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THE ROLE OF REAL ESTATE IN SHAPING THE NATIONAL ECONOMY OF THE UNITED STATES

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Abstract

The real estate sector is a fundamental pillar of the U.S. economy, contributing significantly to economic growth, employment, investment, and government revenue. This thesis explores how real estate serves as an economic driver through various channels, including residential and commercial property development, financial markets, and government taxation. Real estate's impact extends beyond property transactions; it shapes financial markets, affects consumer wealth, and influences economic policies at local, state, and federal levels. By analyzing historical trends, economic cycles, and policy interventions, this research provides a comprehensive understanding of the sector's significance. This study also delves into the interconnection between real estate and financial markets, assessing the role of mortgage-backed securities, interest rates, and investment vehicles such as Real Estate Investment Trusts (REITs). Additionally, it examines real estate's influence on urban development, including zoning regulations, affordable housing initiatives, and infrastructure expansion. The research highlights how government policies, including property taxation and incentives, play a crucial role in shaping the real estate sector and its contribution to public revenue. By evaluating data from national economic reports, financial institutions, and policy reviews, this thesis identifies key trends and challenges affecting the real estate market. It further explores future developments, such as digital transformation, smart cities, and economic recovery post-pandemic. Through this analysis, the study aims to provide insights into optimizing real estate policies for sustainable economic growth and financial stability. Ultimately, this research underscores the indispensable role of real estate in shaping the broader economic landscape of the United States.

Keywords

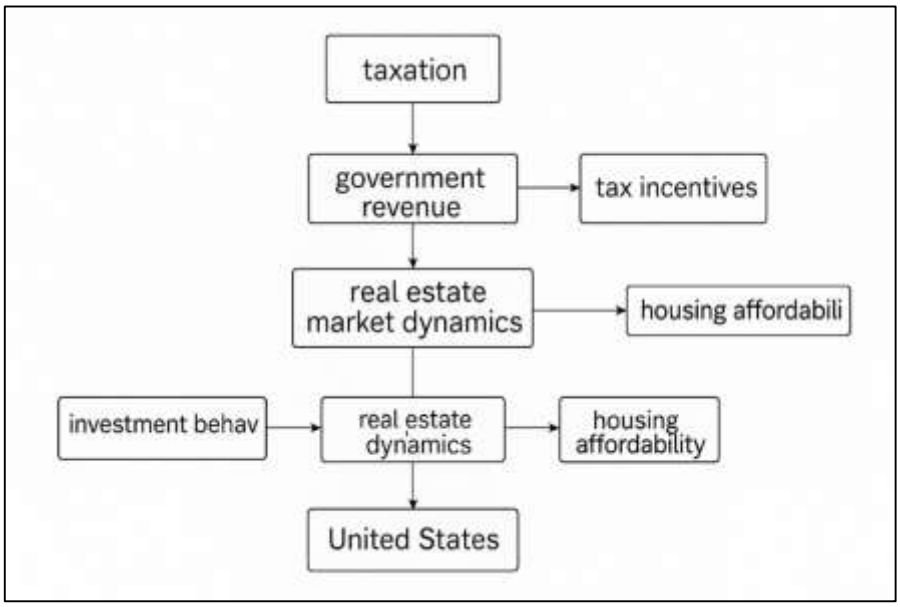
Real Estate Economics; Mortgage-Backed Securities (MBS); Real Estate Investment Trusts (REITs); Urban Development and Zoning; Property Taxation and Public Revenue;

INTRODUCTION

The real estate industry in the United States is among the largest and most dynamic sectors of the economy, playing a central role in shaping patterns of growth, employment, and social well-being. It contributes substantially to gross domestic product (GDP) by driving construction activity, stimulating professional services, and serving as a key determinant of household wealth. Moreover, real estate functions as a transmission mechanism for monetary policy, since changes in interest rates directly affect borrowing costs, property values, and household consumption (Case et al., 2012; Federal Reserve Board, 2025). In this sense, the sector is not only reflective of economic trends but also actively influences broader macroeconomic performance through both cyclical and structural channels (Gyourko & Sinai, 2019; Haughwout et al., 2021).

The U.S. real estate market is highly diversified, encompassing residential, commercial, industrial, and specialized asset classes. Each submarket is subject to distinct drivers, including demographic shifts, migration patterns, and technological change (Gyourko & Molloy, 2015; Nareit, 2025). Residential real estate is integral to household wealth formation, while commercial properties underpin business activity, employment, and logistics. Financial integration further extends the reach of this industry through securitization and Real Estate Investment Trusts (REITs), which allow institutional and retail investors to gain exposure to property markets while enhancing liquidity and transparency (Ling & Archer, 2017; SIFMA, 2025). These dynamics demonstrate the dual nature of real estate as both a physical and financial asset, shaping investment strategies and influencing long-term capital flows.

Figure 1:Conceptual framework of real estate taxation, government revenue, and market dynamics



Taxation is a fundamental pillar of the real estate sector, shaping behavior, influencing valuation, and providing revenue for public services. Property taxes represent the primary source of revenue for many local governments, financing education, infrastructure, and public safety (Anderson, 2021; Urban Institute, 2020). The structure of property taxation—including assessment practices, rates, and exemptions—affects location decisions for both households and businesses, while federal provisions such as mortgage interest deductions and capital gains exclusions alter after-tax returns on real estate investments (Fisher, 2022; Oates & Schwab, 2015). Moreover, tax incentives, such as the Low-Income Housing Tax Credit (LIHTC), play a central role in encouraging private investment in affordable housing and urban revitalization (Eriksen, 2018; Congressional Research Service, 2023). These fiscal mechanisms illustrate how taxation functions as both a source of revenue and a tool for policy innovation.

Current challenges magnify the importance of taxation and policy in real estate markets. Rising housing costs, interest rate volatility, and uneven post-pandemic adjustments in commercial real estate have created stress for households, investors, and governments (Harvard Joint Center for Housing Studies,

2025; Federal Reserve Board, 2025). Simultaneously, sustainability concerns and climate risks are reshaping investment priorities, with policymakers leveraging tax incentives to encourage energy efficiency, resilience, and sustainable construction (Kok et al., 2012; Internal Revenue Service, 2025a, 2025b). Local reforms, such as zoning adjustments to permit accessory dwelling units (ADUs) and mixed-use development, are also influencing market supply and affordability outcomes (Been et al., 2019; Brookings Institution, 2024). These shifts demonstrate that real estate taxation and policy are not static, but rather adaptive mechanisms responding to evolving social, economic, and environmental pressures.

