Economic Impacts of Real Estate Investment Trusts in Hawaii

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Executive Summary

- Real estate investment trusts (REITs) own and operate or finance income-producing commercial real estate such as shopping malls, apartment, office, and industrial buildings, hotels, senior housing, data centers, self-storage facilities, and theme parks. REITs distribute net income to shareholders as taxable dividends, fulfilling the intent of the U.S. Congress when in 1960 it enabled small investors to own property through REITs.

- More than 9,300 individual investors in Hawaii receive $30 million each year in public non-listed REIT distributions (one type of REIT). Hawaii-based advisers also are active REIT investors for clients, holding $32 million in REIT stocks and $60 million in just one company's REIT-dedicated mutual funds. Many Hawaii organizations manage employee retirement savings plans with REIT investments. (The Employer-Union Health Benefits Trust Fund (EUTF) owned a $79 million interest in a Vanguard REIT fund.) Combined, Hawaii residents own an estimated $2.5 billion in real estate equity through REITs, mutual funds, and exchange-traded funds. They receive more than $105 million in REIT dividends annually, on which $8.8 million in Hawaii state taxes are due.

- In just the past year REITs were associated with more than 11,700 jobs representing labor earnings of nearly $500 million and $95 million in tax revenue in Hawaii. In the past five years REIT-related construction activity is estimated to have generated $3 billion in Hawaii GDP. REIT investments have sustained tourism with more than 4,500 lodging units, and have provided more than 200,000 square feet of medical office space, 5.2 million square feet of retail space, and 12,400 self-storage units in Hawaii.

- Characteristics of REIT-related construction are as important as magnitudes. At Ala Moana Center, International Market Place, and elsewhere, transformative investments by REITs redefine the tourism destination experience and adapt to changing resident consumer preferences. Few individuals and only small numbers of corporate investors in Hawaii have capital markets access equivalent to what is enabled by REITs.

- A Hawaii legislative proposal to eliminate the dividends paid deduction (DPD) for REITs would subject Hawaii shareholders to double taxation, a notorious distortion in the economic theory of taxation that is not in the public interest. Double-taxing Hawaii REITs would reduce future construction and investment, risking capital flight to the 48 other states where double-taxation is absent. The investor groups most likely to replace REITs in Hawaii are tax-exempt institutions such as pension plans, foundations, and university endowments that, overall, would generate less in taxes from their real estate investments in Hawaii. Hawaii could lose more tax revenue from foregone economic activity in response to DPD elimination than would be gained in corporate income taxes, which comprise only 0.4 percent of State of Hawaii revenues. Eliminating the DPD for REITs would signal adversely Hawaii's investment climate and undermine the State's credibility as an investment host.

Overview

A. *The Real (Estate) World*

Suppose that your Uncle owns a gas station in Waipahu, or perhaps your Auntie owns a condominium in Kalihi; maybe your cousin owns a retail building on Kalakaua Avenue. Your Auntie, your Uncle, and your cousin are real estate investors. They collect rents from their tenants. They pay property taxes. They pay for improvements, and for maintenance and other expenses. They pay income taxes on the net income they earn.

Now, instead, let's say that your Uncle invested in Getty Realty, a REIT that owns an Aloha gas station in Waipahu. Instead of buying an apartment, your Auntie invested in Douglas Emmett, a REIT that owns Waena Apartments in Kalihi. Instead of buying that retail building on Kalakaua, your cousin invested in American Assets Trust, a REIT that owns The Shops at Kalakaua. Those REITs would collect the same rents from the same tenants. They would pay the same property taxes, and would pay for the same improvements and maintenance and other operating expenses. Then—by law—these REITs would distribute at least 90 percent (but probably 100 percent; possibly more) of the same net income to your Uncle, to your Auntie, and to your cousin, income subject to the same income taxes.[1]

What about the most valuable properties in Hawaii, such as Ala Moana Center? Only the wealthiest people can afford to own, outright, properties like Ala Moana, but because Ala Moana is owned by a REIT, Uncle, Auntie, or cousin still can receive their share of the net income that Ala Moana produces, and pay taxes on that income, by investing in that REIT. They can also place their savings with Hawaii institutional investors that own REITs on their behalf, funding Uncle, Auntie, and cousin's benefit plans and retirement plans. [2]

B. *Introduction*

REITs are a financial structure established by Congress in 1960 to expand access to real estate investment for small investors, similar to stock mutual funds. Corporations retain earnings and many corporations pay no dividends, relying on capital gains to reward investors. For these

[1] Uncle, Auntie, and cousin would have secured their own retirement, too. Over the past 20 years, Getty Realty's investments have produced total returns averaging 9.5 percent per year, significantly better than the S&P 500 stock index. Over the past 10 years, Douglas Emmett investments produced total returns averaging 15.3 percent per year—again better than the S&P 500. American Assets Trust, since January 2011, has returns averaging 18.6 percent per year—nearly two-thirds better than the S&P 500. REITs pool incomes from commercial real estate across the country, hedging geographic risk, and earn risk-adjusted returns generally in excess of those of stocks.

[2] Information available from published sources (such as S&P Money Market Directory and Preqin databases) indicate that Hawaii-based institutional investors such as the University of Hawaii 403(b) Plan, the Hawaiian Airlines Pension Master Trust Hawaii Pacific Health Savings Plan, Kamehameha Schools, the Hawaii Employer-Union Health Benefits Trust Fund (EUTF), Queen's Health Systems (Pension Plan, Land Company Endowment Fund, and Retirement Plus Plan), Hawaii Community Foundation, Office of Hawaiian Affairs, and City & County of Honolulu 457 Deferred Compensation Plan, all invest broadly in REITs.

reasons corporations are taxed separately from their shareholders. In contrast, REITs are strictly regulated in a manner that results in distribution of essentially all net income through dividends to shareholders, or through dividend reinvestment programs, taxable as dividend income. REITs facilitate capital inflows to the Hawaii economy as well as capital outflows from the Hawaii economy, as investors in and out of Hawaii invest in real estate inside and outside Hawaii.

