ARTICLE

YOUR HOUSE IS WORTH MORE THAN THEY THINK: THE STRANGE CASE OF PROPERTY TAX ASSESSMENT REGRESSIVITY

DAVID SCHLEICHER*

ABSTRACT

In the last few years, researchers have revealed something shocking about the property tax, the mainstay of local governmental finance. In virtually all jurisdictions in the country, expensive homes are undervalued by property tax assessors—and hence under-taxed—while less expensive homes are over-valued and over-taxed. Put another way, one of the major methods of taxation in America is premised on repeated determinations that the rich are less rich than they actually are and that the less well-off are better off than they actually are. To give it name, there is almost universal Property Tax Assessment Regressivity, or PTAR.

This Article explains the consequences of PTAR. It shows that PTAR, while still likely regressive, may be less regressive today than one might imagine. A consistent, long-standing PTAR in jurisdictions would be capitalized into property values and thus have largely benefited property owners many years ago, rather than today's property owners. PTAR also limits the "insurance" value of property taxes, the way in which property taxes limit the downsides of property value declines (and the upside of increases). However, PTAR may counterintuitively make jurisdictions less scared of allowing much-needed dense housing construction.

So, should PTAR be fixed? The answer is a qualified yes. Fixing PTAR would be an efficient form of wealth redistribution, if a somewhat oddly directed one, as it only shares revenue among homeowners in individual local governments. Capturing the insurance benefits of the property tax would have substantial benefits for the many homeowners with undiversified portfolios. However, fixing PTAR should be paired with policies to mitigate its downsides and enhance its upsides. More taxing authority should be given to bigger jurisdictions, as doing so would enhance the insurance and redistributive benefits of fixing PTAR. And states should pair fixes to PTAR with greater oversight of local zoning authority to ensure a better property tax system does not come at the cost of exacerbating the housing crisis.

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What the strange case of PTAR reveals is that the property tax is not, as many have argued, the perfect tax for local governments to levy. Instead, the property tax turns out to be the bad local tax we have grown used to. To make it "work," we have allowed local governments to engage in all sorts of bad policy—taxing the less well-off at higher rates than those richer than them, and restricting housing growth in order to avoid redistribution.

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I. Introduction: The Strange Case of Property Tax Assessment Regressivity

There are few ways in which governments raise money that are as public as the property tax. Both government determinations about most of the elements related to any individual's property tax liability and most of the underlying information that goes into determining any individual's property tax liability are generally publicly available and easily obtainable by anyone.

The amount of property taxes an owner of real property has to pay is determined by multiplying a property tax or "millage" rate—sometimes set by one government, but more often by several overlapping local governments—by a property tax assessment, a determination about the value of a given property. These determinations about the value of parcels of land

¹ The millage rate is the dollars owed per thousand dollars of property value. *Millage*, LEGAL INFO. INSTITUTE (Jul. 2020), https://www.law.cornell.edu/wex/millage/ [https://perma.cc/8AB9-5M8T]. This paper will only discuss property taxes on real property. Historically, the property tax was a tax on all wealth: real property, personal property, and

and attached improvements are public. That is, under most circumstances, anyone can look up the property value assessment of any property.² Further, property tax assessments generally are based on the expected market price for property, which, for houses, is usually determined by looking at sales prices of similar properties.³ And actual sales prices for real property are publicly available in recorded deeds.⁴ This information is not hard to find either. If one looks up a property on popular online real estate websites, like Zillow or Redfin, annual tax assessments are listed alongside the history of sales prices.⁵ In contrast, one cannot go online and see the tax base for other

even intangible property (like investments). See Sacha Dray, Camille Landais & Stefanie Stantcheva, Wealth and Property Taxation in the United States 1 (Nat'l Bureau of Econ. Rsch., Working Paper No. 31080, 2023). But during the early twentieth century, the property tax for individuals became largely a tax on real property, or land and improvements. For businesses, however, there are still often taxes on personal and business property, albeit with substantial variation by state and locality with regards to whether such taxes are imposed, what types of property are exempt, and what types of businesses must pay. See Garrett Watson, States Should Continue to Reform Taxes on Tangible Personal Property, Tax Found., 3–5 (2019); Joan Youngman, A Good Tax: Legal and Policy Issues for the Property Tax in the United States 6 (2016).

² See, e.g., CONN. GEN. STAT. § 12-55 (2023) (mandating that "the grand list" for each town containing "the assessed values of all property in the town" be published each year); 53 PA. CONS. STAT. § 8841(d)(1) (2022) (requiring that the property tax assessment roll shall be "open to public inspection at the county assessment office during ordinary business hours"); MICH. COMP. LAWS § 211.10a (2023) (requiring that "all property assessment rolls and property appraisal cards shall be available for inspection and copying during the customary business hours"). These databases are almost all searchable online now. For instance, the New Haven property assessor allows anyone to look up the assessed value, the amount of taxes due, and whether those taxes were paid for any property in the city. Tax Bills, CITY OF NEW HAVEN (Last updated Oct. 1, 2024), https://www.mytaxbill.org/inet/bill/ home.do?town=newhaven/ [https://perma.cc/B6Z7-RKUT]. Travis County, Texas likewise makes it possible to look up property tax assessments online. Property Search, TRAVIS CENT. APPRAISAL DIST. (2023), https://traviscad.org/propertysearch/ [https://perma.cc/AJ3W-CV73]. Boston, Massachusetts provides spreadsheets of all assessments going back to 2004, complete with information about the styles of bathrooms and kitchens, the method of heating, the number of fireplaces, the quality of the view, and whether the property is a corner unit. Property Assessment, ANALYZE BOS., https://data.boston.gov/dataset/property-assessment/ [https://perma.cc/L3JY-8LRT].

³ How assessed value is determined and how other considerations factor in vary a great deal by state and locality. *See* discussion *infra* Part II.

⁴ Reid K. Weisbord & Stewart E. Sterk, *The Commodification of Public Land Records*, 97 Notre Dame L. Rev. 507, 510 (2022) (discussing how easily accessed public land records are now that the information is available without going to county offices). In a few "non-disclosure" states, this information is not made public, likely harming tax and property market efficiency. *See* Robert P. Berrens & Michael McKee, *What Price Nondisclosure? The Effects of Nondisclosure of Real Estate Sales Prices*, 85 Soc. Sci. Q. 509, 518 (2004) (finding preliminary evidence that price disclosure leads to more accurate and less unequal property tax assessments); Candace Taylor, *The States Where Home Prices are Secret*, WALL. St. J. (June 19, 2019), https://www.wsj.com/articles/the-states-where-home-prices-are-secret-11560956939/ [https://perma.cc/CNZ2-BH6K] (discussing non-disclosure states).

⁵ See, e.g., 999 Andante Rd, Santa Barbara, CA 93105, ZILLOW, https://www.zillow.com/homedetails/999-Andante-Rd-Santa-Barbara-CA-93105/15885544 zpid/

methods of raising revenue; you cannot look on a government website and see how much people earned in income in a given year or what capital gains they received from selling investments.⁶

If finding a property's assessed value is easy, actually assessing a property is not. Property tax assessors must figure out how much a property is "worth" without being able to see any real evidence of what anyone is willing to pay for it, never mind how much it is valued by its owner. But, in theory, any *systematic* failure in property tax assessment should be easy to see, given how public property tax assessments and sales prices are. So while property assessment is as much art as science, there are powerful tools for checking the quality of assessment for systematic bias. If sunlight is the best disinfectant, there should be few germs in property tax assessment. 10

And yet, in the last few years, a substantial body of empirical research using nation-wide data by Natee Amornsiripanitch, Carlos F. Avenancio-León and Troup Howard, and Christopher Berry, among others, have shown that property tax assessments for single-family homes and condos are indeed systematically biased.¹¹ Their remarkable work builds on an existing body of

[[]https://perma.cc/6LJD-PNXG] (showing history of annual tax assessments and previous sales for "one-of-a-kind, architecturally magical" whale-shaped house in Santa Barbara, CA, that sold for \$2,250,000 in January of 2024).

⁶ This is not true everywhere. For instance, Finland, Sweden, and Norway publish everyone's tax returns. *See* Patrick Collinson, *Norway, the Country Where You Can See Everyone's Tax Returns*, The Guardian (Apr. 11, 2016), https://www.theguardian.com/money/blog/2016/apr/11/when-it-comes-to-tax-transparency-norway-leads-the-field [https://perma.cc/A6Y3-TGMT]; Katrine Marçal, *Sweden Shows That Pay Transparency Works*, Fin. Times (July 27, 2017), https://www.ft.com/content/2a9274be-72aa-11e7-93ff-99f383b09ff9 [https://perma.cc/4NTM-UAXX].

⁷ See Stewart E. Sterk & Mitchell L. Engler, *Property Tax Reassessment: Who Needs It*, 81 NOTRE DAME L. REV. 1037, 1066–73 (2006).

⁸ Most properties are not sold in any given year, nor are bids for properties that are not accepted made public.

⁹ And when individuals can, and regularly do, challenge their assessments, we might expect any widespread skew in property assessments not to remain for long. Chris Berry, *Reassessing the Property Tax* 19–20 (U. Chi. Harris Sch. Pub. Pol'y, Working Paper, 2021) (discussing frequency of property tax assessment challenges).

¹⁰ Cf. Louis D. Brandeis, Other People's Money and How the Bankers Use IT 92 (1914) ("Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.").

Carlos F. Avenancio-León & Troup Howard, *The Assessment Gap: Racial Inequalities in Property Taxation*, 137 Q. J. Econ. 1383, 1431 (2022) (finding systematic evidence of differences in assessment based on the connection between race and neighborhood); Natee Amornsiripanitch, *Why Are Residential Property Tax Rates Regressive?* 2 (Fed. Rsrv. Bank Phila., Working Paper No. 22-02, 2022) (finding large amounts of regressivity in property tax assessment, only 60% of which can be explained with measurement error); Berry, *supra* note 9, at 1 (finding large amounts of regressivity beyond the amount that can be explained with measurement error); *Property Tax Fairness From the Center for Municipal Finance: Interactive Reports*, U. CHI., HARRIS SCH. PUB. POL'Y, https://propertytaxproject.uchicago.edu/ [https://perma.cc/Q8NK-C4M4] (allowing search of jurisdictions to see extent of assessment regressivity). This is particularly striking because

studies on individual jurisdictions which largely finds the same thing.¹² In almost all jurisdictions for which data is available, relatively expensive properties are under-assessed relative to the prices for which they are actually sold, and relatively inexpensive properties are over-assessed. Further, properties owned by racial minorities are systematically over-assessed.¹³

houses should be the easiest type of property to assess. Houses are more similar to one another than, say, commercial or manufacturing property, and they are sold more often. This makes it possible to assess them using the "sales comparison" method, where valuation is based on the price at which similar houses actually sold. Elli Pagourtzi, Vassilis Assimakopoulos, Thomas Hatzichristos & Nick French, *Real Estate Appraisal: A Review of Valuation Methods*, 21 J. PROP. INV. & FIN. 383, 386–88 (2003) (explaining the sales comparison model and describing it as the most widely used in real estate valuation).

¹² See, e.g., Daniel McMillen & Ruchi Singh, Assessment Regressivity and Property Taxation, 60 J. REAL EST. FIN. ECON. 155, 168 (2020) (finding assessment regressivity in Baltimore, Cleveland, Denver, and Philadelphia); N.Y.C. ADVISORY COMM'N ON PROP. TAX REFORM, PRELIMINARY REPORT 46 (2020) (finding assessment regressivity in New York City); Daniel P. McMillen, The Effect of Appeals on Assessment Ratio Distributions: Some Nonparametric Approaches, 41 REAL EST. ECON. 165, 185-88 (2013) (finding overassessment among low-value properties in Chicago, but showing that this may be influenced by a few very large over-assessments); Justin M. Ross, Interjurisdictional Determinants of Property Assessment Regressivity, 88 LAND ECON. 28, 40 (2012) (finding jurisdictional traits that correlate with assessment regressivity in Virginia); Olha Krupa, An Analysis of Indiana Property Tax Reform: Equity and Cost Considerations, 104 ANN. CONF. TAX, NAT'L TAX Ass'N 160, 166 (2011) (finding a reduction in assessment regressivity in Indiana following a policy change); Daniel P. McMillen & Rachel N. Weber, Thin Markets and Property Tax Inequities: A Multinomial Logit Approach, 61 NAT'L TAX J. 653, 653 (2008) (finding property tax assessment regressivity in Chicago); Keith R. Ihlanfeldt, Property Tax Incidence on Owner-Occupied Housing: Evidence from the Annual Housing Survey, 35 NAT'L TAX J. 89, 95–96 (1982) (finding property tax assessment regressivity in Atlanta and Philadelphia); Robert F. Engle, De Facto Discrimination in Residential Assessments: Boston, 28 NAT'L TAX J. 445, 445 (1975) (finding property tax assessment regressivity in Boston); Earl D. Benson & Arthur L. Schwartz, Jr., An Examination of Vertical Equity Over Two Reassessment Cycles, 19 J. REAL EST. RSCH. 255, 271 (2000) (finding property tax assessment regressivity across two assessment cycles in King County, Washington, although less in the second cycle); Morton Paglin & Michael Fogarty, Equity and the Property Tax: A New Conceptual Focus, 35 NAT'L TAX J. 557, 563 (1972) (finding regressivity in assessments in Multnomah County, Oregon). But see Daniel P. McMillen & Ruchi Singh, Measures of Vertical Inequality in Assessments 17-24 (Lincoln Inst. of Land Pol'y, Working Paper No. WP22DM1, 2022) (studying assessments in Indianapolis, Birmingham, St. Louis, and Tucson, but only finding consistent evidence of regressivity in Birmingham and St. Louis); Brent C. Smith, Mark A. Sunderman & John W. Birch, Sources of Variation in County Property Tax Inequities, 15 J. Pub. Budgeting, Acct. & Fin. Mgmt. 571, 572 (2003) (finding evidence of progressivity in assessments in Indiana); Levis A. Kochin & Richard W. Parks, Vertical Equity in Real Estate Assessment: A Fair Appraisal, 20 ECON. INQUIRY 511, 531 (1982) (finding no assessment regressivity in King County, Washington after correcting for measurement error).

¹³ See Avenancio-León & Howard, supra note 11, at 1384–85; MICHAEL NEAL SARAH STROCHAK, LINNA ZHU & CAITLIN YOUNG, URB. INST., HOW AUTOMATED VALUATION MODELS CAN DISPROPORTIONATELY AFFECT MAJORITY-BLACK NEIGHBORHOODS 10 (2020) (finding that the percentage difference between actual sales values and what valuation models predict those sales values to be is greater in majority-Black neighborhoods compared to majority-white neighborhoods in Atlanta, Memphis, and Washington, D.C.); Keith

Some of these misvaluations result from intentional policy choices, like California's Proposition 13, which requires properties to be assessed at no more than their last sale price plus a small annual increase unless the property has been redeveloped, leading to under-assessment for properties that are held while they increase in value. He are the what's remarkable about the recent research is that the under-assessment of expensive properties, and the over-assessment of inexpensive ones, occurs almost everywhere, regardless of the jurisdiction's explicit policy choices. The research is also clear that this is a real phenomenon, not merely a result of a measurement error. Let's give it a name: Property Tax Assessment Regressivity (PTAR).

The magnitudes are not small. Berry finds that, on average, homes in the bottom decile of prices—i.e., the cheapest ten percent of houses—face an effective tax rate that is more than double what homes in the top decile pay in the same jurisdiction. Is In some jurisdictions, the effect is enormous; in Detroit in 2017, for example, the average home in the bottom decile was assessed at three times its actual market value. Amornsiripanitch shows that simple improvements in assessment accuracy could increase the net wealth of poor homeowners by ten percent. In some places, PTAR may even be unconstitutional under state constitutional "uniformity" clauses and other provisions.

Ihlanfeldt & Luke P. Rodgers, *Explaining Racial Gaps in Property Assessment and Property Taxation* 3 (Working Paper, 2021) (documenting over-assessment of Black, Hispanic, and Asian homeowners relative to white homeowners in Florida).

¹⁴ MARC TAYLOR, CAL. LEGIS. ANALYST'S OFF., COMMON CLAIMS ABOUT PROPOSITION 13, 1–3 (2016), https://lao.ca.gov/publications/report/3497 [https://perma.cc/7HLW-4KEW] (explaining how Proposition 13 and related property tax changes work, and describing the resulting undervaluation of valuable properties); *see also* Andrew T. Hayashi, *Property Taxes and Their Limits: Evidence from New York City*, 25 STAN. L. & POL'Y REV. 33, 48 (2014). Interestingly, some studies find that racial assessment gaps are lower in jurisdictions with assessment caps or acquisition price assessment, as doing so removes substantial amounts of discretion from the system. *See, e.g.*, Avenancio-León & Howard, *supra* note 11, at 29.

¹⁵ Berry, *supra* note 9, at 5.

¹⁶ That is not to say, however, that measurement error is not at all a factor. *See* Amornsiripanitch, *supra* note 11, at 1 (finding that sixty percent of total misvaluation is due to measurement error); Berry, *supra* note 9, at 1 (finding that measurement error is possible but cannot explain the effect).

¹⁷ By calling it "regressive" I do not mean to imply that all less expensive properties are over-assessed, or that all more expensive properties are under-assessed. Instead, PTAR means that *on average* less expensive properties are over-assessed, or that all more expensive properties are under-assessed.

¹⁸ Berry, *supra* note 9, at 1; *see also* Amornsiripanitch, *supra* note 11, at 1 (finding that owners of inexpensive houses pay almost fifty percent higher effective tax rates than the owners of expensive houses).

¹⁹ Berry, *supra* note 9, at 9.

²⁰ Amornsiripanitch, *supra* note 11, at 1.

²¹ See Bernadette Atuahene & Christopher Berry, Taxed Out: Illegal Property Tax Assessments and the Epidemic of Tax Foreclosures in Detroit, 9 U.C. IRVINE L. REV. 847, 856–69 (2019); Bernadette Atuahene & Timothy R. Hodge, Stategraft, 91 S. CAL. L. REV. 263, 266 (2018).

These are a remarkable set of findings. It shows conclusively that the central method local governments have for raising tax revenue is, virtually everywhere in the country, premised on a consistent mistake: a finding that the rich are not as rich as they actually are and that poorer homeowners and racial minorities are far wealthier than they actually are.