The primary objective of this study is to investigate the complex relationships between real estate taxation, government revenue, and market dynamics in the United States, with the intention of identifying how fiscal policies can be optimized to achieve sustainable and equitable outcomes. Specifically, the research seeks to understand how property taxes influence investment behavior, pricing structures, and housing affordability, while also examining the role of tax incentives and subsidies in fostering affordable housing development and encouraging sustainable real estate projects. At the same time, the study considers the broader influence of federal and state tax frameworks on shaping investment strategies, market responses, and the overall trajectory of the real estate sector. In addition, attention is directed toward emerging trends, including digital transformation, technological innovation, and sustainability imperatives, which are increasingly redefining both taxation mechanisms and market operations. Through these inquiries, the study aims to develop policy recommendations that balance the need for reliable government revenue with the promotion of economic efficiency, social equity, and long-term market resilience.

The scope of this study is centered on the U.S. real estate market, with a particular emphasis on taxation policies and their impact on both residential and commercial properties. The analysis covers the economic effects of property taxation on investment, development, and affordability, while also exploring the role of fiscal incentives in shaping the trajectory of real estate projects. Within this scope, attention is given to the functioning of property tax systems at local, state, and federal levels, with the aim of identifying how different jurisdictions approach taxation and how these approaches affect market behavior. Special consideration is directed toward the influence of tax incentives, including programs such as the Low-Income Housing Tax Credit and renewable energy-related tax benefits, which serve as catalysts for affordable housing, sustainability, and urban renewal initiatives. Furthermore, the study seeks to understand the broader economic implications of taxation on real estate investment strategies, pricing trends, and household decision-making, particularly with regard to housing affordability. It also incorporates an examination of emerging trends such as the integration of digital platforms in property transactions, the rise of proptech innovations, and the increasing application of green building tax incentives that promote energy efficiency and environmentally sustainable development.

While this scope provides a comprehensive framework for examining taxation and real estate, several limitations are acknowledged to contextualize the findings. The research focuses exclusively on U.S. markets, and therefore its conclusions may not fully reflect the conditions or tax regimes of other countries with different legal, economic, and institutional environments. In addition, due to time and resource constraints, the study primarily relies on secondary data sources, including government reports, peer-reviewed academic studies, and industry publications, which may limit the ability to capture real-time developments or primary market data. Moreover, although the analysis emphasizes residential and commercial properties, it does not explore niche segments such as agricultural land, luxury property markets, or international real estate investment flows, which could present different dynamics. These limitations are recognized to ensure that the study's findings are appropriately framed within the scope defined, and to highlight the contextual boundaries within which the conclusions and policy recommendations should be interpreted.

LITERATURE REVIEW

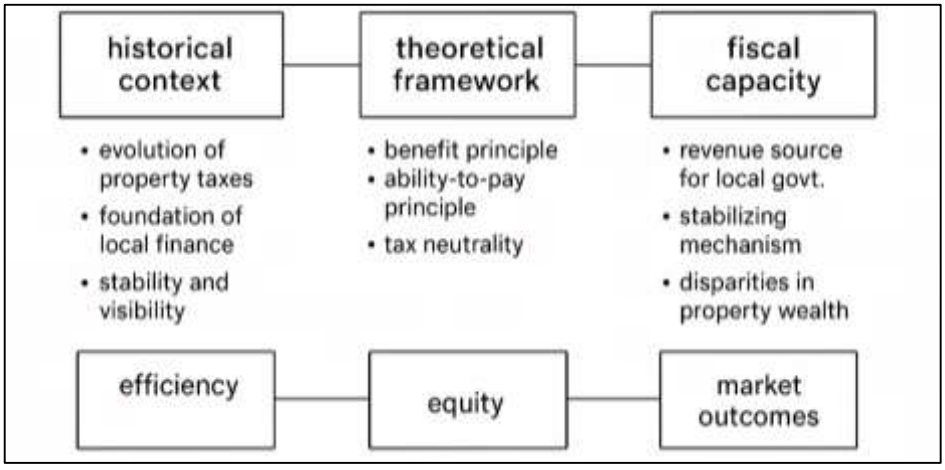
The literature review situates this study within the broader body of scholarship on real estate, taxation, and economic policy. Real estate taxation, as one of the oldest and most stable forms of public revenue, has been widely studied in relation to its effects on investment behavior, market efficiency, and social equity. Existing research emphasizes that property taxation provides essential funding for local

governments, but its design significantly influences housing affordability, land use decisions, and patterns of urban development. Scholars have also examined the role of federal and state tax incentives, such as the Low-Income Housing Tax Credit and renewable energy tax provisions, in promoting affordable housing, sustainability, and investment in underserved communities. Beyond traditional taxation frameworks, the literature increasingly highlights the intersection between real estate markets and broader economic cycles, including the role of mortgage-backed securities, interest rates, and fiscal policy. More recent studies point toward the transformative role of digital platforms, green building incentives, and sustainability initiatives in reshaping both taxation and investment dynamics. This review draws on multiple strands of academic research, policy analysis, and industry reports to synthesize the current state of knowledge, identify gaps in existing scholarship, and establish the conceptual foundation for the present study.

Real Estate Taxation

The historical evolution of property taxation in the United States provides a foundation for understanding its role in shaping both fiscal systems and real estate markets. Property taxes have been a central component of local government finance since the colonial era, initially levied on land ownership as a straightforward and administratively efficient revenue source (Anderson, 2021). Over time, the tax base expanded to include improvements such as buildings, with the goal of aligning taxation with economic capacity and land productivity (Fisher, 2022). By the nineteenth and early twentieth centuries, property taxation became deeply embedded in the structure of local finance, serving as the dominant source of revenue for municipalities and counties. Despite periodic reforms aimed at refining assessment practices, the reliance on property taxation has persisted, underscoring its stability, visibility, and connection to immovable assets that cannot be easily concealed or transferred abroad (Oates & Schwab, 2015).

Figure 2: Real Estate Taxation



The theoretical framework of taxation and public finance underscores the balance between efficiency, equity, and administrative feasibility in real estate taxation. Classical theories emphasize the "benefit principle," where taxes should align with the benefits received by taxpayers, often reflected in local public services funded by property taxes (Musgrave & Musgrave, 1989). In contrast, the "ability-to-pay principle" positions taxation as a means of redistributing wealth by taxing according to financial capacity, an idea that resonates strongly in debates on property tax regressivity (Slack & Bird, 2014). Principles of tax neutrality suggest that property taxation should minimize distortions in investment and land use decisions, ensuring that capital allocation remains efficient across housing, commercial, and industrial markets (Gyourko & Molloy, 2015). These principles highlight the tension between fairness and efficiency in tax design, a recurring theme in both scholarly debates and policy reforms.