Investment *is* capital formation: it expands Hawaii's productive capacity and creates jobs regardless of who the investors are or where they are from. Hawaii investors are no different from Chinese or U.S. mainland investors or those from Botswana. Investors in Hawaii REITs earn dividend income that is no different from the dividend income paid to Hawaii investors in REITs, including to Hawaii investors in Hawaii REITs. Internal Revenue Service (IRS) data show that, in 2013, thousands of Hawaii residents directly and indirectly (through pension funds and other investments) own approximately $1 billion worth of REIT shares, and that Hawaii collects at least $8.8 million in individual income taxes from Hawaii REIT shareholders.

Concern has been expressed that, perhaps, the State of Hawaii should tax REITs the way it taxes other corporations, even though REITs pay out all their net income as a financial pass-through while corporations do not.[3] A second conjecture hypothesizes that taxing Hawaii REITs like such corporations—doubly-taxing first the financial vehicle and then taxing its Hawaii owners again, on the same income—might be a lucrative State revenue source.

First, double-taxing capital income is a notorious distortion in the economic theory of taxation, about the worst tax idea ever. Double-taxing REITs could drive their investments in Hawaii down significantly, towards net *dis*investment from Hawaii. Disinvestment would reduce productivity and income in Hawaii. Many of the investor groups likely to replace REITs in Hawaii under such a circumstance are tax-exempt institutions such as pension plans, foundations, and university endowments that would generate neither corporate nor the same individual income taxes from their real estate investments in Hawaii. Other non-REIT investors already could have done what REITs have done, or could have paid more to acquire REIT investments: REIT disinvestment in Hawaii would be tantamount to an asset price deflation in Hawaii.

Second, it is unlikely that double-taxing REIT net incomes in Hawaii would yield material Hawaii corporate tax revenue. REITs can leave Hawaii and the dynamic effect of doubly-taxing them would be exit: a tax on nothing is nothing. Considering the trivial amounts of tax revenue Hawaii actually receives from *all* corporations doing business in Hawaii,[4]

[3] See Tom Yamachika, President, Tax Foundation of Hawaii (August 31, 2014), "REITs: A New [*sic*] Kind of Tax Shelter?" *Hawaii Free Press* (http://www.hawaiifreepress.com/ArticlesMain/tabid/56/ID/13398/REIT-ndash-A-New-Kind-of-Tax-Shelter.aspx).

[4] FY2015 Hawaii corporate income tax revenue (CIT) declined 39.9 percent to $52.3 million, from $87.0 million in FY 2014, which was "down 13.9 percent from the previous year's total of $101.0 million" (Hawaii Department of Taxation *2013-2014 Annual Report* (http://files.hawaii.gov/tax/stats/stats/annual/14annrpt.pdf) and fiscal 2015 year-end data (http://files.hawaii.gov/tax/stats/monthly/2015-fis_rev.zip). On trend, measured in constant 2014 dollars to adjust for inflation, Hawaii's CIT declined from $110 million in 1969 to $66 million in 2014 and—on trend—would continue declining to $62 million by 2020. In some quarters corporate tax receipts are negative—sometimes the State pays corporations. Corporate tax collections are cyclical but small, comprising only 0.9 percent of Hawaii

amounts which have declined steadily for 45 years, it's not clear why a corporate tax is even interesting. Hawaii would risk losing more revenue than Hawaii would gain by doubly-taxing REITs, once its substantial negative impact on capital formation in Hawaii is taking into account.[5] Such a barrier to REIT investment is a state tax impediment found in only *one* other state (New Hampshire).

Using the State of Hawaii's input-output model to estimate economic impacts, in just the past year Hawaii REITs have been associated with more than 11,000 construction and non-construction jobs, together representing labor earnings of $482 million, generating more than $95 million in state taxes. REIT investments have sustained Hawaii's principle export, tourism, by providing more than 4,500 lodging units, and in other Hawaii commercial real estate have provided more than 200,000 square feet of medical office property space, 5.2 million square feet of retail space, and 12,400 self-storage units.

DISCUSSION

The discussion below is organized as follows. First, the study provides background on REITs generally, what they are and who invests in them. Second, the study attempts to elucidate who in Hawaii invests in REITs and in Hawaii REITs. Third, the study evaluates some economic impacts of REITs in Hawaii specifically, in investment and redevelopment. Fourth, the study elaborates on why elimination of the so-called REIT dividends paid deduction (DPD) could be a tax policy mistake: economically inefficient and ineffective at revenue-raising, it could risk a net loss of Hawaii tax revenues as a result of its adverse dynamic effects on investment.

I. Background on Real Estate Investment Trusts (REITs)

A. *REITs enable average investors to own commercial real estate*

REITs are companies that own and operate or finance commercial-grade, income-producing real estate like shopping malls, apartment, office, and industrial buildings, hotels, senior housing, data centers, self-storage facilities, and theme parks, even commercial timber forests. REITs distribute that income after expenses to shareholders as taxable dividends. While in the past, only very wealthy individuals could own commercial real estate, in 1960 the United States Congress enacted tax legislation creating REITs to enable all investors to own this type of property through REITs.

General Fund Revenues in FY2015. Hawaii CIT was as low $8.3 million in 2003 ($7.2 million in 2014 dollars), less than what Hawaii shareholders of REITs pay annually in individual income taxes on their REIT dividends. See http://files.hawaii.gov/tax/stats/stats/annual/03annrpt-rev.pdf, and IRS *Statistics of Income* data, at: https://www.irs.gov/uac/SOI-Tax-Stats-Historic-Table-2.

[5] Of course, Hawaii REIT shareholders would continue earning dividend income on which taxes would be paid.

Patterned after mutual funds of stocks and bonds,[6] REIT shareholders own shares of pools of real estate assets. Equity REITs own commercial properties like shopping malls, office buildings, apartments, and even cell phone towers from which rents and/or gains from occasional property dispositions are collected and distributed after expenses to shareholders through dividends. Mortgage REITs invest in mortgages or mortgage-backed securities, distributing income after funding costs to shareholders through dividends. Although the tax code requires REITs to distribute at least 90% of their taxable income, in practice market preferences assure that virtually all net incomes are distributed to shareholders as dividends. Public equity REITs and mortgage REITs often are traded on stock exchanges like the New York Stock Exchange (NYSE) and are registered with the Securities and Exchange Commission (SEC). Some public REITs are not listed on exchanges but are sold directly to investors by brokers and also are registered with the SEC. Other REITs are privately-held and are neither exchange-traded nor SEC-registered.