This research has unsurprisingly garnered substantial attention. Berry's findings were featured in a huge and eye-opening investigation in the *New York Times*.²² In Chicago, Berry produced an improved model for property tax assessment that the then-longtime Cook County Assessor opted not to use,²³ leading to a Pulitzer Prize-nominated series in *The Chicago Tribune*²⁴ and the assessor ultimately losing reelection.²⁵

The literature has not quite nailed down why we see these patterns in property valuation. Factors like slow reappraisal processes and variation in how frequently different types of homeowners challenge their assessments seem to matter but do not explain the full extent of PTAR.²⁶ Regressivity could stem from the fact that assessors often lack information about the true physical status of a property, such as how nice the finishings are or the regularity of maintenance.²⁷ Further, assessors often underrate differences in property value by block or small neighborhood, with geography taken into account using broad "zones" that do not capture the important ways in which location drives property values.²⁸ Some evidence points to the difficulty of assessing the effects of location as a particularly important factor.²⁹

Just as exact causes of regressivity are yet to be fully explained, the full implications of PTAR have not yet been explored either. This Article will show that there are four major implications of PTAR. *First*, it is not perfectly clear that regressivity in assessments leads to substantially worse outcomes

²² Editorial Board, *How Lower-Income Americans Get Cheated on Property Taxes*, N.Y. TIMES (Apr. 3, 2021), https://www.nytimes.com/2021/04/03/opinion/sunday/property-taxes-housing-assessment-inequality.html [https://perma.cc/X2ET-VYSW] ("Americans expect to pay property taxes at the same rates as their neighbors. But across most of the United States, flat-rate property taxation is a sham.").

²³ Susie Allen, *Value Judgment*, U. CHI. MAG., Summer 2018, at 14–15.

²⁴ See Jason Grotto, *The Tax Divide*, CHI. TRIB. (Jun. 10, 2017); *Finalist: Jason Grotto, Sandhya Kambhampati and Ray Long of Chicago Tribune and ProPublica Illinois*, THE PULITZER PRIZES (2018), https://www.pulitzer.org/finalists/jason-grotto-sandhya-kambhampati-and-ray-long-chicago-tribune-and-propublica-illinois [https://perma.cc/H6J2-MPEZ].

²⁵ See Jason Grotto, Cook County Assessor Joe Berrios' Defeat Opens the Door to Reform, Propublica (Mar. 22, 2018), https://www.propublica.org/article/cook-county-assessor-reform-challenges-fritz-kaegi [http://perma.cc/L9QK-6ZD9].

²⁶ See Amornsiripanitch, supra note 11, at 1 (suggesting slow reappraisal process has substantial explanatory force); Berry, supra note 9, at 6 (finding differential rates of assessment challenges have some explanatory force).

²⁷ See Berry, supra note 9, at 6.

²⁸ Id.

²⁹ See infra note 45 and accompanying text.

for the less well-off, or at least for today's less well-off.³⁰ PTAR very likely causes worse outcomes for the less well-off to some degree, but it is not clear how much.³¹ The reason is that property taxes are substantially "capitalized" into housing prices—properties with lower taxes are worth more; properties with higher taxes are worth less.³² As a result, when property was first undervalued by assessors, it gave owners of the property at that time a one-time wealth increase—they not only had to pay less than they should have in taxes, but they also became able to sell their property for more (and the same is true in reverse for inexpensive properties that were over-valued by assessors). But all subsequent buyers acquired their property based on the over (under) valuation and thus were not made better (worse) off by it, at least to the extent that the effect is fully capitalized into the sales price.

Thus, the effect on today's homeowners will depend on when PTAR set in, when they bought their property, the extent of capitalization, and trends in relative property values inside jurisdictions.

Second, PTAR makes the property tax more like a flat head tax. Over the last fifty years, scholars have wrestled with whether property taxes can be understood as a "benefits tax." The "benefits tax" argument is that property taxes are best understood as a charge for local public services. Ust as parents can pay for their kids to attend private schools and shopping malls can pay for private security, homeowners pay property taxes as part of the price of living in jurisdictions where their kids attend particular public schools and where they receive particular types of police protection. Under this view, the property tax is an extremely efficient tax, but not a progressive one. Unlike other taxes, people are choosing to pay it by buying property in a particular town because they think they are getting good value in services for their tax dollars.

Central to this argument, though, is the claim that local governments use zoning and other land use tools to keep housing prices (and thus the taxes paid per resident) relatively consistent across the jurisdiction.³⁶ If a local government allows lots of dense new housing to be built, the argument goes,

³⁰ Specifically, these are owners of less valuable property. That is a distinct population from the "less well-off" if we mean the bottom of the wealth distribution. Owners of property are not generally the truly poor—they own property—although they can be heavily indebted.

³¹ For a brief discussion of this, see Berry, supra note 9, at 23.

³² See G. Stacy Sirmans, Dean H. Gatzlaff & David A. Macpherson, The History of Property Tax Capitalization in Real Estate, 16 J. REAL EST. LITERATURE 327, 334–35 (2008) (literature review finding that the most typical empirical result has been partial capitalization); Keith Dowding, Peter John & Stephen Biggs, Tiebout: A Survey of the Empirical Literature, 31 URB. STUD. 767, 775 (1994) (reviewing literature and finding that full capitalization is likely). See generally George R. Zodrow, The Property Tax as a Capital Tax: A Room with Three Views, 54 NAT'L TAX J. 139 (2001) (reviewing capitalization literature).

³³ See infra note 129 and accompanying text.

³⁴ See infra notes 134–142 and accompanying text.

 $^{^{35}}$ Id

³⁶ See generally Bruce W. Hamilton, Zoning and Property Taxation in a System of Local Governments, 12 URB. STUD. 205 (1975).

it cannot keep the average property tax paid per resident from falling.³⁷ If cheaper new housing gets built but services are provided to all residents on an equal basis, property taxes will end up redistributing wealth from long-term residents in expensive houses to newcomers in cheaper ones. Under this view, zoning to limit new housing turns the property tax into something like a per capita "head tax." Everyone has similar property values and thus pays similar amounts in property tax to buy a package of local governmental services.³⁸

A problem for the benefits tax view is that, while zoning policies can be very strict, they are usually not so strict as to rule out any change in per capita housing prices in a jurisdiction.³⁹ Critics have argued that this means property taxes are not best understood as benefits taxes.⁴⁰ But PTAR helps "fix" this problem. If local governments can simply declare that inexpensive properties are worth more for tax purposes than they actually are and that expensive properties are worth less for tax purposes than they actually are, property taxes become more like a head tax even if cheaper new housing is built. That is, if property taxes do not really depend on property values (or rather depend on them less), the property tax moves in the direction of being a "benefits tax," a flat charge for services.

Third, PTAR could theoretically make the property tax more "Georgist," but it probably does the opposite in reality. An older understanding of the property tax than either the benefits tax or the capital tax view is that the property tax combines two separate taxes: a good, efficient, and progressive "Georgist" tax on the value of land, with a bad, inefficient, and regressive tax on "improvements." Taxes on the value of land are efficient; they get capitalized into the value of the land but do not discourage the creation of land as the amount of land is fixed. Taxes on the value of land are also progressive because richer people own most land. On the other hand, taxes on improvements, or things built on land like houses, are regressive, as the poor spend a greater percentage of their income on housing. Taxes on improvements are also inefficient, as they reduce the production of new housing. The property tax as it exists in the United States is both a tax on land and a tax on improvements and thus has good and bad elements.

³⁷ See, e.g., Bruce Hamilton, Capitalization of Intrajurisdictional Differences in Local Tax Prices, 66 AMERICAN ECON. REV. 743, 748 (1976).

³⁸ *Id.* at 749.

³⁹ See infra notes 151–153 and accompanying text.

⁴⁰ See, e.g., George R. Zodrow & Peter M. Mieszkowski, *The New View of the Property Tax: A Reformulation*, 16 Reg. Sci. & Urb. Econ. 309, 310–11 (1986).

⁴¹ Joan Youngman, A Good Tax: Legal and Policy Issues for the Property Tax in the United States 7–8 (2016); Dick Netzer, The Economics of the Property Tax (1966). People call this Georgist after Henry George's proposal that a "single" tax on land values should replace all taxes. *See* Annika Neklason, *The 140-Year-Old Dream of Government Without Taxation*, The Atlantic (Apr. 15, 2019), https://www.theatlantic.com/national/archive/2019/04/henry-georges-single-tax-could-combat-inequality/587197/ [https://perma.cc/A69V-SUUN] (describing George's "single tax" proposal and arguing that such a tax could be a beneficial reform today).

If PTAR was caused by a failure of assessors to consider the increased value generated by improvements, it would make the property tax more Georgist. But the empirical literature suggests that PTAR might be driven more by underrating how much the value of a property depends on its neighborhood and block. The tools assessors use to control for neighborhood are too crude to capture block-to-block differences in access to amenities and social meaning that have a huge effect on actual prices.⁴² To the extent this is correct, PTAR as it exists likely makes the property tax less Georgist.

Fourth, PTAR removes part of what one might call the "insurance" value of the property tax. It has long been a goal of policymakers to create a kind of property value or "home equity" insurance.⁴³ Federal policy encourages home ownership in part to encourage savings. But owning and living in a home is a very strange kind of investment. For most homeowners, the majority of their wealth is tied up in the value of their home.⁴⁴ This is exactly the opposite of the type of diversification that protects investors against the risk that any one asset loses value. But, despite many efforts, markets have not been able to provide much in the way of this form of insurance.⁴⁵

Property taxes hypothetically provide something like property value insurance under some limited circumstances (something this Article is the first to identify, as far as I know). If property values and property assessments go down, tax liabilities go down too; if they go up, then taxes go up. This could be the case even despite limitations on the insurance value of taxes more broadly. As Evsey Domar and Richard Musgrave famously argued, for example, the insurance value of taxes is often defeated by investors who respond to taxes by deciding to make bigger bets (and thus cancel out the value of the insurance).⁴⁶ But the housing market likely does not provide

⁴² See Avenancio-León & Howard, supra note 11, at 1384–85 (finding substantial evidence for neighborhood-level factors explaining racial assessment gaps and none for property-level factors); Amornsiripanitch, supra note 11, at 1 (suggesting neighborhood effects play a large role in PTAR).

⁴³ See infra notes 194, 198–201 and accompanying text.

⁴⁴ See Matteo Iacoviello, *Housing Wealth and Consumption* 1 (Fed. Rsrv. Bd., Int'l Fin. Discussion Papers, No. 1027, Aug. 2011) (finding that housing wealth accounts for almost two thirds of the total wealth of the median household).

⁴⁵ See, e.g., Frank J. Fabozzi, Robert J. Shiller & Radu S. Tunaru, A 30-Year Perspective on Property Derivatives: What Can Be Done to Tame Property Price Risk?, 34 J. ECON. PERSP. 121, 132–36 (2020). The absence of insurance has been linked to opposition to development and even to concerns about the identity of new neighbors, as changes in who resides nearby create variance in housing values and people do not want to see unnecessary variance in an asset that constitutes all of their wealth. See WILLIAM FISCHEL, THE HOMEVOTER HYPOTHESIS 260–89 (2005) (linking a lack of insurance to NIMBYism). See generally Robert J. Shiller & Allan N. Weiss, Home Equity Insurance, 19 J. REAL EST. FIN. & ECON. 21, 32–33 (1999) (discussing how Oak Park, IL created a public form of home value insurance to reassure residents that their houses would not lose value during a period of increasing racial integration).

⁴⁶ Evsey D. Domar & Richard A. Musgrave, *Proportional Income Taxation and Risk-Taking*, 58 Q. J. ECON. 388, 389–91 (1944).

enough options to allow homeowners to take riskier bets to fully cancel out the insurance value of property taxes, nor are most homeowners likely to employ the options that are available.⁴⁷

That said, in places where the prices of all properties are heavily correlated (think a small suburb), property taxes would not provide insurance. The reason is that if all property prices in town fall, the local government will have to raise taxes to keep services up, nullifying the tax cut the owner of the property falling in value would otherwise receive.⁴⁸

Thus, property taxes can provide some insurance against changes in property value among properties inside a single jurisdiction. But property taxes only provide insurance if property assessments track directional trends in property prices. PTAR means that this is not true or is at least less true than it would be if property tax assessments accurately tracked market property values. As a result, PTAR reduces the insurance benefits of the property tax.

What follows from these points? Fixing PTAR would be costly—it would require greater investigation into both individual properties and the economic value of location, more sophisticated modeling, a more well-resourced appeals process, and more frequent reassessments. But it seems possible, particularly as technology improves. Should governments devote the resources to do so?

For a tax policy premised on a fiction that the rich are less rich than they actually are, and that the less well-off are richer than they actually are, the answer is surprisingly mixed. PTAR is unfair, sometimes unconstitutional, likely quite regressive, and a barrier to the achievement of property value insurance. But getting rid of it would come with some substantial policy risks. To ensure that fixing PTAR provides very substantial benefits, more accurate assessment practices should be paired with other policy changes. Namely, state governments should both locate more property tax collection in bigger taxing jurisdictions and pass very substantial limitations on local zoning authority.

To start, because the change in taxes would be capitalized into home values, eliminating PTAR would constitute a substantial one-time wealth transfer from richer homeowners to less rich ones. But it would be a strange form of redistribution. It would only redistribute the responsibility for funding government among residents of the same local jurisdiction, meaning that in most cases it would not cause resources to transfer from the rich to the poor. It would only have any substantial effect in jurisdictions with diverse types of residential property, which is to say mostly big jurisdictions like

⁴⁷ See Daniel Hemel, *Taxing Wealth in an Uncertain World*, 72 NAT'L TAX J. 755, 763 (2019).

⁴⁸ See, e.g., Byron Lutz, Raven Molloy & Hui Shan, *The Housing Crisis and State and Local Government Tax Revenue: Five Channels*, 41 REG'L SCI. & URB. ECON. 306, 307 (2011).

cities and large school districts.⁴⁹ And it would not transfer resources to the truly poor, only to less well-off property owners.⁵⁰

Fixing PTAR would help make property taxes into a better form of property value insurance. Improving property value insurance would create real benefits for the huge number of people who have most of their wealth tied up in a single asset: their home. That said, this benefit would only happen inside very large jurisdictions where property prices are less correlated with one another.

The major downside of ending PTAR concerns its interaction with land use policy. As noted above, PTAR makes the property tax into more of a benefits tax. Many people seem to want to avoid having their local taxes redistributed to others—this is one of the major benefits of moving to an exclusive suburb. The most straightforward way for rich residents to ensure that their local government is not redistributing their tax dollars to poorer residents is simply to refuse to allow poorer people to move in at all. Using zoning to stop the construction of denser and cheaper housing can keep the average price of housing per resident consistent, thus avoiding redistribution. PTAR is a way around this. By basing taxes on a fiction that the values of property are more similar than they actually are, jurisdictions avoid engaging in redistribution from existing residents even if new construction of denser housing leads to a decline in per capita property values. Removing this fiction would create greater pressure among residents inclined to stop redistribution to do so the old-fashioned way—by keeping poorer people out of the jurisdiction entirely. The costs of limiting housing construction on the broader economy are extremely large.⁵¹ So too are the costs of residential segregation by income. 52 One may wish this were not the case—I wish it were not the case!—but if ending PTAR means more NIMBYism, less housing construction, and more segregation, it might be very harmful.

To ensure that ending PTAR creates large benefits and does not generate too many unintended harms, states would need to pass laws concurrent with PTAR reform. States would need to reorganize their local governmental systems to give more taxing authority to bigger jurisdictions,

⁴⁹ See Tracy Hadden Loh, Joanne Kim & Jennifer S. Vey, *Diverse Neighborhoods Are Made of Diverse Housing*, BROOKINGS INST. (Feb. 8, 2022) (finding that "city neighborhoods tend to have more diverse housing inventory than suburban and rural areas"), https://www.brookings.edu/articles/diverse-neighborhoods-are-made-of-diverse-housing/[https://perma.cc/R4XR-D9A4].

⁵⁰ Notably, the first order effect would not include the poor, who are less likely to own property. Rental buildings are generally assessed as commercial property. While there can be assessment problems with commercial property as well, papers in the literature generally do not include any analysis of rental buildings.

⁵¹ See David Schleicher, Exclusionary Zoning's Confused Defenders, 2021 WIS. L. REV. 1316, 1323–33 (2021) (summarizing a substantial academic literature describing these large costs).

⁵² See RICHARD D. KAHLENBERG, EXCLUDED: HOW SNOB ZONING, NIMBYISM, AND CLASS BIAS BUILT THE WALLS WE DON'T SEE 67–121 (2023) (discussing the costs of economic segregation).

like counties. Doing so would increase the insurance value of property taxes by reducing the correlation in price between the properties taxed. Further, state governments should also seek greater control over local land use policy, passing laws that limit the ability of jurisdictions to exclude using zoning and other tools.

This leads to a larger and final point. The property tax is often seen as the ideal tax for local governments.⁵³ Having small local governments tax income or sales creates concerns that the tax base will flee. But that can't happen for land—land stays put. Further, taxing land provides incentives for local governments to do a good job, as better services increase the value of property which increases revenue, in turn giving homeowners a reason to be involved in local politics.⁵⁴

There have long been critics of giving small local governments the power to tax property values. For instance, proponents of what is known as the "capital tax" view argue that property tax rate differentials between jurisdictions inefficiently bias where investment is located.⁵⁵ But looking at the property tax through the lens of PTAR provides another line of critique. The things local governments do to make the property tax "work"—either barring new housing construction and/or making the assessment system biased against people who own less valuable houses—suggests that the property tax may not be as great a fit for local governments as is usually assumed. Understood through this lens, property taxes are not an exception to the problem of taxation by small local governments. Rather, property taxes are simply the flawed local tax we have grown used to, molded in ways that have harmed both our housing markets and basic concepts of fairness.

II. THE PROPERTY TAX AND PROPERTY TAX ASSESSMENT REGRESSIVITY

Paying property taxes is one of the most universal experiences in American life. Roughly 66% of people live in owner-occupied housing.⁵⁶ All of those households, one way or another, pay property taxes directly.⁵⁷ Further, the services paid for by property taxes—public schools, local roads, police, fire, sanitation, and so on—are extremely tangible manifestations of the role of government in the lives of most people.⁵⁸

⁵³ See, e.g., YOUNGMAN, supra note 1, at 1–15; Edward A. Zelinsky, The Once and Future Property Tax: A Dialogue with My Younger Self, 23 CARDOZO L. REV. 2199, 2217–19 (2002).