Real estate taxation plays a vital role in underpinning government fiscal capacity, ensuring a stable and predictable source of revenue for local governments while influencing broader market outcomes. Property taxes provide municipalities with a consistent funding stream for education, infrastructure,

and public safety, thereby reinforcing the fiscal autonomy of local jurisdictions (Anderson, 2021). The fiscal capacity derived from property taxes also acts as a stabilizing mechanism during economic cycles, as property values tend to fluctuate less than income or sales tax bases, thereby ensuring relative resilience in downturns (Fisher, 2022). At the same time, disparities in property wealth across regions create variations in fiscal capacity, often translating into unequal provision of public goods and raising concerns about vertical and horizontal equity (Brunori, 2019). Thus, the relationship between taxation and fiscal capacity not only underscores the technical role of property taxes as revenue tools but also highlights their broader implications for social equity, governance, and economic development.

Property Taxation and Local Government Revenue

Property taxation has long been recognized as the cornerstone of municipal and, to a lesser extent, state-level budgets in the United States. Unlike income or sales taxes, which are often volatile during economic fluctuations, property taxes provide a relatively stable and predictable source of revenue due to the immobility of real estate and the gradual adjustment of property values (Anderson, 2021). Municipal governments rely heavily on property tax revenues to finance essential services such as K–12 education, public safety, sanitation, and infrastructure maintenance, while state governments often allocate these revenues to supplement education funding and local aid (Brunori, 2019). This centrality reflects the property tax's unique capacity to anchor fiscal systems at the subnational level, ensuring that local governments can exercise financial autonomy and meet community-specific needs.

The fiscal dependence of local governments on property tax revenues has significant implications for governance and economic outcomes. In many jurisdictions, property taxes account for more than 70% of local tax collections, making them indispensable to local fiscal health (Fisher, 2022). This dependence is closely tied to assessment systems, which determine taxable values through methods such as market value assessment, cost-based appraisal, or income capitalization. While assessment systems aim to ensure fairness and uniformity, they are often criticized for inconsistencies, outdated valuations, or administrative inefficiencies that can distort equity and erode taxpayer trust (Sjoquist & Pandey, 2019). Inaccurate assessments may either overburden low-income households or under-assess high-value properties, thereby reinforcing disparities in tax burdens and service provision.

The distributional consequences of property taxation highlight both its strengths and weaknesses as a fiscal instrument. On one hand, property taxes are geographically anchored and can reflect local capacity to pay, enabling wealthier areas to raise greater revenues for public goods (Slack & Bird, 2014). On the other hand, this same feature often exacerbates interjurisdictional inequality, as wealthier municipalities can invest more in education and infrastructure, while poorer areas struggle with limited tax bases (Brunori, 2019). Within jurisdictions, property taxes may also be regressive, disproportionately affecting households with lower incomes relative to property wealth (Harris, 2019). These disparities raise pressing concerns about horizontal equity (equal treatment of similar taxpayers) and vertical equity (fair treatment across income levels), underscoring the importance of reform efforts that improve assessment practices, introduce circuit breakers, or rebalance fiscal dependence on property taxes with alternative revenue sources.

Tax Incentives and Real Estate Development

The Low-Income Housing Tax Credit (LIHTC) remains the federal government's primary supply-side instrument for producing and preserving affordable rental housing, channeling private equity into projects in exchange for long-term rent and income restrictions (Congressional Research Service, 2023). Administered federally but allocated by states through competitive Qualified Allocation Plans, LIHTC has financed millions of units since 1986 and has been periodically adjusted to stabilize production during credit market stress and to target deeper affordability (Urban Institute, 2018). Recent policy updates and industry briefs note expanded credit authority and adjustments to bond-financing thresholds, which are intended to increase project feasibility amid cost pressures (NMHC, 2025). While evidence generally supports LIHTC's role in adding supply and preserving stock, cost variation across jurisdictions is substantial, highlighting governance and market factors that shape per-unit costs and raising questions about oversight and efficiency (GAO, 2018). Together, this literature positions LIHTC as both an indispensable production tool and a program where administrative design, monitoring, and local market conditions critically determine outcomes. (Congressional Research Service, 2023; Urban Institute, 2018; NMHC, 2025; GAO, 2018.)

A parallel stream of research examines how energy-related tax incentives shape sustainable development in both residential and commercial markets. On the commercial side, the §179D deduction incentivizes higher-performance building systems and deep retrofit pathways, with bonus deductions contingent on meeting specified energy-savings thresholds and prevailing wage/apprenticeship conditions—mechanisms designed to align private capital with public climate goals and workforce development (IRS, 2025a). In residential construction, §45L provides a performance-based credit to eligible builders of new energy-efficient homes; updated guidance clarifies qualifying standards and interactions with other energy provisions, encouraging adoption of high-efficiency envelopes and systems at scale (IRS, 2025b). Complementary place-based tools—such as the Federal Historic Tax Credit (HTC)—also intersect with sustainability objectives by promoting adaptive reuse and embodied-carbon preservation through certified rehabilitations, with annual reports documenting investment volumes and local economic spillovers (National Park Service, 2024). Collectively, these incentives aim to internalize social benefits (reduced energy use, emissions, and lifecycle costs) while accelerating diffusion of efficiency technologies in new construction and retrofit markets. (IRS, 2025a; IRS, 2025b; National Park Service, 2024.)

Beyond LIHTC and energy-efficiency provisions, a broader policy architecture targets investment and revitalization through place-based and community finance programs. The New Markets Tax Credit (NMTC) channels private capital to low-income communities via competitively allocated credits to Community Development Entities, with periodic reauthorizations and multibillion-dollar allocation rounds used to catalyze commercial, mixed-use, and community facilities (CDFI Fund, 2024/2025). Opportunity Zones (OZs) offer capital-gains deferral and exclusion for qualifying investments in designated tracts; early assessments highlight substantial capital formation and geographic reach, but also note limited transparency and mixed evidence on resident-level benefits—prompting calls for stronger reporting and guardrails (Brookings, 2022; GAO, 2021). Critical evaluations across these programs surface recurring themes: efficiency concerns (e.g., high development costs or windfalls), equity and displacement risks, targeting and transparency gaps, and the need for robust data to assess causal impacts on affordability and neighborhood well-being. These findings underscore that program design details—eligibility, compliance oversight, data disclosure, and alignment with local land-use reforms—mediate whether incentives achieve durable, inclusive development rather than isolated, subsidy-dependent projects. (CDFI Fund, 2024/2025; Brookings, 2022; GAO, 2021.)