B. *REITs have provided portfolio diversification and an inflation hedge*

For the investor, REITs have provided an additional avenue for portfolio diversification in a format that enables real estate to be held in small shares rather than in lumpy, whole properties. Research typically has shown that adding real estate to portfolios of stocks and bonds by investing through REITs has increased risk-adjusted returns: yields have risen and volatility has declined.[7] Real estate returns have exceeded inflation rates, providing a natural inflation hedge. REITs have been shown over long periods of time systematically to outperform both stocks and corporate bonds while delivering more stable income streams. REIT ownership has proven to be a well-established method of improving overall portfolio performance relative to portfolios that only hold stocks and bonds.

C. *Unlike other businesses, REITs must satisfy requirements ensuring that they are long-term investors in real estate*

Unlike other non-REIT business entities, REITs must comply with a burdensome set of requirements to ensure that they are widely-held, long-term investors in real estate or real estate financings.

Specifically, unlike other business entities, the federal tax code (and those state tax codes, like Hawaii's, that conform to this code) provides that a REIT: (a) must maintain at least 75

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[6] For additional background regarding mutual funds and how they operate, *see* Appendix A:How U.S. Regulated Investment Companies Operate and the Core Principles Underlying Their Regulations (2015, Investment Company Institute) (available at: http://www.icifactbook.org/fb_appa.html)

[7] See, for example,
https://www.reit.com/sites/default/files/media/PDFs/Research/2015ResearchConferenceBoudry.pdf; https://www.reit.com/sites/default/files/portals/0/PDF/CohenSteersReport.pdf; https://www.reit.com/data-research/research/cem-benchmarking-defined-benefit-pension-fund-research-sponsored-nareit; https://www.reit.com/data-research/research/wilshire-research-optimizing-target-date-fund-performance-reits.

percent of its assets in qualifying real estate assets; (b) must receive 75% of its income from some combination of rent from real property, interest from mortgages secured by real property and gains from the sale of real property, or other delineated real estate sources; (c) must receive 95% of its income from the aforementioned qualified real estate sources and from other passive sources;[8] and (d) must have more than 100 shareholders with no fewer than five individuals owning more than 50 percent of its stock.[9] Furthermore, in order to ensure that REITs are long-term investors in real estate, REITs are subject to a potentially confiscatory tax faced by no other non-REIT business entities: a full 100 percent tax on any gain from the disposition of an asset held primarily for sale.[10]

D. *Unlike other businesses, REITs must distribute all of their income as taxable dividends; their shareholders pay tax on these dividends*

In addition to the above requirements, and like mutual funds of stocks and bonds, the corporate income tax liability on REITs' income is borne by shareholders to the extent that the REIT distributes its taxable income to its shareholders. REITs calculate their taxable income and, like mutual funds, can deduct from their taxable income all dividends paid to their shareholders (through the dividends paid deduction). As mentioned above, REITs typically distribute all of their taxable income to shareholders. In 2014, Securities and Exchange Commission (SEC)-registered REITs distributed $46 billion to shareholders.[11] REIT shareholders are subject to tax on the dividends, primarily at the highest ordinary income rate, not the lower qualified dividend rate.[12] Notably, unlike pass-through entities, which today account for a vast majority of commercial real estate investment in the United States, REITs generally are not permitted to pass through tax losses or tax credits to their shareholders.

From a state income tax perspective, a state collects taxes on REIT dividends regardless of where the REIT owns properties. Thus, REIT shareholders who are Hawaii residents pay individual income taxes in Hawaii even if (as is true in the majority of cases) the REIT does no business in and owns no properties in Hawaii. This single taxation regime contrasts with the zero taxes collected in Hawaii from tax-exempt institutions such as pension plans, foundations

[8] As a result of this 95 percent rule, REITs are unlike other business entities and can only earn up to 5 percent of their annual gross income from non-qualifying sources like real estate services to non-tenants.

[9] Internal Revenue Code (IRC) §§ 856(a), (c)(2) and (c)(3).

[10] IRC §857(a)(6).

[11] "REIT Industry Financial Snapshot" (as of 9/30/15) , published by the National Association of Real Estate Investment Trusts® (NAREIT)) (available at: https://www.reit.com/data-research/data/industry-snapshot). In particular, "[s]tock exchange-listed REITs paid out approximately $42 billion and public non-listed REITs paid out approximately $4 billion in dividends during 2014." *Id*.

[12] "2014 Year-End Summary" (NAREIT) (available at: https://www.reit.com/data-research/data/year-end-tax-reporting-data/2014/2014-year-end-summary.

and university endowments.[13] This distinction between single tax and zero tax outcomes is important because tax-exempt institutions are very significant investors in commercial real estate and would be the most likely replacement investors if REITs decide to invest in the other states that do not impose a double layer of taxes.

E. *All states with an income-based corporate income tax (except one) follow the federal taxation of REITs and their shareholders*

Today, every state except for New Hampshire that imposes a corporate net income tax conforms to federal income tax rules and allows widely-held and/or publicly traded REITs (and mutual funds) to deduct their dividends paid to shareholders. Although a state in which a REIT owns property might not collect income taxes from REIT shareholders outside of that state, the state does collect income taxes from all its residents who own REIT shares, even on income from properties located outside of that state.

II. Hawaii investors in REITs and Hawaii REITs

A basic question about REITs in Hawaii is who in Hawaii invests in REITS, and who in Hawaii invests in Hawaii REITs? Because portfolio preferences are a fluid matter of changing asset allocation for most investors, even for the half of Hawaii households who are homeowner-occupants, any question about who owns what is naturally challenging to answer. This section of the study details what is available primarily through securities and tax filings. Even then, most of what might be known can only be inferred, and some of what is discussed below is offered without drawing explicit inferences, though the information may be suggestive to readers.

