literature on optimal tax. Classical contributions in the Mirrlees tradition model the efficiency-equity trade-off as a static design problem and do not address how the distributive properties of a given schedule erode when key parameters remain nominally fixed while economic conditions change (Mirrlees, 1971; Saez, 2001; Piketty et al., 2014). The present study does not challenge that tradition but argues that the time path of PIT parameters is a dimension of tax design. A schedule that satisfies standard optimality criteria at the moment of adoption may cease

to be normatively defensible if its deductions and thresholds are not updated in accordance with changing income and price conditions.

The findings are consistent with studies on PIT design in developing economies. These studies emphasize that widening the tax-free zone through deduction and exemption adjustment may be more effective and less distortive than restructuring upper-bracket rates under conditions of high informality and limited administrative capacity (Bachas et al., 2024; Rodriguez et al., 2023; Tanzi & Zee, 2000). Cross-country evidence further shows that PIT systems in emerging economies tend to combine limited progressivity with narrow formal coverage, making deduction-based reform a more tractable redistributive instrument than rate restructuring (Benedek et al., 2022). The Vietnam case supports this view: the 2026 reform generated the strongest proportional relief among low- and middle-income formal workers with dependents while leaving the upper statutory rate structure essentially unchanged. This pattern illustrates that deduction-based corrections can restore distributive intent without requiring a comprehensive overhaul of the PIT schedule.

Finally, this study contributes to the contextual equity scholarship. Prior contributions have argued that equal nominal income does not imply equal real tax capacity when household composition and regional cost-of-living conditions differ (Ramos & Lambert, 2003; Loras-Gimeno et al., 2024). The present framework incorporates this spatial argument and adds a temporal dimension, showing that even an initially appropriate deduction structure may lose its contextual equity properties over time if it is not periodically adjusted. This is particularly consequential in fast-growing economies, where both rapid income growth and pronounced spatial divergence can quickly undermine the real protective role of nominally fixed thresholds.

The principal theoretical implication of this study is that PIT equity should be evaluated as a dynamic property of a system's evolution over time, rather than solely as a static property of its design at a given point. The concept of equity lag captures this by identifying the cumulative divergence between fixed nominal parameters and the evolving

economic conditions that they are intended to reflect. This reinterpretation allows bracket creep to be understood not simply as unintended revenue growth but as a form of progressive distributive failure rooted in the governance structure of the tax system.

The second implication concerns the normative status of adaptive PIT governance. Once the time path of deductions, exemptions, and thresholds is recognized as equity-relevant, institutional mechanisms for updating those parameters become part of the equity structure of the tax system itself, rather than merely a technical or administrative matter. The dynamic equity framework thus links welfare economics, optimal tax theory, and institutional design in a way that is largely absent from the current literature.

The third implication pertains to the applicability of dynamic equity analysis beyond advanced economies. Much of the empirical evidence on fiscal drag and bracket creep is drawn from OECD countries with broad formal tax bases, strong administrative infrastructure, and rule-bound fiscal frameworks (Deutsche Bundesbank, 2022; García-Miralles et al., 2026). The Vietnamese case indicates that the welfare consequences of parameter stagnation may be more concentrated in economies where PIT coverage is narrow, formal-sector-oriented, and adjusted only at long, politically determined intervals, suggesting that the issue of adaptive tax governance is especially pressing outside the OECD context.

The analysis demonstrates that one-off PIT adjustments, while welfare-improving in the short run, are insufficient as durable equity solutions. Vietnam's 2026 reform corrected the accumulated equity lag through a significant increase in deduc-

tions; however, it did not alter the institutional conditions that allowed the accumulation to occur in the first place. If deductions and exemption thresholds remain nominally fixed for an extended period, the same pattern of distributive erosion will re-emerge as incomes and prices continue to rise.

Therefore, the framework supports a transition from episodic, politically triggered adjustments to rule-based parameter updates. CPI indexation represents the most immediate and administratively tractable option, as it preserves the real value of deductions in a transparent and predictable manner, consistent with standard international practice (Altemeyer-Bartscher & Zeddies, 2017; OECD, 2006). However, in fast-growing economies, where the equity benchmark is not only purchasing power but also the evolving income level at which households can meet their basic needs, inflation-only indexation may be insufficient. Updating formulas linked to nominal wage growth, regional minimum income standards, or composite economic indicators may better preserve the ability-to-pay principle that motivates the deduction structure (Musgrave & Musgrave, 1989; Zee, 2005).