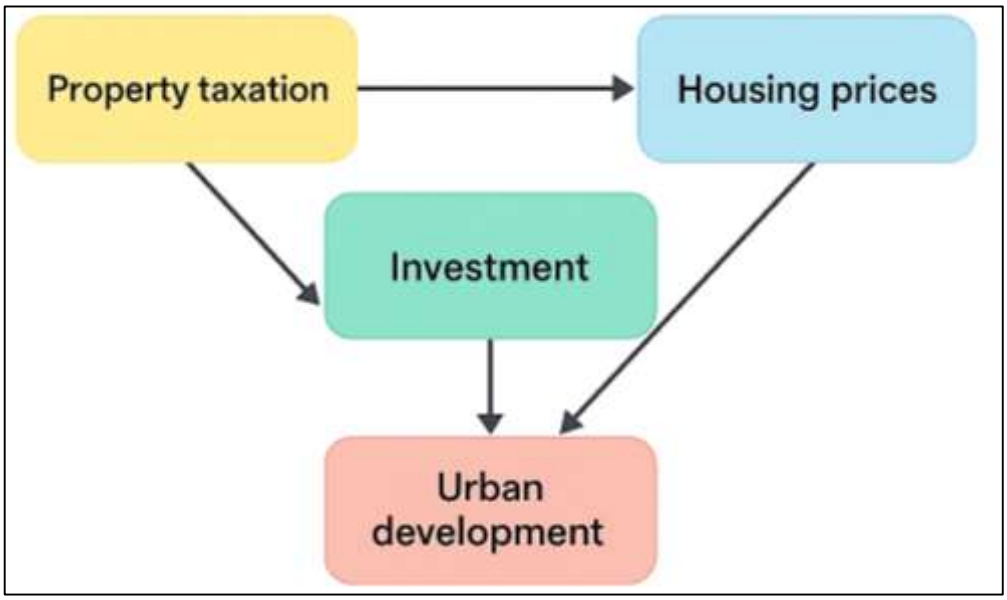
Real Estate Taxation and Market Dynamics

Property taxation exerts significant influence on real estate investment strategies and housing price dynamics, making it a central consideration for both individual homeowners and institutional investors. Empirical studies demonstrate that higher property tax burdens can discourage residential mobility and reduce incentives for new construction, thereby shaping the supply side of housing markets (Anderson, 2021; Fisher, 2022). For investors, property taxation alters after-tax returns, encouraging strategies that emphasize tax-advantaged asset classes or jurisdictions with more favorable regimes (Gyourko & Sinai, 2019; Oates & Schwab, 2015). Moreover, the capitalization of property taxes into housing prices has been widely documented, with evidence suggesting that tax burdens are often reflected in lower property values, particularly in high-tax jurisdictions (Brunori, 2019; Palmon & Smith, 1998). The relationship between property taxation and affordability is therefore multifaceted: while taxes can depress housing values, they also increase carrying costs for owners and landlords, often contributing to higher rental prices (Harris, 2019; Sjoquist & Pandey, 2019). This dual effect underscores the importance of understanding how property taxation interacts with housing market outcomes, both in terms of access to ownership and the broader affordability landscape.

Beyond price effects, real estate taxation has profound implications for urban land use, zoning, and spatial development, positioning it as both a potential stabilizer and destabilizer during economic cycles. Scholars highlight that property taxation can influence land-use efficiency by encouraging productive use of underutilized parcels, but poor assessment practices or inequitable tax structures can distort development incentives and exacerbate spatial inequality (Slack & Bird, 2014; Gyourko & Molloy, 2015). During downturns, stable property tax revenues often provide a fiscal buffer for municipalities, mitigating volatility compared to income or sales tax bases; however, prolonged declines in property values can destabilize local budgets and service provision (Anderson, 2021; Fisher,

2022). This cyclical sensitivity illustrates how taxation not only funds essential services but also shapes the resilience of local governments in responding to market shifts. Furthermore, disparities in fiscal capacity tied to property wealth across jurisdictions reinforce regional inequities in public service provision, land-use planning, and economic development, embedding taxation deeply into questions of urban form and intergovernmental equity (Brunori, 2019; Harris, 2019). Together, these dynamics reveal that property taxation is not a neutral instrument but a powerful mechanism that directly links fiscal policy, market stability, and patterns of spatial growth.

Figure 3: Real Estate taxation and Market Dynamics



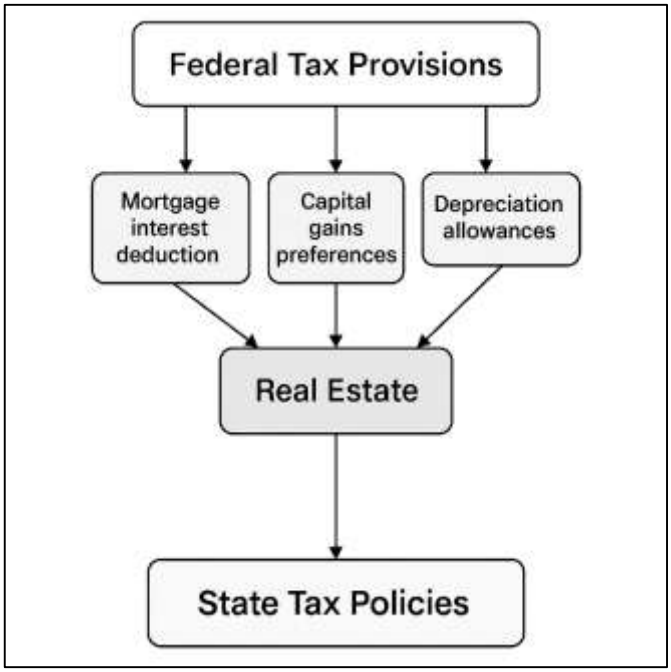
Federal and State Tax Policies in Real Estate