A. *Hawaii investors in REITs and in Hawaii REITs*

1. *Publicly traded REITs: "Shares Held in Street Name"*

Stock-exchange (*e.g.*, the New York Stock Exchange or NASDAQ) listed REITs generally are not able to identify the total number of Hawaii taxpayers who are direct investors in that REIT and the amount of dividends paid to those investors. Like all publicly traded companies, the overwhelming majority of stock exchange-traded REIT shares are held in "street name" by a nominee who is not obligated to report the underlying shareholder-identifying information to the REIT. In fact, for most companies, the registered shareholder that owns the

[13] For example, a recent article cites Prequin, the leading source of information for private real estate investment, that the *average* commercial real estate for a public pension fund, a private pension fund and an endowment is $758 million, $434 million and $143 million, respectively. *See* http://nreionline.com/institutional-investors/pension-funds-endowments-hunger-real-estate-assets. Further, the article indicates that the real estate allocations for all three groups are below their target goals.

majority of their stock is a company called DTC (Depositary Trust & Clearing Corporation) and, more specifically, its affiliated company, "Cede & Co."[14]

Even to the extent that the actual shareholder names are available, many shareholders in stock exchange traded REITs are institutional investors such as mutual funds and pension/health benefit funds. These companies do not provide shareholder-level identifying information.[15]

There are certain public securities filings that are required of shareholders who own more than 5 percent of a publicly traded company.[16] However, these shareholders tend to be large institutional investors such as mutual funds which, like REITs, have pooled the capital of many investors to invest in their underlying portfolio of assets. In fact, mutual funds tend to own a significant percentage of stock in publicly traded REITs[17] and, in most, if not all cases, these REITs are unable to identify the ultimate mutual fund beneficiaries.[18]

Additionally, the Investment Advisers Act of 1940[19] requires advisers that have at least $100 million of assets under management or advise a registered investment company to register with the SEC and periodically report their stock and securities ownership. Such advisers include Bank of Hawaii and First Hawaiian Bank. These advisers must file a Form 13F with the SEC listing their securities ownership. However, it is not possible to know whether the securities listed on these forms are owned directly by such money managers or on behalf of their underlying clients.

2. *Available data*

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[14] *See* http://www.dtcc.com/asset-services/issuer-services/how-issuers-work-with-dtc.aspx ("When an investor holds shares this way, the investor's name is listed on its brokerage firm's books as the beneficial owner of the shares. The brokerage firm's name is listed in DTC's ownership records. DTC's nominee name (Cede & Co.) is listed as the registered owner on the records of the issuer maintained by its transfer agent. DTC holds legal title to the securities and the ultimate investor is the beneficial owner.")

[15] In fact, both the DBEDT and Department of Taxation (DOTAX) testimony with respect to an earlier version of recently proposed legislation, S.B. 118, S.D. 1, noted that many mutual funds invest in REITs. *See* "Statement of Luis P. Salaveria," Director, Department of Business, Economic Development, and Tourism, before the House Committee on Consumer Protection and Commerce and Committee on Judiciary in consideration of SB118, SD1 (March 18, 2015), available at http://www.capitol.hawaii.gov/Session2015/Testimony/SB118_SD1_TESTIMONY_CPC-JUD_03-18-15_.PDF and "Statement of Maria E. Zielinski", Director, Department of Taxation, before the House Committee on Consumer Protection and Commerce and Committee on Judiciary in consideration of SB118, SD1 (March 18, 2015), available at http://www.capitol.hawaii.gov/Session2015/Testimony/SB118_SD1_TESTIMONY_CPC-JUD_03-18-15_.PDF.

[16] *See "Laws that Govern the Securities Industry"* http://www.sec.gov/about/laws.shtml.

[17] For a list of dedicated REIT funds, *see* https://www.reit.com/investing/investing-reits/list-reit-funds.

[18] DOTAX specifically noted that "a mutual fund cannot be compelled to provide information on the number of Hawaii taxpayers investing in such fund or the amount of income attributable to a REIT operating in Hawaii. Therefore any report will not be able to provide all of the information as requested in this measure." *See* footnote 20 (citing testimony).

[19] http://www.sec.gov/about/laws.shtml#invadvact1940.

REITs are just as popular an investment vehicle choice of Hawaii individuals and institutions as they are nationwide. Many Hawaii investment managers include significant REIT holdings in their client portfolios. Again, while data limitations preclude a complete accounting, a picture of the scope of Hawaii REIT investors, investment managers, and their holdings can be sketched.

(*a*) Public, non-listed REITs

Public, non-listed REITs (PNLRs) are REITs that are required under federal securities laws to file periodic reports with the SEC, because of their asset size or large shareholder base, but are not listed on a stock exchange. While shareholder-level data regarding exchange-traded REITs is difficult to obtain, shareholder-level data from PNLRs is available from DST Systems, the transfer agent for many of these companies.

DST data disclose that more than 9,300 individual investors in Hawaii received a total of nearly $30 million in PNLR distributions during 2014, the last full year for which data are available. Sixty percent of these distributions for Hawaii investors comprised cash distributions; the other forty percent were in dividend reinvestment programs pursuant to which shareholders acquire additional shares in lieu of receiving cash distributions. Shareholders still must pay tax on the value of the distribution used to reinvest in new shares. While this is not an exhaustive characterization, it is instructive of the significant magnitudes of REIT distributions accruing to Hawaii residents.[20]

(*b*) Hawaii-based investment advisers and institutional investors

Hawaii-based advisers also are active REIT investors on behalf of their clients. Public data in SEC filings can be gathered for a number of major local banking names like Bank of Hawaii[21] and First Hawaiian Bank,[22] among others, along with smaller providers of investment advisory services[23] to get a feel for how important REIT investments are in locally-managed portfolios. This data show that these Hawaii institutions held approximately $32 million in REIT stocks reported as owned as of June 30, 2015.

[20] Data provided by DST Systems, the transfer agent for most public, non-listed REITs.

[21] Bank of Hawaii, Form 13F-HR (quarter ended 6/30/15); *see* http://www.sec.gov/Archives/edgar/data/315080/000031508015000005/xslForm13F_X01/primary_doc.xml *and* http://www.sec.gov/Archives/edgar/data/315080/000031508015000005/xslForm13F_X01/2015_2Q_INFO_FILE.XML.

[22] First Hawaiian Bank, Form 13F-HR(quarter ended 6/30/15) *see* http://www.sec.gov/Archives/edgar/data/315080/000031508015000005/0000315080-15-000005-index.htm and http://www.sec.gov/Archives/edgar/data/764106/000076410615000005/xslForm13F_X01/062015.xml.