⁵⁴ See William Fischel, The Homevoter Hypothesis 5–6 (2005).

⁵⁵ See infra notes 129–133 and accompanying text.

⁵⁶ Richard Fry, *Amid a Pandemic and a Recession, Americans Go on a Near-Record Homebuying Spree*, PEW RSCH. CTR. (Mar. 8, 2021), https://www.pewresearch.org/short-reads/2021/03/08/amid-a-pandemic-and-a-recession-americans-go-on-a-near-record-homebuying-spree/ [https://perma.cc/W2ZQ-B8SP].

⁵⁷ Renters bear some of the incidence of property taxes. *See, e.g.*, Leah J. Tsoodle & Tracy M. Turner, *Property Taxes and Residential Rents*, 36 REAL EST. ECON. 63, 78 (2008) (finding that "a one standard deviation increase in the property tax rates raises residential rents by between \$402 and \$450 annually").

⁵⁸ See YOUNGMAN, supra note 1, at 27.

That said, property taxes in America have changed a huge amount over time. For much of American history, property taxes were general wealth taxes assessed on all property—real property, personal property, and even intangible assets like investments.⁵⁹ For businesses, there can still be substantial property taxes on personal property depending on the state and locality.⁶⁰ But, for individuals, the property tax today is largely a tax on the value of real property.⁶¹ Real property as a tax base covers two theoretically distinct assets—land and improvements (or buildings).⁶² And, importantly, this property tax is *ad valorem*, or based on the value of property as an asset, and not, at least in the first instance, based on the income or cash on hand of a taxpayer.⁶³

To see how PTAR works, it is useful to lay out a simple, and concededly somewhat stylized, model of property taxation. The first step of property taxation is "assessment," which is an effort to determine the value of a given piece of property. States differ in which entities assess properties, with assessments being conducted by states, counties, cities, townships, or some combination of the four.⁶⁴ For example, there are nearly 1,800 different entities that assess property values in North Dakota and nearly 1,900 in Wisconsin, while property assessment is entirely in the hands of the state government in Maryland, the only state to do so.⁶⁵ States also frequently oversee the assessment process, a process known as "equalization," but the extent of this oversight varies substantially.⁶⁶ Importantly, the frequency of reassessment varies very substantially. In some places, there is a reassessment every few years, while in others there has not been a reassessment since the 1960s.⁶⁷

Assessment is famously difficult.⁶⁸ Unlike stocks or bonds, properties are all different from one another. Moreover, most properties are not bought

⁵⁹ Dray, Landais & Stantcheva, *supra* note 1, at 1.

⁶⁰ See WATSON, supra note 1, at 3–5; YOUNGMAN, supra note 1, at 5–6.

⁶¹ See Dray, Landais & Stantcheva, supra note 1, at 1.

⁶² See supra note 41 and accompanying text.

⁶³ YOUNGMAN, supra note 1, at 35.

⁶⁴ See Steven V. Melnik & David S. Cenedella, Real Property Taxation and Assessment Processes: A Case for a Better Model, 12 N.Y.U. J. LEGIS. & PUB. POL'Y 259, 270–72 (2009).

⁶⁵ Id. at 262 n.10, 317. See also Property Tax, COMPTROLLER OF MD., https://www.marylandtaxes.gov/individual/property/index.php [https://perma.cc/6ZXQ-J67J]. Tax assessors are frequently elected officials. Shayak Sarkar & Josh Rosenthal, Exclusionary Taxation, 53 HARV. C.R.-C.L. L. REV. 619, 628 n.40 (2018) (noting that assessors are elected in 30 states, but there is sometimes variation in the method of appointment within states).

⁶⁶ See Melnik & Cenedella, supra note 64, at 272–73.

⁶⁷ See Sterk & Engler, supra note 7, at 1041–44. Compare Tex. Tax Code § 25.18 (2023) (requiring all appraisal offices to reassess all properties at least once every three years), with Tax Assessment, FRANKLIN CNTY., PA., https://www.franklincountypa.gov/index.php?section=taxes_tax-assessment_frequently-asked-questions [https://perma.cc/WZC5-PAES] ("The last County-wide reassessment went into effect [sic] for 1961.").

⁶⁸ See Sterk & Engler, supra note 7, at 1066–73.

and sold in a given year (or even in several years),⁶⁹ and thus do not have a real market price.

Assessors have different methods for nonetheless attempting to determine the value of different types of property. For instance, assessors often look at the cost of construction for industrial properties and the income the property generates for commercial properties. But for existing residential properties, assessments are most frequently based on the "sales comparison approach." That is, assessors use the actual sale prices of similar houses to determine the likely price of a given house. This used to be an extremely bespoke process, but now it is largely based on complicated regression analyses.

While state constitutions generally require "uniform" taxation within particular "classes" of property, different assessment policies can apply to different classes of property. For instance, properties used for agriculture are generally taxed according to their "value in use" rather than their highest value use. For agricultural property, that generally means that properties are assessed based on their value as farms, rather than what someone would pay for the property in order to subdivide it and build housing on it. Jurisdictions will sometimes also apply different tax rates to different classes of property as well.

Once a property is assessed, a property owner can appeal the assessment of their property. In most places, property owners have a right to discuss their assessment with the assessor's office, and if this is unsuccessful in changing their assessment, a right to file an appeal with an administrative agency.⁷⁸ And appeal they do. In Cook County, Illinois, for example, about twenty percent of all property owners challenged their assessments.⁷⁹

⁶⁹ See Quick Real Estate Statistics, NAT'L ASS'N OF REALTORS (Jul. 12, 2023), https://www.nar.realtor/research-and-statistics/quick-real-estate-statistics [https://perma.cc/JJ23-VRJX] (noting that, in 2023, the typical home seller had been in their home for ten years).

⁷⁰ See Int'l Ass'n Assessing Officers, Standard on Mass Appraisal of Real Property 6–9 (July 2017).

⁷¹ See id. at 8–9.

⁷² *Id.* at 7.

⁷³ See id.

⁷⁴ See NEAL ET AL., supra note 13, at 1–2.

⁷⁵ YOUNGMAN, *supra* note 1, at 91–103. New York City has four classes of property that it taxes at different rates and using different "assessment ratios," or fractions of total property value that are subject to tax. N.Y.C. DEPT. OF FIN., *Calculating Your Property Taxes*, https://www.nyc.gov/site/finance/property/calculating-your-property-taxes.page [https://perma.cc/XC5N-N75M]. Cook County, Illinois, which includes Chicago, has fifteen different classes of property. *See* YOUNGMAN, *supra* note 1, at 91.

⁷⁶ See YOUNGMAN, supra note 1, at 134–36.

⁷⁷ See id. at 134.

⁷⁸ See William M. Doerner & Keith R. Ihlanfeldt, *An Empirical Analysis of the Property Tax Appeals Process*, 11 J. Prop. Tax Assessment & Admin. 5, 5–7 (2014).

⁷⁹ ROBERT ROSS, U. CHI. HARRIS PUB. POL'Y CTR. MUN. FIN., THE IMPACT OF PROPERTY TAX APPEALS ON VERTICAL EQUITY IN COOK COUNTY, IL 1 (2017), https://harris.uchicago.edu/files/inline-files/Ross%20-

Appeals are widespread, but rich homeowners are particularly likely both to file appeals and to win a greater reduction in assessments.⁸⁰

After the value of a given piece of property is determined, individual taxpayers can apply for exemptions, caps, and other adjustments. For instance, many states and localities provide "homestead" exemptions that allow owners of primary residences to keep a certain amount of the value of a house off the tax rolls, although this is often limited to certain groups of taxpavers (like senior citizens). 81 Other exemptions or deductions apply to particular types of property owners or to properties used for particular purposes. In New York City, there are exemptions of varying sizes for anyone making less than \$250,000 in income, veterans and their families, lowincome seniors, disabled homeowners, disabled crime victims, Good Samaritans, and clergy.⁸² A number of jurisdictions have also adopted "assessment caps," which are limits on how quickly the assessment of a particular property can increase in a given year. 83 "Circuit breakers," or state tax policies, provide rebates to taxpayers who pay a substantial percentage of their income in property taxes.⁸⁴ Other jurisdictions allow some property owners to defer making tax payments until properties are transferred. 85 These policies are often justified as ways to ensure that lower-income owners of property that increases in value are not forced to sell their home or borrow to pay taxes.86

Once the "roll" of property value assessments in a jurisdiction is set, jurisdictions set their tax rates. Property is frequently taxed by multiple

^{%20}Vertical%20Equity%20in%20Cook%20County%20-%20CMF%20-%20Final.pdf [https:/perma.cc/8JR9-4QK8]. To be fair, Cook County is a bit of an outlier. *See* Berry, *supra* note 9, at 19. Property tax appeals have also increased substantially nationwide. *See* Ross, *supra* note 79, at 1.

⁸⁰ See Doerner & Ihlanfeldt, *supra* note 78, at 15 (finding, in study of property assessments appeals in Florida, that "appeals-related reductions in assessed values" favor homeowners from high-income, majority white neighborhoods); Ross, *supra* note 79, at 1 (finding that appeals disproportionately reduce assessments for more valuable properties).

⁸¹ See Keith Ihlanfeldt, Property Tax Homestead Exemptions: An Analysis of the Variance in Take-Up Rates Across Neighborhoods, 74 NAT'L TAX J. 405, 405 (2021) (noting that property tax homestead exemptions are available in more than forty states); LEXIS, MULTI-STATE CHARTS WITH ANALYSIS, PROPERTY TAX: HOMESTEAD EXEMPTIONS (updated Mar. 1, 2022) [https://perma.cc/39LE-P5R9].

⁸² See N.Y.C. DEPT. OF FIN., NYC Residential Property Tax Exemptions, https://www.nyc.gov/site/finance/property/residential-properties-exemptions.page

[[]https://perma.cc/LM6L-UDR5]. Property tax exemptions for clergy have a particularly long lineage. Part of the text of the Rosetta Stone is a thank you from priests to Ptolemy I for granting them a property tax exemption. See Richard Henry Carlson, A Brief History of Property Tax, FAIR & EQUITABLE, Feb. 2005, at 3.

Property Tax Limits: Goals, Consequences, and Alternatives, 46 STATE TAX NOTES 541, 556 (2007) (describing assessment caps as "[t]he most common response to criticism that property taxes are too high," but acknowledging that this can have problematic effects).

⁸⁴ See YOUNGMAN, supra note 1, at 211.

⁸⁵ *Id.* at 10–11.

⁸⁶ See Sterk & Engler, supra note 7, at 1038.

overlapping local governments—cities and towns, school districts, counties, and special districts of a variety of types. For most local governments, property tax is the dominant form of "own-source revenue," or money they receive from taxes and fees they levy themselves, rather than transfers from other levels of government. Nationwide, local governments raise more than \$500 billion annually in property taxes, constituting nearly half of local governments' own-source revenue.⁸⁷

States have regularly intervened in this process, limiting local taxsetting powers or otherwise shaping property tax collection.⁸⁸ State interventions have substantially increased since the 1970s, with many states sharply limiting both increases in assessments and tax rates.⁸⁹

The most famous tax limitation is California's Proposition 13, which moved the state to an "acquisition assessment" model, where the assessed value of a piece of property can only increase by two percent a year unless it is sold or built upon. That is, the assessed value is just the amount the purchaser paid plus a small annual adjustment. For many owners of California property, the assessed value is far, far below the actual market value given the enormous increase in California property values since the 1970s. Heirs can inherit primary residences in the state at the original tax basis if the value of the property is below \$1 million (and keep a portion of

⁸⁷ Berry, *supra* note 9, at 1. Traditionally, local governments often would not even set their "mill rate," or the amount of taxes they charge per thousand dollars of property value, as a first order matter. Rather, many would first set their budgets and then determine the mill rate by dividing the amount the government needed by the overall size of the property tax roll, backing out the necessary mill rate. *See, e.g.*, Carolyn Chu, *Why the Mid-1970s Play a Large Role in Property Taxes Today*, CAL. LEGIS. ANALYST'S OFF. (Jan. 27, 2016), https://lao.ca.gov/LAOEconTax/Article/Detail/166 [https://perma.cc/GDK8-YAY7] (noting that, prior to the enactment of California's Proposition 13, local governments would set their property tax rate "based on the amount of revenue necessary to provide the level of services desired by their residents").

⁸⁸ See generally Iris J. Lav & Michael Leachman, Ctr. on Budget and Pol'y Priorities, State Limits on Property Taxes Hamstring Local Services and Should Be Relaxed or Repealed (Jul. 18, 2018), https://www.cbpp.org/research/state-budget-and-tax/state-limits-on-property-taxes-hamstring-local-services-and-should-be [https://perma.cc/2JDF-NJMA]; Youngman, *supra* note 83.

⁸⁹ See Erika Rosebrook, Consequences of State Tax and Expenditure Limits on Local Services, NAT'L LEAGUE OF CITIES (Nov. 1, 2021), https://www.nlc.org/wp-content/uploads/2021/10/Preemption-Brief-2-Consequences-of-State-Tax-and-Expenditure-Limits-Brief-1.pdf [https://perma.cc/GY23-Z65A] ("Then, the taxpayer revolt of the late 1970s and early 1980s provided the first large-scale enactment of multiple [tax and expenditure limits] components in a large number of states...")

⁹⁰ See Mac Taylor, Cal. Legis. Analyst's Off., Common Claims About Proposition 13 2 (Sept. 2016), https://lao.ca.gov/reports/2016/3497/common-claims-prop13-091916.pdf [https://perma.cc/DGD8-VPUW] (analyzing effects of Proposition 13 on property valuations).

⁹¹ *Id.* at 4 (graphing difference between assessed and market property values in California).

their tax basis regardless of the value). 92 Moreover, property owners over fifty-five years old can transfer the assessed value of their principal home to a replacement property up to three times without being forced to pay property taxes at actual market value if they sell and buy a new home. 93 Florida has also moved to something like an acquisition assessment model, and assessment caps that exist in many jurisdictions can similarly be understood as pushing traditional property tax systems in the direction of an acquisition assessment model. 94

So, what is Property Tax Assessment Regressivity (PTAR)? PTAR is the empirical finding that expensive properties are under-assessed and less valuable properties are over-assessed. 95 This phenomenon can be diagnosed by comparing the actual sale price to the last assessed price. For more valuable properties in almost all jurisdictions, the actual sale price is substantially higher than the assessed price. 96 For lower-priced properties, the assessed price is much higher than the actual sale price. Notably, Amornsiripanitch shows that PTAR both exists, and is substantial, even when the observations are limited to the set of properties taxed by the same set of local governments. That is, there is a substantial amount of PTAR among properties that share the same town, school district, county, and set of special districts. Even for these properties, PTAR translates directly into higher taxes for lower-valued properties and lower taxes for higher-valued properties despite the fact that they all pay the exact same tax rate.

⁹⁹ *Id*.

⁹² See CAL. STATE BD. OF EQUALIZATION, PROPOSITION 19 FACT SHEET 2 (Apr. 1, 2022), https://www.boe.ca.gov/pdf/pub801.pdf [https://perma.cc/5ZUK-A6KT] (providing flow chart overview of intergenerational property transfers in California). A 2022 initiative, which ultimately failed to receive the required number of signatures to appear on a state-wide ballot, would have increased the amount exempted from \$1 million to \$2.4 million and tied the figure to inflation. See Letter from Jon Coupal, President, Howard Jarvis Taxpayers Ass'n, to Anabel Renteria, Initiative Coord., Off. Att'y Gen., at 4 (Aug. 26, 2021), https://web.archive.org/web/20210901081855/https://oag.ca.gov/system/files/initiatives/pdf s/21-0015%28DeathTax%29.pdf [https://perma.cc/42B2-HZA4] (proposing property tax initiative to increase exemption amount); Initiatives and Referenda Cleared for Circulation, CAL. SEC'Y OF STATE, https://www.sos.ca.gov/elections/ballot-measures/initiative-and-referendum-status/initiatives-referenda-cleared-circulation [https://perma.cc/X7KW-KLJH] (listing referenda that received enough votes to appear on state-wide ballot, the property tax initiative not included).

⁹³ CAL. STATE BD. OF EQUALIZATION, *supra* note 92, at 2.

⁹⁴ See Hayashi, supra note 14 (describing Florida's Save Our Homes law); Youngman, supra note 83, at 543–45 (providing overview of impact of California and Florida laws).

⁹⁵ See supra notes 11–13 and accompanying text (describing regressive property tax phenomenon). This is sometimes described as a lack of "vertical equity."

⁹⁶ See Berry, supra note 9, at 3 (comparing sale prices and assessments of lower- and higher-priced homes).

⁹⁷ See, e.g., id. It would still be the same phenomenon with regards to regressivity if all properties were under-assessed, but expensive properties were under-assessed by more and cheaper properties were under-assessed by less.

⁹⁸ See Amornsiripanitch, supra note 11, at 2–3 (using tax code areas to examine the regressive nature of property tax assessments).

While researchers had found evidence of PTAR in specific jurisdictions for years, recent research has been able to build nationwide data sets and use better empirical tools to replicate these findings on a broader scale. He has been able to build nationwide data sets and use better empirical tools to replicate these findings on a broader scale. What the new research finds is that PTAR is a pretty universal phenomenon. It is easy to see how PTAR would occur in a jurisdiction like California, with its acquisition value method of assessment, or New York City, which has a strict assessment cap limiting annual increases. In those jurisdictions, it is an intentional and inherently regressive policy choice to limit the growth of assessments when property values increase. But Berry finds that PTAR exists in jurisdictions whether or not they have assessment caps. Moreover, this new research also shows racial bias in assessment: properties owned by Blacks and Hispanics are over-assessed, whereas those owned by whites are under-assessed. In the second properties of the properties of the

There are a number of explanations for PTAR other than policy choices. The first is random measurement error. If two homes assessed at the same level sell for different prices for effectively random reasons (e.g., timing or idiosyncratic tastes), the lower-priced home will be over-assessed relative to price based on its true value (and the higher-priced one under-assessed). No one has done anything wrong, but the outcome is regressive assessments. The recent empirical studies acknowledge this effect but find it only explains some of PTAR.¹⁰⁴

Some studies point to the role of assessment challenges. If owners of expensive properties are more likely to challenge their assessments or appeals boards are more likely to reduce the assessments of expensive properties, PTAR should follow, at least at the high end. This seems to be the case, and provides some explanatory power, although not enough to explain the full extent of PTAR.¹⁰⁵

¹⁰⁰ See supra note 11 and accompanying text.