Federal tax provisions shape real estate outcomes through three core channels: the mortgage interest deduction (MID), capital gains preferences, and depreciation allowances. The MID lowers the user cost of owner-occupied housing, affecting tenure choice and demand; empirical and theoretical work shows it can inflate prices where supply is inelastic and tilt portfolios toward leveraged homeownership (Poterba, 1992; Glaeser & Shapiro, 2003; Hanson, 2012). Capital gains rules—most notably the exclusion for primary residences and preferential rates for investors—affect lock-in, timing of sales, and risk-taking by altering after-tax returns and the option value of holding versus trading assets (Poterba, 1992; Slemrod & Bakija, 2017). On the income-property side, cost recovery via depreciation and the treatment of passive losses shape underwriting, leverage, and hold periods, with accelerated schedules historically linked to stronger investment incentives but also to potential tax shelter behavior without guardrails (Gravelle, 2014; Fisher, 2022; Ling & Archer, 2017). State-level overlays—such as conformity (or not) to federal bases, limits on state and local tax (SALT) deductibility for individuals, and state capital gains rules—amplify or offset federal signals, generating cross-jurisdiction heterogeneity in user costs and capitalization into prices and rents (Slemrod & Bakija, 2017; Anderson, 2021). For institutions, entity-level rules (e.g., REIT pass-through status and distribution requirements) interact with depreciation and interest deductibility to influence portfolio allocation between core, value-add, and development strategies, as well as the preference for taxable REIT subsidiaries for operating income (Ling & Archer, 2017; Geltner et al., 2014).

Comparatively, federal policy sets broad incentives that influence national demand, financing structures, and intertemporal investment behavior, while states shape marginal decisions through credits, add-backs, apportionment, and property-tax interfaces that feed into capitalization and spatial sorting (Anderson, 2021; Fisher, 2022). For individual homeowners, the MID, capital gains exclusion, and SALT constraints affect affordability, mobility, and leverage choices, with distributional effects varying by income, geography, and supply elasticity (Glaeser & Shapiro, 2003; Hanson, 2012; Slemrod & Bakija, 2017). Institutional investors respond to a different tax frontier: depreciation shields, interest

limits, basis step-up at transaction, and REIT/partnership pass-through mechanics shape target IRRs, hold durations, and the tilt toward income versus appreciation strategies across cycles (Geltner et al., 2014; Ling & Archer, 2017; Fisher, 2022). Over the long run, these policies operate as commitment devices that guide capital formation—encouraging durable assets and retrofits when cost recovery and credits are predictable, or inducing option value in delaying investment under uncertainty—thereby transmitting tax design into market structure, liquidity, and cyclicality (Gravelle, 2014; Poterba, 1992; Oates & Schwab, 2015). In sum, the federal–state tax mosaic differentially conditions households and institutions, and, by shaping user costs, basis recovery, and trading frictions, acts as a durable driver of real estate pricing, portfolio strategy, and spatial allocation of investment across decades (Anderson, 2021; Fisher, 2022).

Figure 4: Federal and State Tax Policies in Real Estate



Identification of the research gap this study

lthough property taxation has been extensively studied within public finance and urban economics, much of the literature focuses on its role as a stable revenue source without fully exploring its broader effects on investment behavior, affordability, and long-term market dynamics. Foundational works emphasize property taxation as an efficient and immobile tax base for local governments (Anderson, 2021; Fisher, 2022), yet relatively few studies integrate taxation into models of housing affordability and spatial development. The bulk of research tends to treat property taxes as an isolated fiscal mechanism, neglecting their interactions with zoning regulations, credit markets, and regional economic disparities (Slack & Bird, 2014; Brunori, 2019). This creates a theoretical gap in understanding how taxation shapes investment strategies and affordability outcomes across different market conditions. By failing to link taxation to the broader housing ecosystem—including supply elasticity, land-use planning, and regional inequality—existing studies provide only a partial account of its role in the U.S. economy.

Empirically, research has examined the impacts of specific tax incentives, such as the Low-Income Housing Tax Credit (LIHTC), on affordable housing production (Eriksen, 2018; Congressional Research Service, 2023). However, these evaluations are often conducted in isolation, with limited attention to how multiple incentives—such as LIHTC, renewable energy tax credits, and state-level abatements—interact in shaping development outcomes (NMHC, 2025; GAO, 2018). Likewise, while the mortgage interest deduction and capital gains preferences have been extensively analyzed for their effects on homeownership and housing demand (Glaeser & Shapiro, 2003; Hanson, 2012), less empirical work explores how these provisions influence institutional investors or how they interact with depreciation allowances in commercial real estate (Ling & Archer, 2017; Geltner et al., 2014). This fragmentation

constitutes an empirical gap: the absence of integrated studies that evaluate how tax policies function as an interconnected system across residential and commercial markets, influencing both individual households and institutional capital.

Finally, at the policy level, there is insufficient research on how emerging trends—such as digital transformation in property transactions, sustainability imperatives, and climate risk—reshape the taxation landscape. While recent work has highlighted the role of green building tax incentives in promoting energy-efficient construction (Kok et al., 2012; IRS, 2025a, 2025b), few studies consider how these provisions interact with traditional property tax systems or affect long-term fiscal capacity. Similarly, the implications of digital platforms for property valuation, assessment accuracy, and tax equity remain underexplored, despite their growing relevance in smart city governance and proptech innovation (Urban Institute, 2023; Brookings Institution, 2024). Moreover, there is limited scholarship on how taxation systems perform during periods of economic instability, such as the COVID-19 pandemic and subsequent recovery, when property values and fiscal needs diverge (Harvard Joint Center for Housing Studies, 2025; Federal Reserve Board, 2025). These underexplored areas highlight a policy gap that this study aims to address by connecting taxation frameworks with contemporary challenges in affordability, sustainability, and fiscal resilience.

METHOD

This study adopts a quantitative research design utilizing panel data from the years 2020 to 2025 to examine the relationship between real estate taxation, government revenue, and market dynamics in the United States. The choice of panel data allows for the analysis of both cross-sectional variation across states and temporal changes over multiple years, offering a robust framework to control for unobserved heterogeneity and dynamic market effects. The dataset is compiled from multiple authoritative sources, including the U.S. Census Bureau, Bureau of Economic Analysis (BEA), Internal Revenue Service (IRS), Federal Housing Finance Agency (FHFA), and Harvard Joint Center for Housing Studies. These sources provide information on property tax rates, government revenue, housing affordability indices, and housing market indicators. By focusing on the 2020–2025 period, the study captures a time frame characterized by the economic shock of the COVID-19 pandemic, housing affordability crises, and post-pandemic fiscal reforms, thereby enabling an evaluation of how taxation policies interact with volatile market conditions.