[23] *See, e.g.*, C.M Bidwell & Associates Ltd, Form 13F-HR (quarter ended 3/31/15) (http://www.sec.gov/Archives/edgar/data/1091860/000109186015000005/xslForm13F_X01/primary_doc.xml *and* http://www.sec.gov/Archives/edgar/data/1091860/000109186015000005/xslForm13F_X01/cmba13f-hr033115.xml) and Cadinha & Co LLC, Form 13F-HR (quarter ended 6/30/15) http://www.secinfo.com/dS5q2.mb.d.htm#1stPage (showing approximately $13 million owned in Weyerhaeuser, a timberland REIT with no Hawaii properties).

Another potential source of dividend and capital gain income for Hawaii investors are the REIT-dedicated mutual funds or exchange-traded funds,[24] including those sponsored by Vanguard, Cohen & Steers, and Wilshire. In fact, thousands of Hawaii shareholders have invested about $60 million in several dedicated REIT mutual funds sponsored by a single mutual fund company.[25] The State is collecting taxes on the millions of dollars distributed to Hawaii investors by these companies and funds that invest in REITs, even though almost all of the properties held by these REITs are located outside of Hawaii.

(*c*) Hawaii public officials

In addition to REIT shares owned outright or through brokerage firms, investment advisers, mutual funds, pension funds and other retirement savings investment vehicles, or insurance companies, public record data associated with ethics filings and other public disclosures indicates a pattern of REIT ownership that can be associated with many dedicated public servants as well as individuals outside government serving on boards and commissions. Without disclosing individuals' personal information, it still can be asserted that it is commonplace for a number of distinguished Hawaii political leaders, persons in senior management positions in State and County government, and members of public boards and commissions to hold REIT investments in their personal or managed investment portfolios.[26] Their investment preferences are, as a generalization, not different from those of the public at large, or from those of beneficiaries or managers of Hawaii's public pension system or of public union health trust funds.

(*d*) Hawaii residents—UPREITs

As noted in Appendix I, many of the more than 200 stock-exchange traded REITs are organized in the UPREIT form. Limited partners who own partnership shares in REIT operating partnerships earn income from the partnership's activities and are liable for federal and state income taxes on this income (as appropriate). While publicly available information regarding UPREIT limited partners is itself limited to relatively large owners, it does indicate that three Hawaii individuals own millions of partnership units in Pacific Office Properties Trust, which is headquartered in Hawaii.[27]

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[24] For a list of such funds, *see* https://www.reit.com/investing/investing-reits/list-reit-funds.

[25] This information is not generally available, but was provided to NAREIT by the mutual fund company. In 2014 their accounts received income and capital gain distributions totaling $8.5 million.

[26] Financial disclosure information is obtained from the Hawaii State Ethics Commission and republished at http://www.civilbeat.com/disclosures/.

[27] NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 28, 2015, PACIFIC OFFICE PROPERTIES TRUST, INC., p. 10 available at: http://www.pacificofficeproperties.com/PDFGovernance/2015%20Proxy%20Statement.pdf. Note that two of these individuals also own hundreds of thousands of limited partnership units in another REIT"s (Corporate Office Properties Trust's) operating partnership, Corporate Office Properties L.P.; Exhibit 1, Schedule of Partners, Corporate Office Properties Trust and Corporate Office Properties, L.P., Form 8-K (April 15, 2015), available at: http://markets.on.nytimes.com/research/stocks/fundamentals/drawFiling.asp?docKey=137-000086054615000014-

(*e*) Hawaii retirement and health benefit foundations: ownership in REITs and in REIT-dedicated mutual funds

Many significant Hawaii organizations which manage retirement savings plans on behalf of their employees are REIT investors, or include REIT fund options in their employee retirement-savings plans, such as Hawaii Pacific Health, Hawaiian Airlines, The Queen's Health System, University of Hawaii Foundation, Hawai'i Community Foundation, Office of Hawaiian Affairs, City & County of Honolulu, and Kamehameha Schools.[28]

In particular, the Employer-Union Health Benefits Trust Fund (EUTF), which provides a variety of medical and life insurance benefits to almost 200,000 Hawaii state and local current and former employees, owned a $79 million interest in a Vanguard REIT fund.[29]

(*f*) Data from stock exchange-traded REITs

Even with the limitation on identifying Hawaii-resident shareholders because of the "street name" issue noted above, a number of exchange-traded REITs were able to provide proprietary data obtained from an outside vendor that provides proxy solicitation services to them. Proxies are sent to shareholders of record who have voting control over specific shares. Thus, the information can be used as an estimate for the actual market value of shares that might be owned by these shareholders (as voting control may, but does not necessarily, correlate to value). Even with a relatively small sample size, the data show that at least hundreds of Hawaii "accounts" have voting control over hundreds of thousands of shares of REITs with Hawaii properties.

(*g*) Internal Revenue Service data and additional estimates

Recent IRS aggregate data[30] concerning individual income tax returns (Form 1040) shows that more than $700 million in total "ordinary dividends" (both "qualified dividends,"

2MON4B44IRJQV17J3M3RLCJJ76&docFormat=HTM&formType=8-K. While this REIT owns no Hawaii properties, both partners presumably may earn income taxable in Hawaii through this interest.

[28] S&P Money Market Directory and Preqin databases.

[29] Based on this link, http://files.hawaii.gov/auditor/Reports/2014_Audit/EUTF2014.pdf, that fund is the "Vanguard REIT Index Fund." The fund invests in publicly traded REITs and, as of September 30, 2015, its net assets were valued at $48 billion. Notice that the Vanguard REIT Index Fund's holdings as of September 30, 2015 include REITs listed below with portfolios including Hawaii properties. Their value at this time also is reported below. Simon Property Group (Waikele Outlets) and Public Storage (various self-storage facilities) make up 12.8 percent of the fund's net assets. As a result, a large percentage of the Vanguard REIT Index Fund's dividend supports health and welfare benefits of current and prior Hawaii employees, including: Simon Property Group (about $4 billion) (8.3 percent of fund); Public Storage (about $2.1 billion) (4.5 percent of fund); General Growth Properties (about $1 billion); Host Hotels & Resorts (about $800 million); Extra Space Storage (about $600 million); Healthcare Trust of America (about $200,000); Sunstone Hotel Investors (about $200,000); Healthcare Realty Trust (about $200,000); WP Glimcher Inc. (about $150,000); Xenia Hotels & Resorts (about $129.000); American Assets Trust (about $93,000); Select Income REIT (about $88,000); and Getty Realty Corp (about $29,000).