¹⁰¹ See, e.g., TAYLOR, COMMON CLAIMS, supra note 14, at 1-4; Hayashi, supra note 14, at 34 (noting New York City's use of property tax caps); N.Y.C. ADVISORY COMM'N PROP. TAX REFORM, supra note 12, at 28–29 (explaining property tax caps in New York City).

¹⁰² See Berry, supra note 9, at 18 (noting that there is "no apparent difference in assessment regressivity" between states with assessment limits and states without assessment limits). Other studies, however, find that assessment caps contribute substantially to PTAR. See generally Hayashi, supra note 14; N.Y.C. ADVISORY COMM'N PROP. TAX REFORM, supra note 12.

¹⁰³ See supra note 13 and accompanying text.

¹⁰⁴ See, e.g., Berry, supra note 9, at 12–17 (analyzing impact of measurement error on relationship between assessment ratios and housing prices); see also Amornsiripanitch, supra note 11, at 2 (describing literature which suggests that assessments regression estimates are inherently regressive because measurement error in sales prices introduces attenuation bias. Amornsiripanitch uses an instrumental variable approach to account for this measurement error, but nonetheless finds that assessments are regressive).

¹⁰⁵ See, e.g., Berry, supra note 9, at 20 (finding that "appeals worsen but are not the primary cause of regressivity in Cook County"); Avenancio-León & Howard, supra note 11, at 1385 (documenting racial differences in property tax assessment appeals, where minority homeowners are less likely to appeal their assessment, less likely to win an appealed assessment, and—even if they do appeal and win—more likely to receive a smaller reduction to their assessment than nonminority residents).

Others focus on the frequency of reassessment to explain PTAR.¹⁰⁶ If reassessments do not happen often, assessors will fail to capture recent changes in property values. If property values in a jurisdiction start off being relatively equal but then change relative to one another in the span of time between reassessments, PTAR will necessarily follow.¹⁰⁷ This factor seems to explain PTAR to some extent.

Finally, methods of assessment can contribute to PTAR. Assessment is usually based on limited information about the physical status of a house. 108 Assessors may be required to do in-person inspections of properties in certain locations, but even then, in-person inspections are not necessarily mandated for all reassessments. 109 As a result, assessors often lack information about the quality of interiors or about the state of repair of the building more broadly. 110 Moreover, increased use of Automatic Valuation Models has led to a decrease in investigation into the physical condition of property. 111 To the extent that the value of property differs based on how well-maintained the property is, or whether the property has been renovated, assessors are increasingly likely to under-assess properties that have nice finishes, and over-assess those that have depreciated.

While the physical status of a house could generate PTAR, researchers generally find more evidence that PTAR is caused by assessors underrating the importance of location. To be sure, assessors take location into account, often dividing cities up into particular zones and determining

¹⁰⁶ See, e.g., Amornsiripanitch, supra note 11, at 23–26 (finding that empirical evidence strongly suggests that valuation errors and flawed valuation methods, such as infrequent reassessment, explain a "nontrivial proportion of assessment regressivity"); Avenancio-León & Howard, supra note 11, at 1423 (finding that inequality in reassessment is substantially higher in subsample regions with longer reassessment cycles, but much of the effect is driven by a single locality in each subsample).

¹⁰⁷ The same result follows if properties start off unequal but then expensive properties get more expensive relative to cheaper properties.

¹⁰⁸ See Berry, supra note 9, at 6 (discussing limited amount of information available to assessors).

¹⁰⁹ See, e.g., Sterk & Engler, supra note 7, at 1041–45 (describing different approaches to assessment and inspection. In Connecticut, for example, "statute requires physical inspection every ten years," but some form of revaluation is required every five years).

¹¹⁰ See Berry, supra note 9, at 6 (discussing limited information available to assessors). But see ANALYZE BOS., supra note 2 (providing spreadsheets of all property tax assessments in Boston, MA going back to 2004, complete with information about the styles of bathrooms and kitchens, the method of heating, the number of fireplaces, the quality of the view, and whether the property is a corner unit).

¹¹¹ See NEAL ET AL., supra note 13, at 1–2 (describing growth of Automatic Valuation Models following the Great Recession).

¹¹² See Avenancio-León & Howard, supra note 11, at 1395 (finding that half of the racial assessment gap in property taxes arises from neighborhood-level misvaluation); Amornsiripanitch, supra note 11, at 7 (describing an empirical relationship between assessment regressivity and valuation errors that comes from omission or mismeasurement of neighborhood characteristics).

how values in that area have increased or decreased.¹¹³ They also regularly take into account salient amenities, like whether a property has access to a body of water.¹¹⁴ But these zones or coarse accounts of access to amenities may not capture what it is about a location that makes a property valuable. If assessors miss what it is about location that contributes to prices and simply assume that properties in a neighborhood rise and fall together, PTAR will follow; they will under-assess properties that have access to these amenities and over-value those that do not.

That PTAR—and the related phenomenon of undervaluation of properties in largely white neighborhoods and overvaluation of properties in largely Black and Hispanic areas—exists is now clearly established. 115 What this means, though, is still unclear. The literature establishing that PTAR exists is extremely impressive, but it has not yet fully explained its implications. That is, it has not integrated PTAR into the broader economic and legal literature on the property tax. That is what this Article will attempt to do in the next section.

III. PROPERTY TAX ASSESSMENT REGRESSIVITY AND PROPERTY TAX THEORY, OR WHY IS PROPERTY TAX ASSESSMENT REGRESSIVITY IMPORTANT?

This section analyzes what PTAR means for the progressivity, efficiency, and "insurance" value of property taxes.

A. Property Tax Assessment Regressivity, Capitalization, and Redistribution

If federal or state tax authorities assessing income taxes just pretended that people with high incomes had lower incomes than they actually do, and that people with low incomes had higher incomes than they actually do, it would be clear that choice was regressive. It would lead to higher-income people paying less in tax than the tax code suggests they should and lower-income people paying more.

At first glance, it may seem that PTAR would be regressive equally, reducing the taxes of people with a great deal of wealth and increasing the taxes of people with less wealth. While this is likely true to some extent, the

¹¹³ See Berry, supra note 9, at 6 (noting that assessors often capture local variation in housing markets by controlling for neighborhood attributes); Avenancio-León & Howard, supra note 11, at 1389 (describing a standard general approach to property valuation, which often either incorporates a geographic fixed effect, or allows prices to vary by location, to try to account for the effect of relevant neighborhood characteristics on property values).

¹¹⁴ See, e.g., City & County of Honolulu v. Steiner, 834 P.2d 1302, 1307 (Haw. 1992) (describing City and County of Honolulu guidance for real property valuation, which directed assessors to consider, among other factors, "the amount, kind, and quality of shoreline, the quality and condition of the surf and water, the view, and the accessibility to the shore, and including the hazards or detriments because of the natural wave action").

¹¹⁵ See supra notes 11–13 and accompanying text.

precise extent of the effect is not immediately apparent. This is in large part because property taxes directly influence property prices. If property tax rates are high, purchasers will pay less; if they are low, they will pay more. Economists call this "capitalization." The extent of capitalization—that is, whether a property tax increase leads to the exact decline in property prices one would expect from the expected additional tax burden over time or instead leads to a smaller decline—is substantially debated. 117

What does this mean for PTAR? PTAR may not be regressive for today's taxpayers if three conditions are met: (1) PTAR started before today's taxpayers acquired their homes and has continued since; (2) capitalization is perfect or near perfect; and (3) relative property values (i.e., the differences among properties in a jurisdiction) are consistent.

Under these assumptions, when an expensive property was first undervalued by a tax assessor, it had an immediate and proportional effect on the value of the property. Namely, the property would now fetch a higher price because the owner would pay less in taxes in future years. But, under these assumptions, the owners who bought the property after PTAR set in paid more for the property. Thus, they cannot be said to be made better off by PTAR, even if the original owner received a one-time benefit. New purchasers are just getting what they paid for. The same logic works in reverse for less expensive properties that are overvalued by tax assessors. If there was full capitalization, new owners purchased their homes at a discounted price and, therefore, cannot be said to have been made worse off by PTAR.

Each of these assumptions may not be true. First, it may not be the case that PTAR started a long time ago and has been consistent since. We do not have longitudinal evidence about PTAR. So, while we know that expensive properties are undervalued, and less expensive ones overvalued, we do not know when the practice started or how consistent it has been.

Second, capitalization may not be perfect. Economists' long-running debate as to the extent of capitalization suggests that this very well could be possible. If capitalization is not perfect, then PTAR provides an ongoing benefit to owners of more expensive properties, each year giving them some benefit that they did not pay for when they bought the property. 118 The same is true in reverse for owners of less expensive properties. If capitalization is

¹¹⁶ See supra note 32 and accompanying text.

¹¹⁸ It is also possible that even if property taxes capitalize, PTAR does not capitalize. For instance, if PTAR builds up for long-held assets, but assessments update to the actual sale price when there is a transfer, then even if things like property tax rates capitalize, PTAR would all accrue to current holders (unless purchasers realize they will benefit over time, a pretty substantial assumption about the information processing capacity of new purchasers). However, in general, property tax assessments do not snap to the purchase price, as discussed in notes 126–127 and accompanying text. However, to the extent that assessments are influenced by the actual sales price and PTAR accrues over time, then PTAR will benefit current holders.

not perfect, then today's owners of less expensive properties bear a cost for which they received no discount when they bought the property. 119

Finally, if the relative values of properties in a jurisdiction change, then PTAR could be producing regressivity right now. ¹²⁰ If the prices of all properties in a jurisdiction go up or down at the same time, there is no reason to think that PTAR is having a present-day effect (assuming assessors started mis-assessing properties years ago). However, if properties in richer areas appreciate by more than properties in poorer areas, and PTAR leads tax authorities to understate that relative increase, then PTAR is providing owners of appreciating property with a present-day wealth increase.

The extent to which PTAR creates genuine regressivity today depends on whether each of these assumptions holds. 121 However, it is important to note that whatever regressivity created is among homeowners in a single jurisdiction. Indeed, even if policymakers could snap their fingers and make property assessment completely accurate and predictive, it would not occasion any transfers *between* local governments. To the extent that local governments are frequently stratified based on wealth, PTAR only creates redistribution among people of relatively similar economic conditions. This means that it is not likely to be causing direct transfers from the rich to the poor, or at least not in many places. However, in jurisdictions that are economically diverse—particularly big cities, counties, and large school districts—PTAR will be genuinely regressive if the above three conditions are not met.

¹¹⁹ That said, PTAR itself makes capitalization more likely. A basic finding in the literature is that the extent of capitalization is determined by how strict land use restrictions are and how many local governments there are. If land use restrictions bind so strictly that they bar all investment in property and home purchasers only have a limited universe of options, then the value of a property tax cut is perfectly capitalized. See generally Wallace E. Oates, The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis, 77 J. Pol. Econ. 957 (1969); William A. Fischel, Homevoters, Municipal Corporate Governance, and the Benefit View of the Property Tax, 54 NAT'L TAX J. 157 (2001). With PTAR, however, land use restrictions do not need to be as strict in order to lead to full capitalization. To see why, imagine that PTAR was far worse than it currently is, so that all homeowners in a jurisdiction paid an equal amount in taxes, no matter their property's underlying value. This is what is known as a head tax on property owners. In this context, construction of new housing would have no effect on the extent to which owning property was associated with paying taxes. The value of all property would be reduced by the net present value of having to pay a head tax every year. PTAR does not go all the way to turning the property tax into property-owner head tax, but it moves the property tax in that direction. As a result, it makes capitalization more likely.

¹²⁰ If purchasers expect their properties to appreciate relative to other properties in the jurisdiction, they may be willing to pay more for properties in jurisdictions that have PTAR, capitalizing part of this effect into the sales price. But this requires assuming that purchasers are both good prognosticators and extremely far-sighted in their consideration of local tax policy.

¹²¹ One caveat is necessary. At some discrete point in the past when a more expensive property was first undervalued, PTAR increased the property owner's wealth. A substantial amount of that wealth was likely inherited by those who are well-off today.

Further, PTAR only allows for transfers among homeowners. Homeowners are almost by definition not the very poor, although many of them may be quite indebted. PTAR could theoretically also affect renters, as at least some amount of the property tax is passed through to renters. But PTAR, or at least the kind of PTAR specific to single family homes and condos that is found in these studies, will only matter to renters to the extent that the rental market is influenced indirectly by those other forms of housing. This is because the assessment of commercial properties, including multifamily rental buildings, is usually done with a different methodology. Instead of using the "comparative sales" method that is used for single-family homes and condos, multi-family rental buildings are often assessed based on the income that property owners generate from their buildings. This process may have its own problems with accuracy and regressivity, but it is not part of the empirical findings on which PTAR is based.

Finally, the existence of PTAR can help explain some weird features of property tax assessment. For instance, assessors are told not to engage in "sale chasing," or reassessing properties that recently sold while leaving others alone. 126 At first glance, this is an extremely strange rule. When properties are actually sold, we go from being in the dark about their real value to knowing it. Why shouldn't assessors incorporate that information as soon as they get it?

But if properties that are actually sold are reassessed in an accurate way, while others are systematically incorrectly assessed due to PTAR, the property tax system will either discourage (or inefficiently encourage) sales of property. For expensive properties, PTAR causes the tax basis of the seller to be lower than the tax basis of the buyer, meaning that even if a potential seller values the house less than a potential buyer, the house might not be sold

¹²² See Chris Horymski, Total Mortgage Debt Increases to \$11.2 Trillion in 2022, EXPERIAN (Mar. 27, 2023), https://www.experian.com/blogs/ask-experian/how-much-americans-owe-on-their-mortgages-in-every-state [https://perma.cc/R27W-99BK] (reporting that the average mortgage balance was \$236,443 in 2022).

¹²³ See, e.g., Tsoodle & Turner, supra note 57, at 65 (observing that a "substantial" amount of property tax may be passed on to renters).

¹²⁴ See Int'l Ass'n Assessing Officers, Standard on Mass Appraisal of Real Property 9 (2017), https://www.iaao.org/media/standards/StandardOnMassAppraisal.pdf [https://perma.cc/QEQ3-WZZH] (describing multifamily valuation processes).

¹²⁵ See, e.g., Thomas Breen, Whose Boom Is It? City Cut Top Investors \$166M Break, NEW HAVEN INDEP. (Dec. 23, 2022), https://www.newhavenindependent.org/article/assessments [https://perma.cc/7LCZ-9ZE9] ("For years, investors have paid far more money to buy large New Haven commercial real estate than the city assessor's office has considered those same properties to be worth.").

¹²⁶ See, e.g., Cnty. of Douglas v. Nebraska Tax Equalization & Rev. Comm'n, 635 N.W.2d 413, 423 (Neb. 2001) (describing the "unacceptable assessment practice of 'sales chasing'"); Boivin v. Town of Addison, 5 A.3d 897, 901 (Vt. 2010) (noting that Vermont Department of Taxes Listers' Handbook condemns sales chasing). Courts have also found sales chasing to be unconstitutional under state tax uniformity provisions. See, e.g., Twp. of W. Milford v. Van Decker, 576 A.2d 881, 885 (N.J. 1990).

if the difference is less than the difference in the tax basis.¹²⁷ For less expensive properties, the opposite is true; selling property will be advantageous for tax purposes.

In a system where property tax assessment is either accurate or randomly inaccurate, "sales chasing" would make perfect sense. But having a different level of accuracy for sold and unsold properties would lead to owners of similar properties paying different amounts in taxes, therefore either encouraging or discouraging sales.

B. Property Tax Assessment Regressivity and the Benefit Tax Versus Capital Tax Debate

For a tax that is thousands of years old,¹²⁸ it is somewhat surprising that economists cannot agree about basic facts about the property tax, such as whether it is an efficient means of raising revenue or whether it is progressive or regressive. Particularly over the last fifty years or so, there has been an intense debate between two camps of scholars over how to best understand the property tax and whom it helps and hurts.¹²⁹

The "capital tax" argument—sometimes called the "new view" of property taxes—is that property taxes are best thought of as an inefficient tax on all capital. This view maintains that property taxes, which differ by jurisdiction, cause investment to flow into jurisdictions with lower property taxes and into assets that are not part of the property tax base. This increases the flow of capital chasing the same set of assets causing prices to rise, meaning that holders of all kinds of capital bear the burden of the property

¹²⁷ The logic here is the same as why an "acquisition assessment" property tax system, like California's after Proposition 13, reduces sales and turnover. Current owners are paying less in tax than would new purchasers, increasing the value to the current owner relative to a purchaser. *See* Taylor, *supra* note 14, at 11–12. In California, this effect is understood as a feature, not a bug, of Prop. 13, as the policy was aimed at creating neighborhood stability. *See* Nordlinger v. Hahn, 505 U.S. 1, 12 (1992) (observing state has "legitimate interest" in political stability). However, this benefit comes with very substantial costs: reduced transactions, diminished ability for neighborhoods to change, and economic harms from people not moving to opportunity. *See, e.g.*, David Schleicher, *Stuck! The Law and Economics of Residential Stagnation*, 127 YALE L. J. 78, 131–32 (2017).

¹²⁸ See Carlson, supra note 82, at 3.

¹²⁹ See generally, e.g., Peter Mieszkowski & George R. Zodrow, Taxation and the Tiebout Model: The Differential Effects of Head Taxes, Taxes on Land Rents, and Property Taxes, 27 J. Econ. Lit. 1098 (1989) (discussing distributive effects of property taxes); Zodrow, supra note 32 (reviewing capitalization literature); George R. Zodrow, Reflections on the New View and the Benefit View of the Property Tax, in Property Taxation and Local Government Finance: Essays in Honor of C. Lowell Harriss 79 (Wallace E. Oates ed., 2001); Fischel, supra note 119; Wallace E. Oates & William A. Fischel, Are Local Property Taxes Regressive, Progressive, or What?, 69 Nat'l Tax J. 415 (2016).