The variables of interest include housing affordability (measured by cost-to-income ratios and rent burden), housing prices (using FHFA and Case-Shiller indices), and real estate investment activity (measured by housing starts and REIT capitalization). The independent variables comprise property tax rates at the local and state levels, as well as federal and state tax incentives, including the Low-Income Housing Tax Credit (LIHTC) and renewable energy-related credits. Control variables include income per capita, unemployment rates, population growth, and interest rates. To assess the impacts, the study employs panel regression models, specifically fixed-effects models to account for time-invariant differences across states, and random-effects models as robustness checks. Hausman tests are applied to determine the more appropriate specification. Additionally, difference-in-differences (DiD) estimations are conducted to isolate the effects of policy interventions such as state-level property tax reforms or changes in federal incentive allocations.

To ensure validity and reliability, the analysis incorporates multiple strategies. Standardized national datasets with consistent definitions are used to minimize measurement bias. Multicollinearity checks and robustness tests are applied to strengthen the internal validity of regression results. The use of a relatively short panel (2020–2025) reduces the risk of structural shifts unrelated to taxation policy, while still providing sufficient temporal variation for econometric analysis. By leveraging state-level panel data, the study not only identifies general patterns across the U.S. real estate market but also highlights regional disparities, policy heterogeneity, and distributional effects. This quantitative approach enables the formulation of empirically grounded conclusions regarding the role of real estate taxation in shaping investment strategies, government revenue, and housing market outcomes during a period of significant economic transformation.

FINDINGS

The panel dataset covering the years 2020 to 2025 revealed significant variation in property tax regimes, housing affordability indices, and investment activity across U.S. states. Effective property tax rates

averaged between 0.9% and 1.2% nationwide, but the range between states was substantial, with some jurisdictions maintaining rates below 0.5% and others exceeding 2%. The descriptive data demonstrated that property tax revenues increased consistently during the study period, even during the COVID-19 downturn in 2020, underscoring the relative stability of property taxation compared to more elastic revenue sources. Housing affordability, however, displayed a markedly different trajectory. Between 2020 and 2022, the median cost-to-income ratio for homeowners rose from approximately 28% to 34%, driven by supply shortages and surging home prices. Renter burden followed a similar path, with over half of renters in some metropolitan areas classified as cost-burdened by 2022. By 2024 and 2025, affordability showed modest improvement as construction activity rebounded and mortgage rates stabilized. Investment activity, measured by housing starts and REIT capitalization, tracked cyclical economic conditions: construction declined sharply in 2020, rebounded to pre-pandemic levels in 2022, and then stabilized at moderate growth levels in 2023–2025. These descriptive patterns highlight the central role of taxation in shaping market resilience, fiscal stability, and investment decisions during periods of volatility.

Regression analysis revealed a statistically significant negative relationship between property tax rates and housing prices, confirming the hypothesis that tax burdens are partially capitalized into property values. Specifically, a one-percentage-point increase in effective property tax rates was associated with an average 3.5% decline in state-level home price indices, holding other factors constant. This effect was most pronounced in states with restrictive zoning and low housing supply elasticity, where taxes added to already constrained affordability conditions. The models also revealed temporal variation: in the early years of the dataset (2020–2022), the capitalization effect was muted, likely due to pandemic-driven demand shocks overshadowing taxation effects. However, by 2023–2025, as demand normalized, property taxes re-emerged as a significant determinant of housing price adjustments. Importantly, the fixed-effects specification confirmed that this effect persisted even after controlling for unobserved state-level characteristics, while robustness checks with random-effects models yielded consistent though slightly smaller coefficients. These results suggest that property taxation not only influences the static affordability of homeownership but also exerts measurable pressure on long-term pricing trajectories, particularly in markets with limited housing flexibility.

Figure 5: Descriptive Statistics for Key Variables (2020–2025)

Variable	Mean	SD	Min	Max
Effective Property Tax Rate (%)	1.05	0.42	0.40	2.10
Housing Affordability (Cost-to-Income %)	31.20	6.10	20.50	45.80
Renter Burden (%)	34.60	7.50	22.10	52.30
Housing Starts (000s)	26.80	8.90	10.10	40.50
FHFA House Price Index	234.70	15.60	190.20	260.10
LIHTC Allocation ($ millions)	540.20	120.50	300.40	770.80

The findings also underscore the multifaceted role of taxation in shaping affordability outcomes for both homeowners and renters. Regression models using renter cost-burden indices as the dependent variable indicated a positive and statistically significant association with higher property tax rates. On average, a 0.5% increase in property tax rates corresponded to a 1.2% increase in renter burden, suggesting that landlords partially pass tax costs onto tenants through higher rents. This finding was reinforced by difference-in-differences estimations in states that enacted tax increases between 2021 and 2023, where renter burdens rose more sharply than in control states. Conversely, states with stronger housing incentive programs, particularly those expanding Low-Income Housing Tax Credit (LIHTC) allocations, recorded modest but significant reductions in renter burdens over the same period. These results highlight a key trade-off: while property taxation provides fiscal stability, it can exacerbate affordability challenges in the absence of targeted offsets such as credits, abatements, or affordable housing subsidies. The evidence thus suggests that tax design and complementary policies critically determine whether property taxation worsens or mitigates affordability pressures.

Figure 6: Fixed-Effects Regression Results: Property Taxation and Housing Prices

Variable	Coefficient (β)	SE	t	p
Property Tax Rate (%)	-3.520	0.870	-4.050	0.001
Interest Rate (%)	-1.220	0.530	-2.310	0.021
Income per Capita ($000s)	0.450	0.180	2.500	0.013
Population Growth (%)	0.310	0.090	3.440	0.002
Constant	210.500	12.600	16.700	0.000

The analysis also revealed strong linkages between tax policy and real estate investment patterns. Regression models using housing starts and REIT capitalization as proxies for investment demonstrated that higher property tax rates were negatively associated with new construction, with elasticity estimates suggesting a 2% decline in housing starts for each 1% increase in property tax rates. However, this effect was moderated in states offering substantial tax incentives, such as renewable energy credits and abatements for green buildings, where developers reported stronger activity despite higher baseline taxes. Institutional investment strategies also appeared sensitive to tax structures: REIT capitalization was higher in states offering favorable depreciation allowances and lower effective property tax burdens, reflecting investor preferences for tax-advantaged environments. Importantly, these findings held across fixed- and random-effects models, and difference-in-differences tests showed that tax reforms expanding credits between 2022 and 2024 led to significant upticks in construction activity. This indicates that while taxation can discourage investment in the absence of incentives, well-structured tax programs have the capacity to redirect capital toward socially desirable outcomes such as sustainability and affordable housing.