taxed at the lower tax capital gains tax rate for federal purposes of up to 23.8 percent, and "non-qualified dividends," taxed at the higher federal tax rate applicable to ordinary income of up to 43.4 percent) and approximately $500 million in qualified dividends, were reported by Hawaii taxpayers for the 2013 tax year. While the IRS data does not provide any detail regarding the percentage of these dividends comprising REIT dividends, it is clear that most REIT dividends are considered "non-qualified" dividends.[31] Further, like some mutual fund dividends, some REIT dividends are considered capital gain dividends (reported as net capital gain, rather than as dividends).[32]

Many companies—including real estate companies that choose not to adhere to REIT rules—make small distributions or make no distributions as dividends to their shareholders. Instead, these companies elect to use the cash generated by their operations to make acquisitions or to pay for other strategic initiatives. In some cases, companies are successful in driving up their share prices, but investors pay no taxes on dividends (because the companies pay no dividends), and investors also incur no capital gains tax liability until they sell their appreciated shares. In other cases, company strategies are unsuccessful and the retained cash is shifted to bad investments, resulting in no taxes paid on either dividends or capital gains. REITs, however, must distribute all of their taxable income each calendar year in the form of dividends to shareholders, who pay tax on those dividends—which means that REITs do not have the same opportunity that other companies have to shelter cash from taxation, whether by creating unrealized capital gains (on which taxes are deferred until the gains are realized) or by making bad investments (in which case no taxes are due).

SEC-registered REITs paid over $46 billion in aggregate distributions during 2014[33]. The share paid directly and indirectly to Hawaii residents—and therefore subject to Hawaii personal income taxes—is difficult to determine, but Hawaii appears to benefit more than other states from REIT dividend payments:

- According to the U.S. Census Bureau[34], Hawaii has more residents aged 56 and older compared to other states (data from 2010):
  - Age 56-60: 6.9% of Hawaii's population, 6.4% of the rest of the U.S.
  - Age 61-65: 6.0% of Hawaii's population, 5.4% of the rest of the U.S.
  - Age 66-70: 4.3% of Hawaii's population, 4.0% of the rest of the U.S.
  - Age 71-75: 3.04% of Hawaii's population, 3.00% of the rest of the U.S.

[30] Available at https://www.irs.gov/pub/irs-soi/13in12hi.xls, at https://www.irs.gov/uac/SOI-Tax-Stats-Historic-Table-2 .

[31] *See* "Year-End Tax Reporting Data" published by the National Association of Real Estate Investment Trusts https://www.reit.com/data-research/data/year-end-tax-reporting-data.

[32] *Id.* Again, the IRS data does not provide a breakdown of the portion of any capital gain comprised of REIT or mutual fund capital gain dividends.

[33] Source: SNL Financial.

[34] See http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.

- Age 76+: 7.0% of Hawaii's population, 6.0% of the rest of the U.S.

- According to the Survey of Consumer Finances conducted by the Federal Reserve Board of Governors[35], people in older age ranges are more likely than younger people to hold financial assets, and also have larger average financial asset balances (data from 2013):

  - Ages <35: 92.6% have financial assets; average balances were $38,270
  - Ages 35-44: 93.1% and $148,790
  - Ages 45-54: 93.3% and $251,020
  - Ages 55-64: 95.7% and $411,600
  - Ages 65-74: 97.4% and $563,160
  - Ages 75+: 97.2% and $302,210

- Because REITs provide sizeable and stable income payments, they appeal especially to older investors who are over-represented in Hawaii's population. While data are not available to show this among investors in exchange-traded REITs, data compiled by the much smaller number of public REITs that are not traded on exchanges[36] show that people in older age ranges are more likely to invest in REITs compared to younger people:

  - Ages <35: 0.01% of all Americans have shares in public non-traded REITs
  - Ages 35-44: 0.12% of all Americans have shares in public non-traded REITs
  - Ages 45-54: 0.27% of all Americans have shares in public non-traded REITs
  - Ages 55-64: 0.67% of all Americans have shares in public non-traded REITs
  - Ages 65-74: 0.98% of all Americans have shares in public non-traded REITs
  - Ages 75+: 0.49% of all Americans have shares in public non-traded REITs

- Hawaii residents in every age range are more likely to hold shares in public non-traded REITs compared to Americans who don't live in Hawaii, a fact that may hold true for exchange-traded REITs as well:

  - Ages <35: 0.03% of Hawaii residents compared to 0.01% of other Americans
  - Ages 35-44: 0.24% of Hawaii residents compared to 0.12% of other Americans
  - Ages 45-54: 0.48% of Hawaii residents compared to 0.27% of other Americans
  - Ages 55-64: 1.00% of Hawaii residents compared to 0.67% of other Americans
  - Ages 65-74: 1.56% of Hawaii residents compared to 0.97% of other Americans
  - Ages 75+: 0.62% of Hawaii residents compared to 0.48% of other Americans

The democratization of real estate investing intended by Congress in the enabling legislation for REITs means that even the smallest individual investors can own REIT shares directly: according to data compiled by Citi Research, 17.5 percent of REIT shares are owned directly by individuals (not including REIT executives or other insiders), representing ownership of real estate equity valued at $154 billion. If Hawaii residents owned only their proportionate

[35] Available at: http://www.federalreserve.gov/econresdata/scf/scfindex.htm.

[36] Data provided by DST Systems.

share, they would have direct REIT holdings worth about $742 million, but the age distribution of Hawaii's population means that they probably own more.

Many other investors own shares in mutual funds and exchange-traded funds (ETFs) that invest exclusively or invest primarily in REITs. Citi Research estimates that such funds own 24.5 percent of REIT shares, with a total value of about $215 billion; [37] Hawaii's proportionate share would be $1.04 billion and its actual share probably is even larger than that.

Many investors own shares in mutual funds and ETFs that cover broader asset groups (such as the Vanguard US Total Stock Market Fund). Citi Research estimates that such funds own about 16.5 percent of REIT shares, with a total value of about $145 billion; Hawaii's proportionate share would be about $700 million and its actual share is likely greater.