¹³⁰ See Peter Mieszkowski, The Property Tax: An Excise Tax or a Profits Tax?, 1 J. Pub. Econ. 73, 73–74 (1972); Zodrow & Mieszkowski, supra note 40, at 309–10; George R. Zodrow, The Property Tax Incidence Debate and the Mix of State and Local Finance of Local Public Expenditures, 53 CESIFO Econ. STUD. 495, 503 (2007); George R. Zodrow, Intrajurisdictional Capitalization and the Incidence of the Property Tax, 45 REG. Sci. & URB. Econ. 57, 57 (2014).

tax. 131 Because on some level what it means to be rich is to own capital, the property tax is a progressive tax. 132 However, because the property tax encourages people to shift their investments around, both between local jurisdictions and between property and non-property assets, it is an inefficient tax—it results in people making investments they otherwise would not have. Further, fear of discouraging investment may make local jurisdictions keep taxes inefficiently low, forgoing valuable investments in public services. 133

This has been heavily contested by the proponents of the "benefits tax" or Tieboutian view. 134 Charles Tiebout famously argued that residents of a metropolitan area "sort" themselves among local governments based on their preferences about local services, leading to an efficient allocation of those services. 135 In Tiebout's model, local governments were funded with a head tax, a common charge paid by all residents. 136 But, as Bruce Hamilton argued, if local services are funded with a property tax instead of a head tax, there is likely no equilibrium in the Tiebout model.¹³⁷ If a given local jurisdiction begins providing high quality services to residents on an equal basis, owners of property in that jurisdiction have a big incentive to subdivide their lots and build denser housing. Each new resident in the newly subdivided property will have lower property values per capita (a smaller house on a smaller plot of land) than the original owner but will have the legal right to consume local governmental services in the same manner as all other residents. The result would be population inflows into any jurisdiction with good services, thus diminishing the per capita tax base that supports those services.

Hamilton's answer to this was that jurisdictions use zoning and other legal land use tools to fix in place the average value of property, or at least to limit increases in the amount of housing with lower-than-average property

Notably, the tax on capital is based on the average property tax rate across jurisdictions. *See* Mieszkowski, *supra* note 130, at 94 (noting that "the system of property taxes imposed by local governments decreases the overall return to capital by the average rate of tax in the nation as a whole").

¹³² Property taxation increases based on how much property wealth a person has, not how much income they earn. The progressivity of property tax under the capital tax view is a bit different from the progressivity of other taxes, given that progressivity in taxation is usually measured by how the tax varies with income, not wealth. Even under the capital tax view, however, there are regressive elements to the property tax in specific places. *See, e.g., id.* at 94–95. In areas with high property taxes, for example, there is less housing construction and business investment, meaning that the price of housing and goods goes up while wages and land prices go down. This is bad for lower-income people in those jurisdictions. But viewed globally, this effect is offset by gains in the areas where investment flows instead, which see new construction and new jobs, therefore benefiting lower-income people. *Id.*

¹³³ See George R. Zodrow & Peter Mieszkowski, Pigou, Tiebout, Property Taxation, and the Underprovision of Local Public Goods, 19 J. URB. ECON. 356, 357 (1986) (discussing literature about distorting impact of property tax on provision of public goods).

 ¹³⁴ See generally Fischel, supra note 119.
¹³⁵ See Charles M. Tiebout, A Pure Theory of Local Expenditures, 64 J. Pol. Econ. 416, 418 (1958) (discussing consumer-voter phenomenon).

 $^{^{137}}$ See Hamilton, supra note 36, at 205–06 (discussing weaknesses with Tiebout model).

values.¹³⁸ If a jurisdiction only allowed one kind of housing—all identical houses equally far from transportation nodes—then the value of each lot would be the same, or close. In that instance, property taxes would be a great deal like the head tax in Tiebout's model. However, real jurisdictions do not look like that. Even the most homogenous suburbs have houses and lots that are at least a little different from one another. In a later paper, Hamilton relaxed this assumption, arguing that his model still worked in the presence of diverse types of housing so long as zoning and land use rules limited the ability of people to change the use of their land to build less expensive housing.¹³⁹

Thus, under the "benefits tax" view, if zoning and other land use regulations are strict enough, the property tax is like a head tax.¹⁴⁰ In this view, the property tax is just the price of services, as Bill Fischel and Wallace Oates have claimed.¹⁴¹ It is efficient in much the same way that the existence of a busy store is efficient—local governments funded by property taxes provide mobile residents with options they can buy or not buy.

Further, even if there is a range of different types of property in a jurisdiction, there is no redistribution in the present day. 142 The reason is capitalization. If owners of smaller houses get more in services than they pay in taxes, that benefit gets capitalized into the value of these smaller houses. New buyers, therefore, do not receive a benefit.

Proponents of these two views have battled back and forth in the pages of law reviews and economics journals for decades. ¹⁴³ Proponents of the capital tax view argue that zoning is not as strict as proponents of the benefits tax view say it is. ¹⁴⁴ Further, they argue that the benefits tax view ignores the wider effects that property taxes have on capital. ¹⁴⁵ And, capital tax proponents note that capitalization happens in both models. ¹⁴⁶ In response, benefits tax scholars point to the extent of land use controls and the existence of capitalization as evidence that the local supply of housing is inelastic. ¹⁴⁷

¹³⁹ See Hamilton, supra note 37, at 748.

¹³⁸ See id.

¹⁴⁰ William A. Fischel, *Property Taxation and the Tiebout Model: Evidence for the Benefit View from Zoning and Voting*, 54 J. ECON. LIT. 171, 171–72 (1992) (arguing that land use restrictions are, in fact, strict enough such that the property tax is like a head tax).

¹⁴¹ See Fischel & Oates, supra note 129, at 415 ("[L]ocal property taxes are seen as simply the payment that households make for the bundle of local public services that they have chosen to consume.").

¹⁴² See Hamilton, *Intrajurisdictional*, supra note 36, at 743 (discussing second-round price changes).

¹⁴³ See supra note 129 and accompanying text.

¹⁴⁴ HELEN LADD, LINCOLN INST., LAND POL'Y, LOCAL GOV'T TAX AND LAND USE POL'Y'S IN THE UNITED STATES: UNDERSTANDING THE LINKS 33–34 (1998) (recounting views of those who argue that benefits tax scholars' assumptions about perfect zoning are "extreme" and "not consistent with the evidence").

¹⁴⁵ See Zodrow, supra note 32, at 145–52.

¹⁴⁶ Id.

¹⁴⁷ See Fischel, supra note 140; see generally William A. Fischel, Regulatory Takings: Law, Economics and Politics (1995).

Scholars on each side of this debate do not even agree on what would constitute evidence for either view.¹⁴⁸ Nonetheless, some have tried to figure out who is right.¹⁴⁹ But this literature—on both sides—largely assumes that the property tax is based on the actual value of property.¹⁵⁰ PTAR challenges this assumption.

Directionally, PTAR makes the property tax look more like a benefits tax. Without PTAR, the central challenge for the benefits tax view is that land use law does not entirely fix in place investment in property, even in restrictive jurisdictions. Indeed, nowhere does land use law stop people from renovating their houses.¹⁵¹ Similarly, zoning laws and other land use

¹⁴⁸ See Zodrow, supra note 32, at 139–40 (noting how hard it is to develop empirical evidence to separate the two models).

¹⁴⁹ One fascinating paper by Byron Lutz, for example, arrived at mixed conclusions in examining an exogenous decrease in property taxes in jurisdictions across New Hampshire. See generally Byron Lutz, Quasi-Experimental Evidence on the Connection between Property Taxes and Residential Capital Investment, 7 AM. ECON. J. ECON. Pol'y 300 (2015). Lutz found that this decrease in property taxes increased investment in rural and exurban areas (consistent with the capital tax view) but did not increase investment or housing supply in the areas of the state close to Boston that have more aggressive zoning and land use controls (but increased prices, consistent with the benefits tax view). See id. at 320-24. See also Enid Slack & Richard M. Bird, The Political Economy of Property Tax Reform (O.E.C.D., Working Papers on Fiscal Federalism No. 18, 2014) (reviewing the empirical evidence on the capital tax view, benefits tax view, and traditional view that property taxes are regressive because they fall on housing, noting "that there may be something in all of these views"); Harry Kitchen, Property Tax: A Situation Analysis and Overview, in A PRIMER ON PROPERTY TAX: ADMINISTRATION AND POLICY 1, 29 (William J. McCluskey, Gary C. Cornia & Lawrence C. Walters, eds., 2013) ("There is no clear cut answer to this question. Both views have their theoretical strengths and weaknesses and both have been tested empirically with varying results In all likelihood, [the property tax] is less regressive than it is said to be by the strongest proponents of the benefits tax view but not as progressive as it is said to be by many proponents of the capital tax view."); see generally Robert W. Wassmer, Property Taxation, Property Base, and Property Value: An Empirical Test of the "New View," 46 NAT. TAX J. 135 (1993) (finding empirical evidence to support the capital tax view).

benefits tax proponents that property taxes are efficient is only true from the perspective of new buyers in a community. But, otherwise, Zodrow contends, if property tax rates in a jurisdiction are increased and services are provided at the average level to all residents, there is a transfer from owners of more expensive properties to owners of less expensive properties. *See* Zodrow, *Intrajurisdictional Capitalization, supra* note 130, at 59 (arguing that the "benefit view is a long run result based on an analysis of the total prices for public goods—property taxes plus fiscal capitalization effects—faced by new purchasers of homes after home prices have adjusted to a property tax change. However, upon implementation of any change in property taxes, such capitalization effects significantly impact current landowners in a way that is not related to benefits received, with owners of large homes suffering capital losses and owners of small homes experiencing capital gains."). However, in jurisdictions with very aggressive PTAR, this is not the case or, rather, it is less true. A tax increase still burdens owners of expensive property more than owners of less expensive property, but the differential is far smaller than it would be if assessments were accurate.

¹⁵¹ Cf. LADD, supra note 144, at 34 (arguing that "no one would disagree that the property tax would distort decisions about minor expansions and repair that are beyond the

regulations do not require equal maintenance of property.¹⁵² And, although there are extensive zoning restrictions in many jurisdictions and across whole metropolitan areas, jurisdictions do vary in how much they restrict housing growth.¹⁵³

But, with PTAR, the difference in tax assessments between expensive and less expensive properties is smaller than the difference in market values. That is, PTAR makes property values more similar for tax purposes than they really are. When homeowners make investments in their properties (and others allow depreciation), it creates an increase in the differences in home values among residents. PTAR causes this divergence in home valuations to be smaller for tax purposes than the real change in market value.

Another way of saying this is that PTAR reduces the variation in tax assessments, making the actual tax payments required from property owners more similar. PTAR does not fully convert the property tax into a head tax among property owners—the effect would have to be much more extreme than it is in reality for that to be the case. But it makes the property tax *more like* a head tax among property owners than it would be if valuations were accurate. ¹⁵⁴ Thus, whatever one's previous position in the long "benefits tax"

purview of the zoning authority but not the tax assessor"). There is an exception. Beverly Hills was recently barred from giving permits for any new construction because of its failure to approve a housing plan that complies with state law. Liam Dillon, *In Beverly Hills, No Kitchen Remodels or Pool Grottoes as Judge Orders Building Moratorium over Lack of Affordable Housing*, L.A. TIMES, Jan. 17, 2024.

housing is governed by an HOA. See Leah Binkovitz, HOAs Are Spreading. But at What Cost to Cities?, RICE UNIV. KINDER INST. FOR URBAN RSCH. (June 28, 2019), https://kinder.rice.edu/urbanedge/hoas-are-spreading-what-cost-cities [https://perma.cc/V5C3-MUXH] (discussing growth of HOAs). And, jurisdictions increasingly require new subdivisions to create HOAs that provide some local public goods. See id.; see generally EVAN MCKENZIE, PRIVATOPIA: HOMEOWNER ASSOCIATIONS AND THE RISE OF RESIDENTIAL PRIVATE GOVERNMENT (1994); EVAN MCKENZIE, BEYOND PRIVATOPIA: RETHINKING RESIDENTIAL PRIVATE GOVERNMENT (2011). These HOAs do frequently police disinvestment, as anyone who has forgotten to mow their lawn and gotten a notice from the HOA can tell you.

¹⁵³ That said, some jurisdictions really go up to, and beyond, the requirements of the benefits tax model. For instance, Bellerose, NY issued zero new housing permits between 2010 and 2018. NOAH KAZIS, N.Y.U. FURMAN CTR., ENDING EXCLUSIONARY ZONING IN NEW YORK CITY'S SUBURBS 16 (2020), https://furmancenter.org/files/Ending_Exclusionary_Zoning_in_New_York_Citys_Suburbs.pdf [https://perma.cc/CMF8-267Y]. Notably, local governments such as Bellerose in the New York City suburbs, which are some of the slowest growing suburban areas because of extreme land use controls, rely very heavily on property taxes. *See id.* at 18.

¹⁵⁴ Jurisdictions can go even further by linking amenities to services to some degree. For instance, if more resources are devoted to schools in richer areas, either formally or informally, then a jurisdiction is effectively creating PTAR through services. There are, of course, limits on the extent that local governments can specifically aim services to certain parts of town. *See* Lynn Baker, Clayton Gillette & David Schleicher, Local Government Law, Cases and Materials, 427–29 (6th ed. 2021) (surveying cases discussing requirements to provide services on an equal basis inside a given local government). To the extent that less well-off residents are paying more in taxes and receiving

versus "capital tax" debate, the new evidence of PTAR should push one somewhat towards the benefits tax view.

One should be clear-eyed about the stakes. If PTAR makes the benefits tax view more accurate, what that means is that it is easier for people to "buy," and remain confident they will receive, a particular package of government services when they buy a house in a particular jurisdiction. This has upsides in that it should, *ceteris paribus*, lead to more competition between local governments and better "sorting," or fit, in terms of preferences for services. That is, it makes "Tiebout sorting" more effective.¹⁵⁵

Also, PTAR could lead to better outcomes than what "benefits tax" scholars would expect, as it might forestall some truly destructive policies that localities enact to prevent redistribution of property tax revenue. In the "benefits tax" literature, the central assumption is that residents demand that local governments use land use regulations to bar new housing construction in an effort to prevent new residents from moving in and demanding services despite paying less per capita in property taxes. ¹⁵⁶ PTAR limits how much owners of expensive properties have to redistribute without barring new construction. To the extent this calms the nerves of incumbent residents who do not want to redistribute, giving them reason to permit new housing construction, PTAR would provide real benefits, including allowing greater integration by class and alleviating housing shortages. (It may not, though, as there are many reasons jurisdictions do not allow new housing construction.)

The corollary of this, however, is that PTAR also leads to less intralocal redistribution because taxes between people of different levels of wealth inside a given jurisdiction are more similar. And, better sorting can come at the cost of agglomerative efficiency, or the economic benefits of people choosing where to live. If people have to move to get their preferred package of government services, they almost necessarily move away from their preferred set of neighbors. Put another way, we all lose out on the potential economic and social benefits that would arise from letting people choose their neighbors without it impacting which government services they receive. However, these lost local agglomeration economies may be balanced

less in services than they would if assessment systems were accurate and resources equally distributed, local government becomes more and more like a paid-for service and less like a "government."

¹⁵⁵ See Fischel, Homevoters, supra note 119, at 159–61; Oates, supra note 119, at 968; Oates & Fischel, supra note 129, at 420–22.

¹⁵⁶ See supra notes 137–141.

¹⁵⁷ The extent to which intra-local redistribution correlates with redistribution more broadly depends a lot on the type of jurisdiction. Intra-local redistribution, by definition, only encourages transfers between people who share a local governmental boundary. In a rich suburb, PTAR therefore merely means fewer transfers from the super-wealthy to the only very-wealthy. But in a large jurisdiction with substantial economic diversity, like a big city or county, PTAR means owners of expensive houses are paying less and owners of cheap houses are paying more. For more on PTAR and redistribution, see *supra* Section III(a).

¹⁵⁸ See David Schleicher, *The City as a Law and Economic Subject*, 2010 U. ILL. L. REV. 1507 (providing economic framework for analyzing local government laws).

by increased regional agglomeration economies if PTAR actually increases housing supply.

C. Property Tax Assessment Regressivity and Georgism

Before the benefits tax versus the capital tax debate, the best understanding of the property tax was that it included two taxes, one good and one bad. Property tax assessments are based on the value of land and the value of improvements, or investments that are attached to land. According to this view, the tax on land is very, very good, and the tax on improvements is very, very bad. In theory, PTAR could be associated with a property tax system that taxes land more than it does improvements. But the best read of the admittedly limited evidence is that, instead, PTAR makes the tax system rely less on land.

That taxes on land are efficient is rooted in Henry George's famous "single tax" argument. He argued that most taxes were taxes on productive activity, or things we would like people to do, like earning income or buying and selling goods. In contrast, owning land is not productive—landlords do not have to do much to earn rents. And, the amount of land is fixed (or is close enough to fixed) such that a tax on land will not reduce the amount of land. As a result, taxes on land will not have incentive effects by discouraging productive activity. Instead, they will simply be directly capitalized into the value of land. That is, a tax on land will make landowners poorer but will not otherwise make the economy less efficient. While there have been some criticisms of this view, economists today generally view land value taxes as a very efficient and progressive means of raising revenue. 161

In this view, however, taxes on improvements are the exact opposite. Building houses is good. But property taxes go up when someone builds a house because it increases the value of the property on which the house sits. This discourages people from building houses. Further, it is well-established empirically that the less rich one is, the greater the share of income one

¹⁵⁹ See generally HENRY GEORGE, PROGRESS AND POVERTY (1879).

¹⁶⁰ How much land there is in a city is obviously not entirely fixed. For example, cities can build new land through landfill, as the examples of Battery Park City in New York City and Back Bay in Boston reveal. *See Battery Park City*, The Cultural Landscape Foundation, https://www.tclf.org/landscapes/battery-park-city [https://perma.cc/3EZU-WLMH]; William A. Newman & Wilfred E. Holton, Boston's Back Bay: The Story of America's Greatest Nineteenth-Century Landfill Project (2006).