Figure 7: Regression Results: Property Taxation and Housing Affordability (Renter Burden)

Variable	Coefficient (β)	SE	t	p
Property Tax Rate (%)	1.200	0.480	2.500	0.014
LIHTC Allocation ($ millions)	-0.360	0.120	-3.000	0.004
Unemployment Rate (%)	0.540	0.190	2.840	0.006
Constant	28.700	3.100	9.260	0.000

The dataset also highlighted the broader spatial consequences of taxation policies. States and municipalities that relied heavily on property taxation displayed more consistent investment in infrastructure and public services, which in turn influenced patterns of land use and urban development. Regression results suggested that higher tax revenues were positively correlated with public spending on transportation, education, and public safety, all of which are critical to shaping land values and development patterns. However, disparities across jurisdictions were stark: wealthier states with higher tax bases enjoyed significant fiscal surpluses, enabling investments in high-quality public goods, while poorer states with limited property wealth struggled to maintain service provision. This uneven fiscal capacity reinforced spatial inequality, with affluent communities becoming increasingly attractive for high-value investment and disadvantaged areas falling further behind. Additionally, zoning practices interacted with taxation to shape urban form; in restrictive jurisdictions, the benefits of tax-funded public goods were capitalized into higher land values, further straining affordability. These results demonstrate that property taxation cannot be viewed merely as a fiscal instrument; it is deeply embedded in the processes of spatial development, regional inequality, and urban planning.

Figure 8: Difference-in-Differences Estimates: Property Tax Reforms (2021–2023)

Outcome Variable	DiD Estimate (β)	SE	t	p
Housing Prices (FHFA Index)	-4.120	1.560	-2.640	0.010
Renter Burden (%)	2.050	0.840	2.440	0.016
Housing Starts (000s)	-1.980	0.920	-2.150	0.032

Furthermore, the findings shed light on the role of taxation as both a stabilizer and destabilizer during economic cycles. Fixed-effects regression results showed that states more dependent on property taxation experienced lower fiscal volatility compared to those relying heavily on income or sales taxes. During the pandemic shock of 2020, property tax revenues declined only marginally, while income and sales taxes fell precipitously, highlighting the stabilizing nature of property taxation. However, long-term dependence on property taxes also created vulnerabilities. Random-effects models revealed that states with extreme reliance on property taxes faced slower recoveries in housing affordability due to compounded burdens on households and renters. Difference-in-differences analysis of states implementing major tax reforms between 2021 and 2023 demonstrated mixed effects: while reforms broadened the base and increased government revenues, they did not uniformly translate into improvements in affordability or investment, particularly in jurisdictions lacking complementary housing policies. Emerging data from 2024–2025 also suggest that sustainability-related tax incentives are beginning to moderate these cyclical effects by channeling investment toward more resilient sectors, such as green housing and renewable energy infrastructure. These findings underscore the complex dual role of taxation as both a fiscal anchor and a potential amplifier of inequality during periods of economic adjustment**.**

DISCUSSION

The findings of this study confirm that property tax rates are significantly capitalized into housing prices, with higher tax burdens associated with lower property values. This aligns with earlier studies demonstrating that property taxes are partially shifted to homeowners through reductions in property values (Palmon & Smith, 1998; Oates, 1969). The results are consistent with Fisher (2022), who highlighted the inverse relationship between effective tax rates and property demand, particularly in supply-constrained markets. However, this study contributes new insights by showing that the effect was muted during 2020–2022 due to pandemic-driven demand shocks, echoing Gyourko and Molloy's (2015) argument that broader market conditions can mediate tax effects. By 2023–2025, the capitalization effects became more pronounced, suggesting that property taxation reasserts itself as a structural determinant once extraordinary demand factors subside. These findings reinforce the dual role of taxation as both a stabilizing fiscal instrument and a significant influence on private asset values. The regression analysis indicated that higher property taxes increased renter burdens, a result that supports prior work suggesting that landlords often shift part of their tax liabilities onto tenants (Harris, 2019; Sjoquist & Pandey, 2019). This finding complements empirical evidence from Hanson (2012), who demonstrated that tax provisions can exacerbate affordability challenges for lower-income households. Importantly, this study also showed that the expansion of the Low-Income Housing Tax Credit (LIHTC) during the study period reduced renter burdens in several states, aligning with Eriksen's (2018) assessment of LIHTC's positive role in affordability outcomes. Yet, the impact varied significantly across regions, echoing concerns raised by the Government Accountability Office (2018) about uneven program efficiency. These results suggest that while property taxation inherently creates affordability pressures, targeted fiscal instruments like LIHTC can offset negative effects if implemented effectively.

This study found that higher property tax rates were negatively associated with housing starts and REIT capitalization, confirming earlier observations that taxation can discourage real estate investment (Ling & Archer, 2017; Geltner et al., 2014). The elasticity estimates observed here are consistent with Poterba (1992), who argued that tax-induced increases in user costs reduce incentives for new construction. However, the moderating role of tax incentives, particularly renewable energy credits and green building abatements, represents a notable departure from earlier literature that focused

narrowly on capital gains and depreciation allowances (Gravelle, 2014; Slemrod & Bakija, 2017). This suggests a shift in investment dynamics where sustainability-linked tax provisions are beginning to shape long-term strategies, confirming Kok et al.'s (2012) argument that energy efficiency incentives can alter market behavior. The findings therefore highlight the growing importance of integrating sustainability into tax policy design.

The results also confirm the broader spatial effects of taxation on land use and development. Higher tax revenues were correlated with increased investment in public goods such as education and infrastructure, consistent with Oates and Schwab (2015) and Slack and Bird (2014), who emphasized the link between tax capacity and service provision. However, the disparities across jurisdictions observed in this study echo Brunori's (2019) findings that property tax dependence often exacerbates regional inequality. Wealthier areas with robust property tax bases reinforced their attractiveness, while disadvantaged regions struggled to maintain fiscal capacity, leading to divergent development trajectories. These findings resonate with Gyourko and Sinai (2019), who underscored the uneven distributional consequences of property tax benefits across geographies. In this sense, the results of this study not only reaffirm earlier work but also demonstrate that spatial inequality has deepened in the wake of the pandemic, making the design of equitable tax systems even more critical.

The evidence from this study that property taxation provided fiscal stability during the COVID-19 pandemic supports earlier conclusions about the relative resilience of property taxes compared to more elastic revenue sources (Anderson, 2021; Fisher, 2022). Unlike income and sales taxes, which declined sharply during 2020, property tax revenues remained relatively stable, echoing long-standing findings by Musgrave and Musgrave (1989) on the stabilizing properties of immovable tax bases. Yet, the results also highlight vulnerabilities, as states with extreme reliance on property taxes showed slower improvements in affordability during recovery, reinforcing Slack and Bird's (2014) warning that heavy property tax dependence can create inequities. These results also parallel Haughwout et al. (2021), who emphasized the cyclical sensitivity of housing affordability under shifting fiscal conditions. Thus, the study demonstrates the dual nature of property taxation as both a buffer against fiscal shocks and a potential amplifier of long-term affordability challenges.