Adding up those ways of investing in REITs suggests that individual Hawaii residents own a total of at least $2.5 billion in real estate equity by investing in REITs, either directly or through mutual funds and ETFs. With the average annual REIT dividend yield at 4.25 percent, that suggests that Hawaii residents receive—and pay taxes on—more than $105 million in REIT dividend payments each year through their individual and fund holdings.

As noted above, SEC-registered REITs paid over $46 billion in distributions during 2014, not only to individuals but also to certain institutional investors. Hawaii's proportionate share—both directly to individual investors and indirectly through mutual funds, pension funds, and other collective investments—would be about $224 million, but it is likely quite a bit more given Hawaii's age distribution and Hawaii residents' preference for REITs over other investments.

Moreover, many of the dividends paid by non-REITs represent qualified dividend income, and are therefore subject to a lower federal tax rate than ordinary dividends. According to the Internal Revenue Service, 42 percent of dividends reported by Hawaii residents in 2011 were qualified dividends subject to the lower tax rate. Most REIT dividends, however, are considered ordinary dividend income.

Using IRS data, Hawaii should be expected to collect about $8.8 million annually in income taxes from REIT dividends. The taxes collected by Hawaii from REIT investment incomes are probably higher as estimate does not include UPREIT partnership unit income or REIT capital gain distributions.[38]

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[37] "REITs For Sale: A Deep Dive Look At REIT Ownership and Recent Trends," Citi Research (11 September 2015).

[38] This estimate is calculated as follows. IRS Statistics of Income data for the 2013 tax year show the number of Hawaii personal income tax returns by filing status (single, joint, head of household) and by range of adjusted gross income (e.g., $10,000-$25,000). The Survey of Consumer Finances shows the percentage of households that own financial assets by household type (single with no children, married, single with children) and by income percentile. Using these figures, the aggregate AGI was estimated in ranges corresponding to Hawaii marginal income tax rate ranges and the average REIT dividend income per tax return in each cell. For example, the distributions of AGI and financial asset ownership suggested that single taxpayers with AGI between $9,600 and $10,000 received average REIT dividends of $11.19 per tax return, while married taxpayers with AGI between $500,000 and $1,000,000 received average REIT dividends of $1,997 per tax return. Thereafter, Hawaii's marginal personal income tax rates were applied to the estimated REIT dividends in each cell to estimate the incremental taxes paid on REIT dividends:

B. *REITs in Hawaii*

The scope of REITs' presence in Hawaii is indicated by some of the following indicators. Information from public REITs is more generally accessible than from those that are not listed with the SEC, so the data below are only a partial representation of REIT properties and developments in Hawaii. Nevertheless, some idea of their significance is suggested by the data.

- There are at least 84 REIT-owned properties in Hawaii.[39]
- The current fair market value of REIT-owned properties in Hawaii is approximately $11 billion.[40]
- The construction-related impacts of REITs in Hawaii in 2014 was an estimated 11,728 full-time equivalent (FTE) jobs and $482 million of labor earnings, as described in **Section III** of this study, but the total economic contribution of REITs and related companies in Hawaii has not been estimated directly.[41] Independent testimony submitted during the 2015 Hawaii Legislative Session contains elements of the latter calculation.[42]

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for example, it was estimated that the lower-income single taxpayer paid $0.72 in taxes on REIT dividends while the higher-income married taxpayer paid $220. Aggregating across all taxpayers resulted in an estimate of total Hawaii personal income taxes paid on REIT dividends of $8.8 million per year. It is important to keep in mind that this estimate includes taxes on only REIT dividend income, not capital gains realized from owning REIT stock. On a long-term basis, almost exactly half of total returns on REIT investments have been generated from income and half from capital appreciation.

[39] SNL Financial (based on SEC filings) (as of December 31, 2014).

[40] "REITs Across America" (http://www.reitsacrossamerica.com/#) (Property holdings reported as of December 31, 2014. Estimated property values based on the equity market capitalization of all equity REITs in the FTSE NAREIT All REITs Index as of December 31, 2014). (Source: NAREIT, SNL Financial and Company Financial Statements, available at www.sec.com).

[41] A national study prepared by EY for NAREIT, *Economic contribution of Real Estate Investment Trusts in the United States*, (forthcoming), using an input-output model to estimate the economic contributions of REITs in the United States in based on the 2013 *Impacts for Planning* (IMPLAN) input-output model of the United States, may shed more light on this question in terms of job associated with REIT properties, as opposed to construction impacts analyzed in **Section III** of this study.

[42] See "Statement of Chris B. Heaphy, Assistant Secretary, Taubman Centers, Inc. before the House Committee on Consumer Protection and Commerce and Committee on Judiciary in consideration of SB118, SD1 (March 18, 2015), available at http://www.capitol.hawaii.gov/Session2015/Testimony/SB118_SD1_TESTIMONY_CPC-JUD_03-18-15_.PDF (the Taubman Statement) regarding multi-year redevelopment of both International Market Place. See "Joint Statement of Francis Cofran, General Manager, Ala Moana Center, and Sandeep Mathrani, Chief Executive Officer, General Growth Properties (GGP) before the House Committee on Consumer Protection and Commerce and Committee on Judiciary in consideration of SB118, SD1 (March 18, 2015), available at http://www.capitol.hawaii.gov/Session2015/Testimony/SB118_SD1_TESTIMONY_CPC-JUD_03-18-15_.PDF (GGP's Statement). Specifically, Taubman's Statement noted that the redevelopment of International Market Place is projected to generate 1,000 jobs during construction and 2,500 future full time jobs, and GGP's Statement noted that redevelopment at Ala Moana Center is projected to generate over 11,000 jobs during construction and 3,000 jobs annually.

- In 2013, Hawaii residents are estimated to have paid state individual income taxes of $8.8 million on distributions from REITs.

- Hawaii REIT-owned properties range from health care facilities and hotels to industrial and self-storage properties, office buildings, multi-family structures and a variety of retail facilities ranging up to shopping centers and regional malls.

- REIT-owned properties include many prominent ones familiar to Hawaii residents, such as Wet'n'Wild Hawaii, Waikiki Beach Walk, Ala Moana Center, Pearlridge Center, and Waikele Premium Outlets.

- Hawaii REIT-owned property values total more than 15 percent of Hawaii GDP, ninth highest among the fifty states at current marks to market.