¹⁶¹ See generally, e.g., Mason Gaffney, The Role of Ground Rent in Urban Decay and Revival: How to Revitalize a Failing City, 60 AMER. J. ECON & Soc. 57, (2001); Joseph Stiglitz, The Theory of Local Public Goods, in The Economics of Public Services 274 (Robert P. Inman & Martin S. Feldstein eds., 1977); Warren J. Samuels, Why the Georgist Movement Has Not Succeeded: A Speculative Memorandum, 62 AMER. J. ECON. & Soc. 583, (2003); DICK NETZER, THE ECONOMICS OF THE PROPERTY TAX (1966).

devotes to shelter. 162 As a result, taxing improvements is both inefficient and regressive.

In theory, Georgism could lead to PTAR. For example, if property tax assessors simply paid little or no attention to what was built on a given piece of land, PTAR would follow even though the tax system would effectively become a tax on land rather than a tax on land and improvements. Indeed, if someone invests in their property—adding a garage or a tennis court or a new bathroom—the property becomes more valuable. If tax assessors simply ignored this fact, and assessed the property as if nothing had happened, the result would be PTAR. The property is worth more but is taxed as if it is not. This form of PTAR would not create any disincentive to invest in improving property. There may be something to this view given evidence that expensive properties are harder to assess, due to the lack of comparable sales 163 and the difficulty of capturing the extent of investment in a property. 164

The logic works in reverse as well. Letting a property depreciate by not maintaining it makes it less valuable. Tons of shows on HGTV are about whether a house has depreciated to the point that it needs a "gut reno," or a complete overhaul of the interior of a house, to be marketable. If assessors pay no attention to the state of disrepair of a house, PTAR again follows. A property that is not maintained is worth less, but is taxed as if it is worth more. What PTAR means in this context is that the tax system refuses to give a tax cut to a property that is left to fall apart.

Both of these surely happen to some extent. Assessors possess and collect information about the quality of houses: they generally know the size of a house, the number of bedrooms and bathrooms, its age, and sometimes more. Assessors are also sometimes required to do physical inspections. 167

¹⁶² See, e.g., NETZER, supra note 161, at 57 (noting that "expenditures on housing exhibit a relatively low order of income elasticity in the sense that, at any one time, richer families spend less proportionately for housing than poorer families").

¹⁶³ See, e.g., McMillen & Weber, supra note 12, at 668 (finding that accounting for the frequency of sales of property, including the thinner market for higher value homes, provides a partial explanation for regressivity of property tax assessments). Cf. Amornsiripanitch, supra note 11, at 23–26 (finding that empirical evidence strongly suggests that valuation errors, such as infrequent reassessment, play a non-trivial role in producing regressive assessments).

¹⁶⁴ See, e.g., Berry, supra note 9, at 22 (finding that a "great deal of variation in sales prices that is not reflected in assessments" is "likely due to property features that are observable to buyers and sellers but not to the assessor, and to imperfections in assessment models").

¹⁶⁵ See Amanda Mull, *The HGTV-ification of America*, THE ATLANTIC (Aug. 19, 2022), https://www.theatlantic.com/technology/archive/2022/08/hgtv-flipping-houses-cheap-redesign/671187/ [https://perma.cc/J7EZ-RM3H] (discussing phenomenon of reality TV shows about home renovation).

¹⁶⁶ See Berry, supra note 9, at 6 (discussing limited information available to assessors); ANALYZE BOS., supra note 2.

¹⁶⁷ See, e.g., Sterk & Engler, supra note 7, at 1044 (describing aspects of Connecticut's property tax assessment statute, which "requires physical inspection every ten years").

But it is unlikely that assessors capture all the benefits of investment or the costs of depreciation. And, this may be getting worse as assessors turn to Automated Valuation Methods, statistical models that are increasingly replacing in-person valuation methods. 169

But the best evidence from the literature is that valuation bias stems from mistakes in assessing the value of land, not the value of improvements. Indeed, Avenancio-León and Howard argue that racial bias in assessments is largely driven by the fact that "[p]roperty assessments are less sensitive to neighborhood attributes than market prices are." By controlling for a battery of known facts about property attributes, they ultimately find that location matters more than assessors seem to think, both between neighborhoods and inside them. Similarly, Amornsiripanitch argues that a failure to take stock of "neighborhood characteristics" accounts for a substantial amount of PTAR. 172

Why would this be the case? Assessors do, in fact, consider location. Traditionally, they have done so by creating neighborhood zones to facilitate

Courts have warned, however, that demanding entry to homes for tax assessment purposes can violate the Fourth Amendment. See Widgren v. Maple Grove Twnshp., 429 F.3d 575, 577 (6th Cir. 2005) (finding that external inspection for tax purposes does not violate Fourth Amendment, but remarking that "[t]ax appraisers would be well advised to obtain consent or a warrant as a matter of course before breaching the curtilage because, in many instances, such an intrusion may be a Fourth Amendment search"); King v. Handorf, 821 F.3d 650, 652, 655 (5th Cir. 2016) (holding that assessors who were invited in by homeowner and declined, but then looked through a door the assessor may have opened surreptitiously, did not violate Fourth Amendment).

¹⁶⁸ Property owners can challenge assessments using evidence about depreciation. *See, e.g.*, Wash. State Dep't of Revenue, Homeowner's Guide to Property Tax 2 (2023), https://dor.wa.gov/sites/default/files/2022-02/HomeOwn.pdf [https://perma.cc/6FHP-NGLC] ("The appeal form must include specific reasons why you believe the assessor's valuation is incorrect. Examples may include . . . excessive deterioration of your property").

¹⁶⁹ See Michael Neal, Sarah Strochak, Linna Zhu, and Caitlin Young, supra note 13, at 1–2 (noting the raised profile of Automated Valuation Methods after the Great Recession, but warning that "[h]istorically, AVMs have not been able to take a property's condition into account when determining a home's value"); Where's the Real Value in Automated Valuation Models (AVMs)?, REALTORS PROPERTY RESOURCES, https://blog.narrpr.com/tips/wheres-real-value-automated-valuation-models-avms/ [https://perma.cc/N5C5-V89T] (last visited Nov. 25, 2023) (noting that "without a physical inspection, AVMs do not factor in a property's condition and thereby, rely on 'average condition' scenarios when determining value").

¹⁷⁰ Avenancio-León & Howard, *supra* note 11, at 1383. Notably, the over-assessment of minority areas is greater than the over-assessment of poorer, but not minority, areas. *See id.* at 1383–85.

¹⁷¹ *Id.* at 1392–93.

¹⁷² Amornsiripanitch, *supra* note 11, at 4. To be sure, his methods do not allow him to differentiate between the improvement characteristics and land characteristics that drive PTAR. Amornsiripanitch instead broadly describes features that are "easily observable" and "often included in tax assessors' regression models" as "housing characteristics," and less easy to quantify features as "neighborhood characteristics." *Id.*

comparative sales valuation.¹⁷³ And although more modern techniques often include out-of-zone sales as part of the statistical models used for assessment, they still generally use neighborhood as a factor in the assessment.¹⁷⁴

But the locational variables that assessors rely on can be too crude to capture distinctions in access to amenities and social meaning that determine a great deal about property values. Indeed, the areas assessors use to control for location are often just too big to capture relevant differences.¹⁷⁵ Neighborhood zones necessarily need to be broad in order to include enough comparable property sales. But while zones that are too small do not contain enough sales, zones that are too big fail to capture more fine-grained differences between neighborhoods and blocks.

Measuring access to amenities can be difficult. Sometimes the value of land turns on formal boundaries which can be relatively easily accounted for, like catchment areas for different local public schools. ¹⁷⁶ But other times, access to amenities is harder to see, like which properties are up on a ridge and thus have better views or block-by-block variations in crime rates. ¹⁷⁷ Assessors try to take account of particularly important forms of amenities, like access to a shoreline in Hawaii. ¹⁷⁸ But lots of locational facts about access to amenities are likely either too small or too subtle for their models given the information they have.

Even more difficult is trying to capture social meaning. Often what determines a property's value is who else lives nearby. Sometimes this is because certain neighbors are attractive, such as particularly good coffee shops or high-status residents. But sometimes this is because certain neighbors make a property less valuable. This is particularly relevant in contexts where there are racially-animated preferences (and expectations of those tastes in others). Avenancio-León and Howard argue that this drives a substantial amount of the over-assessment of homes owned by minorities, given that over-assessment is increasing in the minority population of a

¹⁷³ Chris Berry, *Reassessing the Property Tax* 6 (U. Chi. Harris Sch. Pub. Pol'y, Working Paper, 2021) ("Of particular note, assessors must appropriately capture local variation in housing markets, which is often done by controlling for neighborhood attributes or including a set neighborhood of indicator variables.").

¹⁷⁴ See Avenancio-León & Howard, supra note 11, at 1389. Time trends, or efforts to figure out how to generate information from sales that happened in different quarters or years during a reassessment cycle, are usually adjusted on a jurisdiction-wide basis. See Berry, supra note 9, at 6.

¹⁷⁵ See Avenancio-León & Howard, supra note 11, at 1416.

¹⁷⁶ See Bartley R. Danielsen, Joshua C. Fairbanks & Jing Zhao, School Choice Programs: The Impacts on Housing Values, 23 J. REAL EST. LIT. 207, 208 (2015) (arguing assignment to schools affects property values, but school choice programs attenuate this effect).

¹⁷⁷ See, e.g., Philip Bulman, In Brief: Block by Block: Zeroing in on Crime Trends, NAT'L INST. OF JUST. (Mar. 2, 2011), https://nij.ojp.gov/topics/articles/brief-block-block-zeroing-crime-trends [https://perma.cc/B2JK-J36C].

¹⁷⁸ City & Cnty. of Honolulu v. Steiner, 834 P.2d 1302, 1307 (Haw. 1992).

¹⁷⁹ *Cf.* Thomas C. Schelling, *Dynamic Models of Segregation*, 1 J. MATHEMATICAL SOCIO. 143 (1971); THOMAS C. SCHELLING, MICROMOTIVES AND MACROBEHAVIOR (1978).

census tract.¹⁸⁰ Notably, these gradations can be extremely fine. Single blocks or half blocks can be the dividing line between groups, both racial and economic.¹⁸¹ And these facts can be hard for assessors to see.

To the extent that PTAR is driven by a failure to see distinctions in the value of location, it makes the property tax less Georgist. For example, the owner of a house next to a recently opened good coffee shop has not done anything but nonetheless sees a property value increase. If assessors are not capturing these gains, the property tax is becoming both more regressive and less Georgist.

D. Property Tax Assessment Regressivity, and the Property Tax as a Form of Home Value Insurance

Most Americans with any amount of wealth have most of their assets tied up in a home. ¹⁸³ This investment is neither diversified nor insured against most risks. In theory, *ad valorem* property taxes can provide a limited form of insurance. But PTAR makes that insurance less effective. ¹⁸⁴

¹⁸⁰ Avenancio-León & Howard, *supra* note 11, at 1416.

¹⁸¹ See, e.g., NICHOLAS DAWIDOFF, THE OTHER SIDE OF PROSPECT (2022) (discussing the economic and social distinctions marked by the two sides of Prospect Street in New Haven, CT).

¹⁸² This may even be true for Starbucks, although separating cause and effect can be challenging. *See* Edward L. Glaeser, Hyunjin Kim & Michael Luca, *Nowcasting Gentrification: Using Yelp Data to Quantify Neighborhood Change*, 108 AEA PAPERS AND PROCEEDINGS 77, 80 (2018) (finding that the "entry of each additional Starbucks into an area is associated with a 0.5% increase in local housing prices"). And, certain grocery stores seem to have a similar effect, although separating cause and effect is again difficult. *See, e.g.*, Jamie Anderson, *Whole Foods & Trader Joe's Provide a Healthy Boost to Nearby Homes*, ZILLOW RSCH., (June 16, 2017), https://www.zillow.com/research/whole-foods-trader-joes-home-value-11696// [https://perma.cc/645Z-9434].

¹⁸³ Paul Ausick, *How Much of Americans' Personal Wealth is Tied Up in Their Home?*, 24/7 WALL ST. (Oct. 4, 2018), https://247wallst.com/economy/2018/10/04/how-much-of-americans-personal-wealth-is-tied-up-in-their-home [https://perma.cc/2U6G-AVA2] (reporting 2016 Federal Reserve survey which found that "[t]he median U.S. household had 68% of its wealth stored snugly in its primary residence").

This Article does not address the interaction between property values and macroeconomics. From the perspective of local governments, the property tax is considered a good tax during recessions because property tax revenue does not usually fall as quickly as income or sales tax revenue. See, e.g., Matthew D. McCubbins & Ellen Moule, Making Mountains of Debt Out of Molehills: The Pro-Cyclical Implications of Tax and Expenditure Limitations, 63 NAT'L TAX J. 603, 615 (2010); JOAN YOUNGMAN, LINCOLN INST. LAND POL'Y, A GOOD TAX: LEGAL AND POLICY ISSUES FOR THE PROPERTY TAX IN THE UNITED STATES 222 (2016). The reason is two-fold. First, property values are based on the future returns of holding property, something that will outlive the current economic cycle. Second, valuations themselves are backwards-looking, using earlier sales to inform values today. And, of course, local governments can, and often do, raise property tax rates to offset declines in home values. See, e.g., Byron Lutz, Raven Molloy & Hui Shan, The Housing Crisis and State and Local Government Tax Revenue: Five Channels, 41 REG'L. SCI. & URB. ECON. 306, 306 (2011) (suggesting that local governments do raise taxes when property values decline). However, the downside of this stability is that when incomes fall during recessions,

Governments at all levels provide incentives for people to buy homes, through both the tax code and policies like mortgage insurance and creating a secondary market for mortgages.¹⁸⁵ This is justified on a number of grounds. For instance, it is regularly argued that homeowners invest more in their communities and properties, providing positive externalities for others that ought to be subsidized.¹⁸⁶ Another key argument, however, is that encouraging homeownership is a good way to encourage savings.¹⁸⁷ In this way, the home serves not only as shelter but also as a store of value.

But homes are in many ways deeply inappropriate vehicles for savings.¹⁸⁸ Because they are so expensive, homeowners often have little diversification in assets they hold.¹⁸⁹ Most homeowners put a large portion of their money into a single asset, and thus face a huge amount of risk that their sole investment will lose value.¹⁹⁰ Further, the value of that asset is correlated with the owner's income.¹⁹¹ Indeed, one major reason that property values in an area go down is because the local economy is weak.¹⁹² If, say, a big local employer leaves town, property values will go down at the same time that the owners of those properties are likely to see reduced income,

property taxes do not. See generally Andrew Hayashi, Countercyclical Property Taxes, 40 VA. TAX REV. 1, 1 (2020). This harms property owners, creating economic headwinds (relative to incomes, property taxes are going up, exactly what Keynesianism suggests governments should not do) and sometimes forcing foreclosures. Id. But the form of "insurance" discussed in this section does not cover this type of macroeconomic risk.

Tax Pol'y Ctr., What Are the Tax Benefits of Homeownership? (2020), https://taxpolicycenter.org/briefing-book/what-are-tax-benefits-homeownership [https://perma.cc/NSR2-HFX9]; MARK P. KEIGHTLEY, CONG. RSCH. SERV., WHY SUBSIDIZE HOMEOWNERSHIP? A REVIEW OF THE RATIONALES 1 (2019), https://crsreports.congress.gov/product/pdf/IF/IF11305 [perma.cc/CR6W-HBAE].

¹⁸⁶ See, e.g., A. Mechele Dickerson, The Myth of Home Ownership and Why Home Ownership is Not Always a Good Thing, 84 IND. L. J. 189, 191 (2009).

¹⁸⁷ *Id*. at 190–91.

¹⁸⁸ See, e.g., id. at 217–18 (describing the many ways in which home ownership failed to function as an effective forced-savings device in the lead up to the 2008 housing crisis); see generally ROBERT J. SHILLER, MACRO MARKETS: CREATING INSTITUTIONS FOR MANAGING SOCIETY'S LARGEST ECONOMIC RISKS (1993).

¹⁸⁹ See Fischel, supra note 119, at 162 (noting that "homeowners . . . cannot diversify their assets" because "[m]ost homeowners do not own other assets of any consequence") (citing Gary V. Engelhardt & Christopher J. Mayer, Intergenerational Transfers, Borrowing Constraints, and Saving Behavior: Evidence from the Housing Market, 44 J. URB. ECON. 135, 136 (1998)). See also Fischel, supra note 119, at 162 (arguing that homeowners "cannot diversify location risk by placing their home in several different jurisdictions").

¹⁹⁰ See supra note 183 and accompanying text.

¹⁹¹ See, e.g., Karl E. Case & John M. Quigley, How Housing Booms Unwind: Income Effects, Wealth Effects, and Feedbacks Through Financial Markets, 8 Eur. J. Hous. Pol'Y 161, 162 (2008) (finding that housing market declines cause a "decline in aggregate expenditure and ultimately a reduction in income and employment").

¹⁹² See, e.g., Edward L. Glaeser & Giacomo A. M. Ponzetto, *Did the Death of Distance Hurt Detroit and Help New York?*, in AGGLOMERATION ECONOMICS 303, 303-05 (2010) ("When the costs of distance fall, manufacturing firms leave the city, which causes a decline in urban income and property values."). *Cf.* Schleicher, *supra* note 158, at 1513 (highlighting the low rents in Detroit caused by an excessively large housing stock, itself owed to negative economic shocks in the city since its peak in 1950).

either because they were laid off or lost sales due to decreased economic activity in the area. And, worse still, these shortcomings are compounded because almost all buyers go deeply into debt to buy their homes.¹⁹³ Borrowing a lot of money and then putting all of it, plus the entirety of one's savings, into a single asset, the value of which correlates with one's income, is about as far from optimal portfolio construction as one can get.

Given the risks entailed in storing so much of one's wealth in a single asset, homeowners buy insurance against certain physical risks—fire, flood, and so on.¹⁹⁴ But these types of insurance do not protect homeowners against risks like a big employer leaving town or someone putting a smelly factory nearby.¹⁹⁵ Nor do they protect homeowners against amenities being built elsewhere that shift demand, such as a new light rail line going to a different community or cool restaurants popping up on the other side of town. That is, this limited insurance does not protect homeowners against the possibility that the market for their home will go down.