The framework also underscores the importance of spatial equity. A uniform national deduction threshold generates horizontal inequity whenever living costs and income opportunities vary substantially across regions, as in Vietnam (Vietnam Briefing, 2025b; Loras-Gimeno et al., 2024). The central policy implication is that sustaining the original distributive purpose of a PIT schedule requires not merely periodic correction of the equity lag, but institutional arrangements that embed adaptive responsiveness into the governance structure of the tax system on a continuous basis.

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## CONCLUSION

This study develops a dynamic equity framework for evaluating personal income tax design in fast-growing economies and applies it to Vietnam's 2026 PIT reform as an illustrative case study. The framework identifies equity lag, the cumulative divergence between nominally fixed PIT parameters and evolving economic conditions, as the central mechanism through which static tax governance generates progressive distributive failures. Applied to Vietnam, the analysis shows that five years of parameter stagnation raised the effective tax burden on low- and middle-income formal workers with dependents, and that the 2026 increase in the deduction constitutes a Kaldor-Hicks

welfare improvement that restores the original distributive intent of the PIT schedule for this group. The simulation results are consistent with the framework's prediction that the largest proportional relief was concentrated in the lower and middle portions of the formal wage distribution, consistent with the framework's prediction that deduction-based corrections are most powerful where the equity lag has accumulated most severely.

The study concludes that one-time corrective adjustments, while necessary, are insufficient to prevent the recurrence of equity lag unless accompanied by institutional mechanisms that embed adaptive responsiveness into the governance structure of the PIT system. The proposed framework suggests that rule-based updating mechanisms, whether through inflation indexation, wage-linked formulas, or mandatory review schedules, should be treated as a normative component of tax design, rather than as a peripheral administrative concern.

Several directions for future research follow from the limitations of this study. First, the dynamic equity framework should be applied in comparative settings across a range of fast-growing and middle-income economies to assess its robustness. Case studies or cross-country analyses involving Indonesia, the Philippines, Bangladesh, Kenya, or Morocco would test whether the equity lag follows similar patterns under different institutional arrangements, labor market structures, and political adjustment cycles.

Second, future research should develop more precise operational measures of equity lags. The present study introduces the concept and illustrates its effects through simulated changes in effective average tax rates. However, a systematic empirical agenda could construct explicit equity lag indicators based on inflation, nominal wage growth, household dependency composition, and the frequency of PIT threshold adjustment. Such indicators would allow the governance performance of PIT systems to be benchmarked across countries and over time.

Third, additional research is needed to assess the comparative effectiveness of alternative adaptive governance mechanisms. Future papers could evaluate inflation indexation, wage-linked indexation, minimum-wage-linked deduction formulas, and binding periodic review schedules, not only with respect to their distributional outcomes but also with respect to political feasibility, administrative capacity requirements, revenue predictability, and taxpayer perceptions of procedural fairness (Torgler, 2011; OECD, 2020).

Fourth, the regional dimension of dynamic equity deserves more focused empirical investigations. Future research could assess whether geographically differentiated deduction thresholds reduce horizontal inequity in countries with pronounced spatial divergence in prices and wages and whether such differentiation is compatible with administrative simplicity and compliance. This question is particularly relevant to Vietnam, where regional development gaps and cost-of-living differentials remain substantial.

Fifth, the framework could be extended beyond wage income taxation to examine analogous forms of parameter drift in business household thresholds, social insurance contribution structures, and other nominally fixed instruments. Exploring these domains would help determine whether dynamic equity constitutes a broader principle of fiscal governance that is applicable beyond the personal income tax.

More broadly, the concept of dynamic equity offers a coherent basis for evaluating whether a PIT system continues to serve its distributional purpose over time. Its application to other fast-growing economies with nominally fixed tax parameters represents a productive direction for future research.

## AUTHOR CONTRIBUTIONS

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