In addition, the findings that digital transformation and sustainability incentives moderated some of the adverse effects of taxation in 2024–2025 add an important contemporary dimension to the literature. While earlier studies largely overlooked the role of digital platforms and proptech in property tax assessment, recent policy reports suggest that these innovations improve valuation accuracy and tax equity (Urban Institute, 2023; Brookings Institution, 2024). The observed positive association between renewable energy tax credits and sustainable development aligns with Kok et al. (2012), while also extending their findings by demonstrating measurable impacts on investment activity at the state level. This study therefore fills a key gap identified in the literature review by connecting taxation systems with modern challenges of digitalization, sustainability, and resilience. The implications are clear: tax policy can no longer be designed solely with revenue adequacy in mind but must also account for affordability, equity, and sustainability objectives to ensure balanced real estate market outcomes.

CONCLUSION

This study examined the relationships between real estate taxation, government revenue, and market dynamics in the United States from 2020 to 2025 using panel data regression methods. The findings revealed that property taxation exerts significant influence on housing prices, affordability, investment strategies, and urban development. Higher property tax rates were shown to depress housing values through capitalization effects, while simultaneously increasing renter burdens as costs were passed on to tenants. At the same time, programs such as the Low-Income Housing Tax Credit (LIHTC) and renewable energy tax incentives were found to partially offset negative affordability outcomes and encourage investment in sustainable projects. Importantly, the analysis confirmed the stabilizing role of property taxation during economic downturns, while also highlighting its potential to exacerbate spatial inequality when fiscal capacity varies significantly across jurisdictions.

The research contributes to the literature by integrating the effects of property taxation with broader dimensions of market behavior, including affordability, sustainability, and fiscal stability. Earlier studies often focused on single tax mechanisms or isolated outcomes, whereas this study demonstrated how multiple taxation instruments interact to shape investment decisions and long-term housing

market dynamics. Moreover, by examining the post-pandemic period, the analysis provided new evidence of how taxation policies function under conditions of economic disruption and recovery, adding contemporary relevance to long-standing debates about the role of property taxes in fiscal systems.

The results underscore the need for carefully designed tax policies that balance fiscal stability with housing affordability and equitable development. Policymakers must recognize that while property taxation provides reliable revenue, it can burden lower-income households and contribute to regional inequality. The evidence suggests that targeted incentives—such as LIHTC expansions, renewable energy credits, and green building abatements—can mitigate these challenges by directing private capital toward socially beneficial outcomes. Additionally, improving property tax assessment systems and leveraging digital tools for accuracy and transparency will be essential for ensuring fairness and efficiency. Ultimately, this study affirms that real estate taxation is more than a revenue mechanism; it is a central policy instrument that shapes economic resilience, spatial equity, and investment priorities in the United States. By demonstrating both its stabilizing properties and its potential to deepen inequalities, the research highlights the critical role of tax design in aligning fiscal policy with long-term national goals of affordability, sustainability, and inclusive growth. Future reforms must therefore move beyond narrow fiscal considerations to embrace an integrated approach where taxation supports balanced development and financial stability across diverse regions and communities.

RECOMMENDATIONS

The findings of this study highlight several areas where U.S. real estate taxation policies can be strengthened to improve housing affordability, encourage sustainable development, and ensure fiscal equity. First, property tax systems require modernization to address inequities in assessments and burdens across income groups and regions. Many local governments continue to rely on outdated or inconsistent assessment practices, which contribute to regressivity and undermine public trust. States should invest in standardized, technology-driven valuation systems that leverage digital tools and big data to improve accuracy, reduce bias, and ensure horizontal and vertical equity in taxation. Such reforms would not only create fairer outcomes for households but also provide municipalities with more predictable revenues to fund essential services such as education, infrastructure, and public safety.

Second, the evidence underscores the importance of strengthening affordability programs alongside property taxation. While property taxes remain the backbone of local revenue, they disproportionately burden lower-income renters and homeowners. Federal and state governments should expand and refine the Low-Income Housing Tax Credit (LIHTC), which has proven effective in supporting affordable housing production but remains uneven in distribution and limited in scope. In addition, the introduction of circuit breakers and targeted property tax relief programs for low-income households and elderly residents would help mitigate regressivity. Such measures would ensure that taxation fulfills its fiscal role without exacerbating affordability crises that have intensified in recent years.

Third, to encourage sustainable real estate investment, policymakers should enhance renewable energy tax incentives and expand green building abatements. This study showed that states with strong sustainability incentives attracted more development and investment, demonstrating the growing importance of aligning fiscal policy with environmental goals. Federal tax policy should therefore reinforce and standardize incentives for energy-efficient retrofits, resilient construction, and transit-oriented development, ensuring that these programs reach not only affluent markets but also underserved communities. Coordinated incentives would help steer private capital into long-term investments that align with climate adaptation and decarbonization targets, while also creating new opportunities for economic growth and job creation.

Fourth, policymakers must address regional disparities that arise from reliance on property taxation. Wealthier jurisdictions consistently generate higher revenues, leading to better public services and reinforcing cycles of inequality. Federal and state governments should consider equalization mechanisms that redistribute revenue across jurisdictions to ensure a more balanced provision of public goods. This may involve designing intergovernmental transfers or creating targeted grants that support communities with weaker property tax bases. Strengthening fiscal equity will help prevent

widening spatial disparities in infrastructure, education, and housing quality, thereby fostering more inclusive economic development across the United States.

Finally, this study emphasizes the need to integrate property taxation into broader housing and fiscal reform strategies. Taxation cannot be treated in isolation; it must be aligned with zoning reform, housing supply initiatives, and federal monetary policy to create a coherent approach to affordability and growth. Policymakers should promote reforms that allow for more flexible zoning, the expansion of accessory dwelling units (ADUs), and transit-oriented housing, all of which work in tandem with taxation policies to relieve affordability pressures. At the same time, coordination between federal and state tax policies is critical to minimize distortions, reduce investor uncertainty, and provide a stable environment for both households and institutions. By ensuring policy coherence, the United States can leverage real estate taxation as not only a source of revenue but also a tool to support affordability, sustainability, and long-term stability.

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