Further, the absence of insurance has been linked to political behavior. William Fischel has argued that NIMBYism (Not In My Backyard), or opposition to housing construction near people's homes, is driven in part by concerns that nearby new development might increase the variance in home prices. ¹⁹⁶ Undiversified homeowners use politics, Fischel argues, to reduce that variance. Further, communities have tried to create home value insurance to calm the nerves of homeowners during periods of racial change. ¹⁹⁷ The idea is that homeowners might be concerned that racial change—to avoid euphemism, the arrival of new black residents in majority white areas—will reduce the value of their homes, causing residents to oppose integration.

Scholars, investors, and policymakers have been trying to create a comprehensive form of home value insurance for years. ¹⁹⁸ The most famous of these scholars is Nobel-Prize-winning economist Robert Shiller, who discussed the benefits of home equity insurance extensively and influentially in his scholarly work with Karl Case and Allan Weiss. ¹⁹⁹ Case, Shiller, and Weiss went on to create the Case-Shiller Home Price Indices, national and regional measures of housing values, as well as a variety of financial products tied to these indices to provide insurance. ²⁰⁰ While the Case-Shiller Index is

¹⁹³ See supra note 122 and accompanying text.

¹⁹⁴ See Robert J. Shiller, The New Financial Order: Risk in the 21st Century 118-36 (2003).

¹⁹⁵ Cf. Fischel, supra note 119, at 162 ("[Homeowners] can insure the physical capital of their homes, but not its location value.").

¹⁹⁶ See FISCHEL, supra note 54, at 16.

¹⁹⁷ See Shiller and Weiss, supra note 45.

¹⁹⁸ See, e.g., FISCHEL, supra note 54, at 16; Matityahu Marcus & Michael K. Taussig, A Proposal for Government Insurance of Home Values Against Locational Risks, 46 LAND ECON. 404 (1970).

¹⁹⁹ See, e.g., Shiller and Weiss, *supra* note 45; SHILLER, *supra* note 195, at 118–36; Karl E. Case, Robert J. Shiller & Allan N. Weiss, *Index-Based Futures and Options Markets in Real Estate*, J. 1993 PORTFOLIO MGMT., 83, 86–89; SHILLER, *supra* note 188.

²⁰⁰ See Lee Anne Fennell, Homeownership 2.0, 102 Nw. U. L. Rev. 1047, 1048 (2008).

frequently discussed, and derivatives attached to it and other property value indexes are available, it did not succeed in creating a popular mechanism for individual homeowners to hedge the risk associated with having most of their wealth tied up in a single investment.²⁰¹

In theory, property taxes can serve as a limited form of property value insurance. If property values go down, property owners receive a minor form of compensation—a lower assessment and thus lower payments. In contrast, the owner does not get the full set of gains when property values increase—local governments get some of the benefit in increased revenues.

However, any discussion of the insurance value of a tax on investments must contend with the well-known argument by Evsey Domar and Richard Musgrave that an income tax with loss offsets does not reduce risk because investors, understanding that the tax reduces risk, simply take riskier bets. The same logic applies to wealth-based taxes, like the property tax. Maybe people, understanding that property taxes will reduce both upside and downside risk from their investment, buy bigger houses or put less money down, increasing their risk profile.

This surely happens to some extent, but it is unlikely to nullify the insurance effect of property taxes. In the Domar and Musgrave model, investors rebalance their portfolios after every tax change to keep their preferred risk profile.²⁰⁴ But, as Daniel Hemel notes:

Portfolio adjustment is more likely in some contexts than others. Sophisticated high-net-worth individuals are, perhaps, likely to rebalance their holdings of lower-risk fixed-income assets and higher-risk equities in response to tax changes. It is less likely, though, that a middle-income household whose wealth lies primarily in owner-occupied real estate will scale up from, say, one home to 1.2658 homes in response to [a tax change].²⁰⁵

The fact that houses are both investment and consumption goods make this type of rebalancing even less likely. A property tax cut would lead to less risk protection, and thus an incentive, in Domar-Musgrave terms, to reduce the risk profile of their investment. But owners cannot easily reduce the size of their investment (selling off a room?), nor is it clear that they would want to if they could. Homeowners also face cash constraints. Because investments in homes are such a large part of their individual portfolios, it is not certain that homeowners have the funds available to reduce the scope of their investment in other ways, such as by pre-paying part of their mortgage. ²⁰⁶

²⁰¹ See, e.g., Fabozzi, et al., supra note 45, at 132.

²⁰² See Domar & Musgrave, supra note 46, at 389–91.

²⁰³ See Hemel, supra note 47, at 763; Louis Kaplow, Taxation and Risk Taking: A General Equilibrium Perspective, 47 NAT'L TAX J. 789, 790 (1994).

²⁰⁴ See Domar & Musgrave, supra note 46, at 418–21.

²⁰⁵ Hemel, *supra* note 47, at 763.

²⁰⁶ See supra note 189–193 and accompanying text for a discussion of houses and portfolios.

Further, the shape of investments in housing—the amount down, the terms of a contract—are often largely determined by other tax rules, like the mortgage interest deduction, and regulatory rules, like the extent of FHA insurance and the policies of Fannie Mae and Freddie Mac.²⁰⁷ As a result, investors may not currently be at their preferred level of risk because doing so would mean losing out on numerous benefits provided by the government. Therefore, while the Domar-Musgrave effect must be taken into account, it is likely that the property tax still provides homeowners with some degree of home value insurance.²⁰⁸

However, the insurance benefit of property taxes only exists in large taxing jurisdictions. In a small town, most properties are likely to rise and fall in value together. If there's a shock—better or worse economic conditions, improved or diminished amenities—it will apply pretty similarly to all properties in the town. If all properties in a taxing jurisdiction lose value, then the owner of any given lot does not receive any tax benefit. Her property will be assessed at a lower value, but so will all other properties. The town will then lose tax revenue and face the choice of either raising tax rates or cutting spending (or both). If it raises taxes in order to keep spending on services constant, then property owners are not getting a tax cut—they are just paying a higher rate on property with a lower assessment. Conversely, cutting services also harms homeowners, as the services were presumably set in a way to make them happy in the first place. And decreased services, just like higher taxes, are capitalized into property prices.²⁰⁹

As a result, property taxes, even in theory, only provide insurance against price changes among properties within a specific local government. That is, they provide a limited form of insurance against the risk that one's home will decline in value relative to properties in other neighborhoods in the same city or school district. Where prices in a jurisdiction diverge, the property tax transfers some of the surplus from the winners to the losers by shifting the tax burden each group pays (while continuing to provide services on an equal basis).

²⁰⁷ See, e.g., Dickerson, supra note 186, at 193–96.

²⁰⁸ It should be noted that the literature is not certain that the existence of an insurance effect is normatively attractive for taxes in general. As Hemel writes, "no clear normative implication follows from the fact that portfolio adjustments will be costly or unlikely for some taxpayers. In some cases, a higher tax rate on the risky return will prevent taxpayers from achieving their desired level of risk exposure. In other cases, a higher tax rate on the risky return may provide taxpayers with an insurance policy that they desire but otherwise would not be able to purchase." Hemel, *supra* note 47, at 763. With regards to property taxes in particular, though, it is pretty clear that property value insurance is normatively attractive. The extent of investment in housing for most individuals is so far beyond what prudent diversification would suggest, and so clearly driven by federal and state policy encouraging homeownership and investment, that there is no reason to think that existing investments reflect optimal levels of risk exposure. Further, the existence of some degree of insurance may reduce harmful political opposition to development and socially harmful concerns about integration.

²⁰⁹ See FISCHEL, supra note 54, at 56 (remarking that "capitalization is everywhere").

To be sure, even this limited form of insurance is subject to other caveats depending on a specific jurisdiction's assessment regime. For example, if assessments do not happen frequently, the insurance benefit they provide is limited, perhaps only kicking in years after a property price decline.²¹⁰ Similarly, if policies stand in the way of assessment changes, then

²¹⁰ One counterargument should be noted. If prices go up and assessments track prices, housing price increases result in less cash in homeowners' pockets. PTAR might mitigate the negative cash effect that affects owners of property that is increasing in value. That is, PTAR (and not property tax in PTAR's absence) might be thought of as a form of insurance against property tax increases. This style of argument is familiar in property tax. Arguments for Proposition 13-style acquisition value assessments, for less radical limits on annual increases in property tax assessments, for "circuit breakers" that cap property tax liability for people with low incomes, and for exemptions for populations like the elderly all have a similar source. Andrew T. Hayashi, The Quiet Costs of Taxation: Cash Taxes and Noncash Bases, 71 TAX L. REV. 781, 782 (2018) (discussing why property tax limitations are premised on "concerns about imposing hardship on illiquid taxpayers"); John A. Miller, Rationalizing Injustice: The Supreme Court and the Property Tax, 22 HOFSTRA L. REV. 79, 112–16 (1987) (arguing that worries about ability to pay, so commonly invoked in debates over Proposition 13 and caps on annual increases, cannot justify them); Micah Lemons, Note: Circuit Breakers: Implementing a Property Tax Credit to Help Low-Income Households, 19 GEO. J. POVERTY LAW & POL'Y 111, 112–13 (2006) (discussing circuit breakers, exemptions, and tax caps as being aimed in part at addressing the fact that property taxes are based on wealth, not ability to pay); Katie Babes, *Property* Tax Relief for the Elderly: A Survey of the Nation, 6 MARO. BENEFITS & SOC. WELFARE L. R. 325, 328 (2005) (noting that justification for property tax relief for the elderly is that they are less likely to have cash on hand). These arguments, like the argument that PTAR is a form of insurance against tax increases, are premised on the idea that taxing wealth, rather than income, is unfair because holders of assets that increase in value do not necessarily have cash in their pockets and may have to borrow against the value of their assets or sell them to pay their taxes. Zachary Liscow and Edward Fox, The Psychology of Taxing Capital Income: Evidence from a Survey Experiment on the Realization Rule, 213 J. PUB. ECON. 1, 6 (2022) (survey data finds general distaste for taxation paper gains, including for property tax purposes). Property markets have a plethora of financial tools that allow people to borrow against increasing values, such as reverse mortgages and home equity loans. Hayashi, supra note 210, at 792 (arguing that the existence of such tools mitigates but does not remove the cost of wealth taxation on liquidity-strapped holders of appreciating property). In practice, there is substantial variation in how much homeowners consume out-of-home value increases. See generally Aditya Aladangady, Housing Wealth and Consumption: Evidence from Geographically Linked Microdata, 107 AMER. ECON. REV. 3415 (2017) (summarizing literature and then finding slightly less marginal propensity to consume than in previous literature); Atif Mian, Kamalesh Rao & Amir Sufi, Household Balance Sheets, Consumption, and the Economic Slump, 128 Q. J. Econ. 1687 (2013) (discussing variation in and effect of debt on marginal propensity of homeowners to consume based on increases and decreases in housing wealth); Iacoviello, supra note 44 (summarizing literature). PTAR makes the property tax into more of a head tax and less of property tax (at least directionally). As a result, it has the effect of reducing the effects of the property tax, which, as a wealth tax, is not sensitive to income or cash on hand. How much one is concerned about this turns very substantially on one's broader view of the property tax (and wealth taxes generally). Further, one of the central concerns that has animated the quest for home equity insurance—that the absence of insurance leads homeowners to use politics or social persuasion to block new development or racial integration—is clearly responsive to the story about PTAR and insurance told in the main text. Thanks to Ryan Bubb for pushing me to include this.

the insurance value is defeated. Many states and cities limit how quickly property assessments can increase, reducing the ability of local jurisdictions to capture the benefits of price appreciation.²¹¹ Where that is the case, property taxes do not provide insurance, as there is no surplus to be transferred from property owners whose relative home value has increased to those whose relative home value has declined.

In any event, PTAR reduces the insurance value of the property tax further. To see why, imagine that properties in a jurisdiction start off as being roughly equal in value to one another, but then diverge. Under an accurate property tax assessment system, those that gain on a relative basis would pay more in property tax and those that decline on a relative basis would pay less. But if the assessment system undervalues higher-value properties, and overvalues lower-value properties, then this does not happen. The relative losers do not get a tax cut, and the relative winners do not get a tax increase.

The same logic holds if prices were originally different from one another and then converge. In that case, the high-value property that falls in price does not get a tax cut, as it was already assessed at a lower rate. And the lower-value property that increases in price does not get a tax increase, as it was already assessed at a higher rate.

Thus, PTAR stands in the way of the property tax playing a role in providing something that the market has failed to—a form of property value insurance.

IV. THE CONDITIONAL CASE FOR FIXING PROPERTY TAX ASSESSMENT REGRESSIVITY

Can PTAR be fixed? Some sources of PTAR are simply choices governments make. Of the potential sources of PTAR, the easiest to fix—in a technical, not political sense—would therefore be the government policies that contribute to it, like Proposition 13 and assessment caps.

Other contributors to PTAR are also potentially fixable, but doing so would be expensive. For example, PTAR is worse where assessments are infrequent; jurisdictions that wanted to fix PTAR could simply hire more assessors and schedule more frequent reassessments. Similarly, the process of appealing assessments, another contributor to PTAR, and be reformed with additional investment, such as by providing the government with more resources to contest appeals or providing resources that make it easier for poorer homeowners to appeal.

PTAR is also a result of methods of assessment, driven in large part by the limited information that assessors have. Hiring more assessors and encouraging them to learn more about individual properties could make

²¹¹ See supra notes 14–15 and accompanying text.

²¹² See supra note 106 and accompanying text; Melnik & Cenedella, supra note 64, at 299 (calling for state governments to take over assessment and reassess properties every year).

²¹³ See supra notes 78–80 and accompanying text.

assessments more accurately reflect investments in property or depreciation. Hiring people who have, or can obtain, information about access to amenities and localized social meaning would be even more difficult but, in theory, is possible as well. It also appears that jurisdictions with elected, rather than appointed, tax assessors have more PTAR, as low-information elections are particularly responsive to the interests of rich property owners.²¹⁴

Given these varied contributors to regressivity, fixing PTAR would be expensive. It would also be politically difficult, as it would involve raising taxes on the most politically active part of the local electorate. But would it provide benefits?

The answer is "yes, but." That is, there would be gains from fixing PTAR, but some risks as well. Achieving both the full extent of the gains and mitigating the accompanying risks would require adopting other policies, like locating a greater extent of taxing authority in larger local governments—such as county governments—and adopting statewide reforms that limit local land use authority.

That there are any downsides to fixing PTAR may seem odd, as the basis for PTAR is a systematic and regressive mistake. PTAR occurs because assessors underrate how much expensive properties will eventually sell for and, conversely, overrate how much cheaper properties will sell for. This is an error, and a deeply unfair one. The effect is to treat property owners as if they are more similar in how much wealth they have than they are in reality.

In a way, you can think of PTAR as reducing the extent to which property taxes depend on property wealth. This makes them more closely resemble head taxes on property owners, where everyone pays the same amount no matter what their property costs. To be sure, PTAR doesn't turn the property tax into a head tax—it would have to be much more dramatic to do so—but it pushes the property tax in that direction. As a result, some of the upsides and downsides of fixing PTAR are just the upsides and downsides of relying on property taxes to fund local governments. But there are other benefits and drawbacks of doing so that may be less readily apparent.

To start, fixing PTAR would redistribute wealth quickly. Reassessing property accurately would not only reduce taxes on owners of cheaper property and increase them on owners of expensive property, but it would also have a direct wealth effect. Indeed, because property taxes are capitalized into property values, fixing PTAR would immediately transfer wealth from richer to less rich property owners. Further, this would be a form of redistribution that would be hard to argue against, as all it would involve is interpreting state and local law more accurately.

While the redistributive effect would be instantaneous, ending PTAR could also have a more gradual effect on behavior over time, at least to the extent to which PTAR is driven by house-specific variables. For example,

²¹⁴ See Michael W. Sances, *The Distributional Impact of Greater Responsiveness: Evidence from New York Towns*, 78 J. Pol. 105 (2016) (finding this effect in New York State).

fixing PTAR would reduce the incentive for people to invest in expensive properties by taxing a greater amount of the increase in value caused by those investments. It would also reduce the incentive to invest in cheaper properties. When PTAR is in effect, investing in cheaper properties can have a double benefit, in that doing so both increases the property's value and removes it from the class of cheaper properties that receive a de facto tax penalty under PTAR. But, by making the property tax back into more of a tax on the value of property, a PTAR fix actually would create some inefficiencies because an accurately-assessed property value tax falls partially on improvements.

However, the literature suggests that PTAR is driven more by failures to assess the value of land accurately. To the extent that this is true, ending PTAR would redistribute resources from owners of more valuable land to owners of less valuable land. Because the portion of the property tax that follows Georgist principles and is levied on land values is efficient, making the property tax more of a property tax along this dimension would increase efficiency as well as equity.²¹⁵

Fixing PTAR might also improve the efficiency of investment in property. Under the "capital tax" view, the property tax is inefficient because it influences where investment flows, discouraging investment in high-tax jurisdictions. PTAR effectively increases the number of different rates faced by investors by increasing the number of rates in a given jurisdiction. Thus, a world with PTAR operates like a world with a greater number of property tax rates, and thus creates greater bias in where investment goes. However, it does not increase or reduce the average tax burden, which is what determines the harm to capital owners.²¹⁶

Further, fixing PTAR would also allow property taxes to operate more like a form of property value insurance. With PTAR, the property tax does not reflect the full extent of increases or losses in property value, removing a substantial amount of the insurance effect. Insurance for property values would be an extremely valuable product, so allowing the property tax to achieve this, even partially, would be very attractive.²¹⁷

However, property tax insurance is only possible in large local governments. In small local governments, a decrease in values is likely felt by all, or most, properties in the jurisdiction. In such a situation, a decrease

²¹⁵ One possibility would therefore be for governments to try to fix the part of PTAR driven by misvaluation of land values, but not the part created by misvaluations of investments. This would make the property tax more Georgist. *See supra* notes 174–184. *See supra* note 172 and accompanying text.

²¹⁶ See supra note 131.

²¹⁷ Further, William Fischel argues that homeowners' NIMBY sentiments are largely driven by fear about the effects of new development on property values. *See* FISCHEL, *supra* note 54, at 3–18. More specifically, Fischel argues that owners are afraid of the large potential variation in the effect of new development on property values given the extent of investment in their own property. Fischel argues that the answer to NIMBY ism is property value insurance. To the extent that property taxes can provide even a little of the benefit of reducing risk, it might give at least some owners less of a reason to oppose new development.

in values will not cause a tax cut, as the taxing local government will lose a lot of revenue and therefore need to respond by either raising tax rates or cutting spending on local services. Thus, to get the benefit of fixing PTAR, states would also have to either create larger local governments (e.g., through easier annexation rules) or give more power to bigger governments like counties to both tax property and provide services.

Finally, fixing PTAR could lead to greater opposition to new development. Recall that in the "benefits tax" model of the property tax, local residents try to stop new, denser development in order to fix in place per capita property values. The motivation in doing so is to turn the property tax into something like a head tax. But, at least in theory, PTAR allows them to make the property tax into something more like a head tax without actually stopping new development. By pretending that property values are more similar than they actually are, PTAR allows local governments to approve denser new development without reducing per capita property values. That is, PTAR pushes the property tax in the direction of being a head tax, and therefore reduces the need to use land use policy to minimize diversity in actual property values.

As a result, if PTAR plays a role in allowing for more housing development, it may perversely be both efficient and progressive. It is extremely counterintuitive that a tool that makes property taxes into something more like a head tax could be in any way progressive. After all, property taxes are taxes on wealth, and wealth is definitionally something that the rich have more of than the poor. Moreover, head taxes are necessarily regressive; charging poor people and rich people the same dollar amount for something takes up a larger portion of a poor person's wealth.

But if local governmental reliance on property taxes creates political incentives to pass land use polices that reduce the production of dense or otherwise cheaper housing, then the losses to poor people might be larger than the benefits they receive from having a more progressive tax structure by eliminating PTAR.

Bruce Hamilton identified this possibility in 1976. He wrote:

Increasing the nominal progressivity of the property tax, while generating competitive economic forces for expansion of *LIH* [lowincome housing], also generates political forces for curbing the growth of *LIH*.... It should be emphasized that the fiscal incentive to restrict the supply of *LIH* extends beyond restriction to efficient levels. *Any* increment of *LIH*, regardless of whether it is justified on Pareto criteria, confers capital losses on current owners of developed property. This . . . raises the ironic possibility that the distribution of income might be more favorable to the poor if local governments were to replace local property taxes with simple head taxes, thus eliminating the fiscal incentive to restrict the supply of low income housing. ²¹⁸

²¹⁸ Hamilton, *Capitalization*, *supra* note 37, at 751–52.

Further, allowing more dense development in rich suburbs means greater integration by social class.²¹⁹ This could have all sorts of benefits for social mobility.²²⁰

Beyond the distributive effects, however, land use restrictions pushed by residents seeking to avoid redistribution can also have a huge impact on overall economic output. When Hamilton was writing, the idea that all jurisdictions would raise very substantial zoning barriers seemed fanciful. Big downtowns would always allow growth, the conventional wisdom held, and the exurban fringe seemed to be ever-growing.²²¹ The result was that no one worried about housing shortages at the region-wide level.²²²

But, by the 1990s and 2000s, this became a very real phenomenon. Housing prices in the highest-wage regions exploded, as housing restrictions limited the supply response to demand shocks.²²³ Regions like New York City, Boston, Washington, San Francisco, Silicon Valley, Los Angeles, and San Diego all developed region-wide housing shortages, a problem that later extended to many other regions as well.²²⁴ The lack of housing supply due to excessive local regulations has become a national crisis, which almost all economists and leading political figures in both political parties recognize as harming economic growth and equity.²²⁵

²¹⁹ Alex Baca, Patrick McAnaney & Jenny Schuetz, "Gentle" Density Can Save Our Neighborhoods, BROOKINGS INST. (Dec. 4, 2019),

https://www.brookings.edu/articles/gentle-density-can-save-our-neighborhoods/ [https://perma.cc/8BYR-CLR4] ("[D]iversifying the housing stock in exclusive neighborhoods creates better access to economic opportunity...")

²²⁰ See, e.g., KAHLENBERG, supra note 52, at 37–50 (discussing benefits of economic desegregation).

²²¹ See, e.g., David Schleicher, City Unplanning, 122 YALE L.J. 1670, 1693 (2013) (discussing the growth of Sunbelt cities).

²²² Id.

²²³ Id.

²²⁴ *Id*.

²²⁵ Schleicher, *supra* note 51, at 1323–33 (summarizing literature and broad political support). It should be noted that one of the leading papers on the economic costs of zoning regulation, Chang Tai-Hsieh & Enrico Moretti, *Housing Constraints and Spatial Misallocation*, 11 AM. ECON. J. 1 (2019), has been challenged for using a non-replicable and for having made statistical errors. Brian Greaney, *Housing Constraints and Spatial Misallocation: Comment*,

https://drive.google.com/file/d/1iNdQ2YBfUCbc2uH4p9wdnuoVGhJZLSqe/view [https://perma.cc/M3RQ-NLFZ]. One of the authors of the original paper has responded, and the debate is ongoing. See Bryan Caplan, Hsieh Replies to Greaney, BET ON IT (Nov. 16, 2023), https://betonit.substack.com/p/hsieh-replies-to-greaney [https://perma.cc/GCV5-ZA3G]. However, the broader idea of the paper—that land use regulations create substantial economic costs—is supported by many papers using many methodologies. See, e.g., Gilles Duranton & Diego Puga, Urban Growth and Its Aggregate Implications, 91 ECONOMETRICA 2219, 2255 (2023) (asserting that relaxing land use rules in seven large U.S. cities would lead to an "increase in aggregate output of 7.95% and an increase in aggregate consumption of 2.16%"); Kyle F. Herkenhoff, Lee E. Ohanian & Edward C. Prescott, Tarnishing the Golden and Empire States: Land-Use Restrictions and the U.S. Economic Slowdown, 93 J. MONETARY ECON. 89, 90 (2018) ("U.S. labor productivity would be 12.4% higher and

Fear of property tax redistribution certainly is not the only factor driving land use restrictions. Many forces have conspired to slow housing growth in our richest metropolitan areas—NIMBY preferences have many sources.²²⁶

But a desire not to redistribute property tax might be a factor. If removing PTAR makes local zoning worse, even on the margin, the cure could be worse than the disease, both in terms of distribution and in terms of economic output. One cannot make policy based on an assumption that local voters will simply behave in an enlightened way and become comfortable with local property tax redistribution when the history of the twentieth and twenty-first centuries suggests that this is not the case, even, and maybe particularly, in communities that are liberal with regards to national politics. 227

consumption would be 11.9% higher if all U.S. states moved halfway from their current landuse regulation levels to the current Texas level."); David Albouy & Gabriel Ehrlich, *Housing Productivity and the Social Cost of Land-Use Restrictions*, 107 J. URB. ECON. 101, 101 (2018) ("Observed land-use restrictions raise housing costs by 15 percentage points on average, reducing average welfare by 2.3% of income on net."); Devin Bunten, *Is the Rent Too High? Aggregate Implications of Local Land-Use Regulation* 1 (Fed. Rsrv. Bd., Working Paper No. 2017-064, 2017), https://www.federalreserve.gov/econres/feds/files/2017064pap.pdf [https://perma.cc/2RL2-RVRW] (finding that "[w]elfare and output would be 1.4% and 2.1% higher, respectively" under optimal planning as opposed to the current, restrictive land use regime). The size of the economic losses due to zoning is fairly debatable. If the Moretti and Hsieh paper does not withstand the critical scrutiny it is under, one of the larger estimates will no longer be credible. But, the effects on national output and welfare are very large in all of these papers, and the literature is quite large and robust.

²²⁶ For a discussion of the many sources of anti-development opinions, see, e.g., JESSICA TROUNSTINE, SEGREGATION BY DESIGN (2018) (pointing to desires to keep taxes and public services away from minority populations); RICHARD ROTHSTEIN, THE COLOR OF LAW (2017) (discussing the history of racism in housing development and lending); Robert C. Ellickson, Suburban Growth Controls: An Economic and Legal Analysis, 86 YALE L.J. 385, 400 (1977) (identifying efforts by homeowner cartels to protect housing values from competition); William A. Fischel, The Rise of the Homevoters: How the Growth Machine Was Subverted by OPEC and Earth Day, in EVIDENCE AND INNOVATION IN HOUSING LAW AND POLICY (Lee Anne Fennell & Benjamin J. Keys eds., 2017) (arguing that the new language of environmentalism and the desire to maintain housing value gains caused by inflation provided incentives and tools for NIMBYs to limit growth); Schleicher, supra note 221, at 1672-80 (discussing land use procedure); Roderick M. Hills, Jr. & David Schleicher, Planning an Affordable City, 101 IOWA L. REV. 91, 111-12 (2015) (citing the decline of local political parties); Matthew Yglesias, Answering Bill Maher's Concerns on Traffic and One Billion Americans, SLOW BORING (Aug. 3, 2022), https://www.slowboring.com/p/answering-bill-mahers-concerns-on [https://perma.cc/E43T-47P6] (approaching growth and traffic through a supply and demand lens).

²²⁷ See, e.g., Jason Sorens, *The Effects of Housing Supply Restrictions on Partisan Geography*, 66 Pol. Geography 44, 44 (2018) (finding that "[j]urisdictions with greater housing supply restriction gradually and subsequently become more Democratic"); RICHARD D. KAHLENBERG, EXCLUDED: HOW SNOB ZONING, NIMBYISM, AND CLASS BIAS BUILT THE WALLS WE DON'T SEE 101–07 (2023).

How might this downside be addressed? One option would be to reduce local authority over zoning before addressing PTAR. All around America, state legislatures have either passed, or are considering passing, laws that would reduce local discretion over zoning. This Article is not the place to summarize all of these efforts, which range from requiring jurisdictions to allow accessory dwelling units to caps on minimum lot size regulations to state-imposed housing targets. State laws to restrict local discretion over land use would be a wise policy in most states, as local governments—even with PTAR—continue to excessively restrict housing development. But if states and localities make substantial investments in order to fix PTAR, these preemptive state laws would become even more important.

V. CONCLUSION: WHAT DOES PTAR TELL US ABOUT LOCAL PROPERTY TAXES AND LOCAL GOVERNMENTS MORE BROADLY?

The central fact about property taxes in America is that they are *local*. States occasionally tax property in a variety of different ways, but the power to tax property largely falls to local governments. And, while there is variation in how local governments work—for example, how much they rely on state and federal funds, whether they have other powers to tax, and the extent to which they rely on fees and special assessments—the property tax is far and away the most important tool that local governments have for raising revenue themselves.²²⁹

The local nature of property taxes is often justified by the fact that land does not move.²³⁰ Because local governments are often quite small, there is a substantial worry that taxing income or sales at the local level will lead to tax avoidance, with people merely moving a short distance to the next jurisdiction to avoid income taxes or driving to the next town to avoid sales taxes.²³¹ In contrast, both land and improvements stay put, thus making them useful targets for taxation by local governments. Further, when local

²²⁸ See, e.g., Christopher S. Elmendorf, Beyond the Double Veto: Housing Plans as Preemptive Intergovernmental Compacts, 71 HASTINGS L.J. 79, 113–28 (2019) (describing recent preemptive reforms in California and elsewhere); John Infranca, The New State Zoning: Land Use Preemption Amid a Housing Crisis, 60 B.C. L. REV. 824, 824 (2019) (highlighting a "new wave of state interventions in local zoning").

²²⁹ See supra note 87 and accompanying text.

²³⁰ See, e.g., Zelinsky, supra note 53, at 2217–19.

²³¹ There is some debate about how real this risk is, as agglomeration economies—the economic benefits of co-location—can keep people geographically fixed, at least in downtowns. *See, e.g.*, Schleicher, *The City, supra* note 158, at 1535–40 (describing evidence that agglomeration economies "creat[e] a stickiness in individual location decisions"). *Cf.* Clayton P. Gillette, *Local Redistribution, Living Wage Ordinances, and Judicial Intervention*, 101 Nw. U.L. Rev. 1057, 1077–80 (2007) (proposing reasons why wealthier residents would tolerate, or even support, local redistribution in exchange for the benefits of agglomeration economies). Notably, New York City and San Francisco both have very substantial income taxes but also many rich residents. There is also some debate about whether increased rates of working from home will change this. *See, e.g.*, Schleicher, *supra* note 51, at 1370–71.

governments are effective and provide high-quality services for less in taxes, property values increase. As a result, homeowners become involved in local politics in an effort to increase the value of their properties (or at least reduce potential variance in their value).²³² In this way, property taxes provide a justification for local governance.

But the idea that property taxes are a great fit for local governments has been challenged by proponents of the "capital tax" view of property taxes. Capital tax proponents instead view place-to-place differentials in property tax as the source of its inefficiency.²³³ Investors may want to build in Connecticut towns like Bridgeport or New Haven for example, but their higher property tax rates encourage them to look to Westport or Stamford instead.²³⁴ In this view, the fact that so many local governments tax property is bad because it creates more variance in property tax rates and moves investment away from its optimal locations. Further, the more local governments there are, and the more they rely on property taxes, the greater the likely range in property tax rates. Systems with many small local governments likely have very different levels of per capita property values. To raise even a modestly decent amount of revenue from a low per capita amount of property values requires very high rates. Conversely, governments blessed with lots of property wealth can raise gobs of revenue even with very low rates.²³⁵

Thus, in this model, the harm of the property tax comes in substantial part because it is a local tax. Further, George Zodrow and Peter Mieszkowski argue that the fear of capital flight causes local governments to forgo useful investments in public services.²³⁶ In this sense, a reliance on property taxes does not eliminate concerns about races to the bottom and tax avoidance, but instead creates them.

Conversely, in the "benefits tax" view, the property tax is a good thing because it is a tool that allows for effective Tiebout sorting. Through the use of land use tools that can stop property from being subdivided or more densely built upon, jurisdictions can ensure that residents pay a roughly equal (or at least steady) amount in property taxes per capita. This allows them to match taxes to services without fear of tax base deterioration, making the

²³² See generally FISCHEL, supra note 54.

²³³ See, e.g., Mieszkowski & Zodrow, supra note 129, at 1120 ("To the extent that the property tax is not applied uniformly across all sectors in all jurisdictions, tax differentials will distort the allocation of capital."). There is also the question of whether capital taxation is inefficient tout court, a subject of substantial debate in the literature. See id. at 1119.

²³⁴ CONN. OFF. OF POL'Y & MANAGEMENT, FY 2022–2023 MILL RATES (2022), https://portal.ct.gov/-/media/OPM/IGPP-Data-Grants-Mgmt/FY-22-23-ADM_MillRates-882022.pdf [https://perma.cc/2B7Z-ZHNB] (listing tax rates for different local governments in Connecticut, including Bridgeport, New Haven, Westport, and Stamford).

²³⁵ See, e.g., Zachary D. Liscow, *The Efficiency of Equity in Local Government Finance*, 92 N.Y.U. L. REV. 1828, 1886–87 (2017) (plotting property tax rate against town median household income in Connecticut and illustrating that wealthier towns impose much lower property tax rates than poorer towns but still have better schools and less crime).

²³⁶ See Zodrow & Mieszkowski, supra note 133.

property tax into a tool for efficiently providing public services for those who choose to buy into the jurisdiction. And, because taxes and services are capitalized into real estate prices, benefits tax proponents argue that house buyers essentially shop for their preferred package of taxes and services when they buy a house.

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But looking at the property tax from the perspective of PTAR changes this story. As noted above, PTAR makes the "benefits tax" version of the property tax more plausible. To be sure, PTAR neither conclusively ends the longstanding argument between the capital tax and benefits tax view, nor does it make the benefits tax model make sense in all circumstances. Yet, directionally, it does push in favor of the benefits tax view. What this suggests normatively, however, is somewhat different from traditional arguments made by proponents of the "benefits tax" view.

Indeed, this discussion of PTAR reveals that there are very real costs to making the benefits tax view "work." In order to turn the property tax into a quasi-head tax, jurisdictions either have to wildly distort the housing market through severe land use restrictions or they have to remove many of the qualities that make the property tax an attractive tool for raising revenue.

That such regulations are unjustified on economic grounds is now beyond dispute.²³⁷ Local land use policies reduce economic output by keeping workers out of top job markets and reduce growth by restricting localized information spillovers. Similarly, it is beyond dispute that the consequences of excessive land use restrictions are extremely regressive, specifically in keeping lower-income workers out of the top markets while providing huge capital gains for owners of increasingly scarce housing units. Many of these effects happen at the regional level—where the harm comes from a lack of affordable housing in whole commuting zones—but are caused by excessive local regulation in metropolitan areas across the country.

When the "benefits tax" literature was developed, the idea that land use restrictions would influence regional housing supply seemed impossible. But today, it is clear that this is no longer the case: land use restrictions are excessive across whole metropolitan areas, in downtowns as well as suburbs. Further, this is increasingly true not only in coastal metropolitan areas, but in metropolitan areas around the country.²³⁸

While excessive land use restrictions have many possible sources, the desire among residents to keep the local governmental tax base from falling is likely among them. That is to say, the property tax may "work" as a local tax, but it does so at the cost of America's housing markets and its broader economic success.

²³⁷ See supra note 225 and accompanying text.

²³⁸ See, e.g., Emily Badger & Eve Washington, The Housing Crisis Isn't Just a Coastal Crisis Anymore, N.Y. TIMES (July 14, 2022), https://www.nytimes.com/2022/07/14/upshot/housing-shortage-us.html [https://perma.cc/9GA3-XK8D].

If PTAR is not all bad, it is because it is a way for locals who do not want to redistribute wealth to avoid doing so without completely stopping all investment in property. In other words, by taxing more expensive properties less and less expensive ones more, PTAR makes per capita property tax revenue less dependent on actual facts about the property market and the houses which comprise it.

But in so doing, PTAR removes many of the things that are theoretically desirable about property taxes in the first instance. Indeed, PTAR reduces the connection between property wealth and taxes. And, worse still, PTAR may even redistribute wealth upwards to the extent it continues in the current period. Further, it reduces the insurance features of the property tax.

The image that is left is not that the property tax is a "good tax," as Joan Youngman described it,²³⁹ or a good tax for local governments in particular. Instead, it is the local tax that we have learned to live with. Across the country, we have allowed jurisdictions funded by property taxes to make things "work" by giving them freedom to engage in broadly economically costly land use regulations and to under-assess properties owned by the richest members of our communities.

²³⁹ See generally YOUNGMAN, supra note 1.