- Hawaii REIT investment amounts at historic cost were second highest among the states and the District of Columbia, which ranked first, in per capita terms and also when ranked by percentage of GDP, more than 9 percent for Hawaii (see **Figures 3** and **4**.)

This is not an exhaustive characterization of REIT-owned properties, but some context for these statistics is useful. Consider that: (a) Hawaii's population was 1.4 million residents in 2014[43]; (b) aggregate output or gross domestic product (GDP) in Hawaii was $77 billion in 2014[44]. Thus, in the real estate valuation context, $11 billion in Hawaii REIT-owned properties in Hawaii is not outsized but it is significant. During fiscal year 2014-2015, the four Hawaii counties' property tax bases collectively comprised $293.1 billion in real assets. This implies that publicly identifiable REIT-owned properties comprised about 4 percent of all taxable real property in Hawaii by this value measure.[45]

[43] United States Census Bureau. See http://quickfacts.census.gov/qfd/states/15000.html.

[44] U.S. Bureau of Economic Analysis. See http://files.hawaii.gov/dbedt/economic/image_DB/gdp_1.png.

[45] See https://www.realpropertyhonolulu.com/content/rpadcms/documents/2014/14_state.pdf. Hawaii's capital/output ratio in terms of taxable real properties was 3.8 ($293.1 million divided by $77.4 billion in GDP). At a potential real GDP growth rate in a range of 2.0-2.5 percent, this capital/output ratio would be consistent with a private investment/GDP ratio of about 7.5-8.0 percent. While it is difficult to calibrate this theoretical concept, instructive upper and lower bounds are the $7.1 billion in average annual Hawaii contracting receipts, 2012-2014 (a gross receipts measure), and the average $4.1 billion Hawaii value-added in construction, 2012-2014 (a GDP measure). Against average Hawaii GDP of $75.1 billion, 2012-2014, these upper and lower bounds represent a range of 5.5-9.5 percent of GDP. Contracting receipts include some equipment investment (e.g. photovoltaic panels), while construction value-added typically is more strictly defined to include capital formation activity involving residential and nonresidential structures (the structures, not what sits on top them). Despite these measurement complexities, and recognizing that during the 2012-2014 interval Hawaii's recovery from the Great Depression of December 2007 through June 2009 was largely complete, it is arguable that investment activity recently has returned to a normal range in Hawaii relative to long-term economic growth parameterizations or, loosely-speaking, the mid-range of Hawaii's construction cycle. Identifiable REIT investments in Hawaii may comprise a somewhat more significant share of new capital formation in Hawaii, than their share of existing real assets.

Within the statewide total of the four county governments' property tax base, $213.3 million comprised residential property valuations, almost three-quarters of all taxable real property in the islands. Commercial property classifications comprise slightly less than one-quarter of the counties' property tax base total; agricultural and conservation lands made up most of the remaining assets.

In the commercial property asset classes in which REITs are invested in Hawaii, tax valuations total $66.5 billion. This would imply REIT ownership participation of around 17 percent *within those commercial asset classes*.[46] Again, these amounts only comprise 3.9 percent of all taxable real property in the islands. Note that these amounts reflect only REIT ownership for which public information is available. The fact that REITs hold about 17 percent of commercial real properties in Hawaii can be given some additional context by comparing tourism's value-added share of output in Hawaii, also around 17-18 percent,[47] and that of the federal government in Hawaii (including a larger than national average military share) around 13 percent of gross product (as of 2013).

This real estate value estimate is a market value for *physical* capital. There are other kinds of capital which, combined with labor and natural resource inputs, produce output. Human capital embodies investments in skill-formation through education and work experience. Knowledge capital or intellectual property and the body of methods and techniques comprising how things are produced are a kind of "software." Social capital can represent the value of networks across individuals in a community that add to its productive capacity, which across workers sometimes is taken into account by corporations as a measure of goodwill.

Physical capital represents produced means of production. In addition to equipment, commercial structures are long-lived assets that yield streams of productive services over time. In turn, these services generate streams of income over time which investors seek earn on their investments. In this way REIT shares in commercial real estate asset classes are like mutual fund shares in companies like banks or utilities or airlines: dividends enabled by these earnings flow through REITs and mutual funds to their ultimate shareholders. The key here is that physical capital enables other forms of capital—human, knowledge, social—to be agglomerated productively in ways in which, literally, the value of the whole exceeds the sum of its parts.

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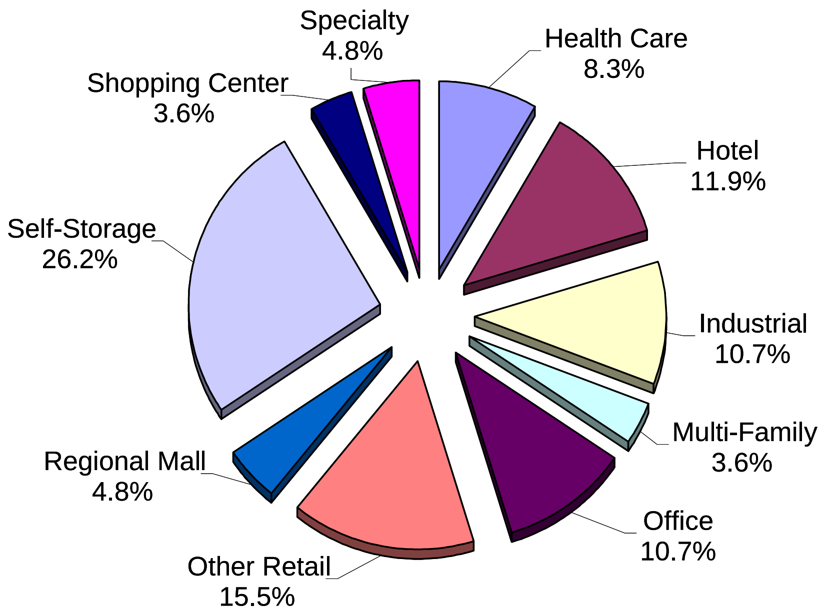
[46] This REIT-participating subset of commercial properties include those in county tax classifications Apartment, Commercial, Industrial, Hotel/Resort, Commercialized Residential, and Time Share. See City & County of Honolulu, Department of Budget and Fiscal Services, Real Property Assessment Division state reports (https://www.realpropertyhonolulu.com/content/rpadcms/documents/2015/15_state.pdf).

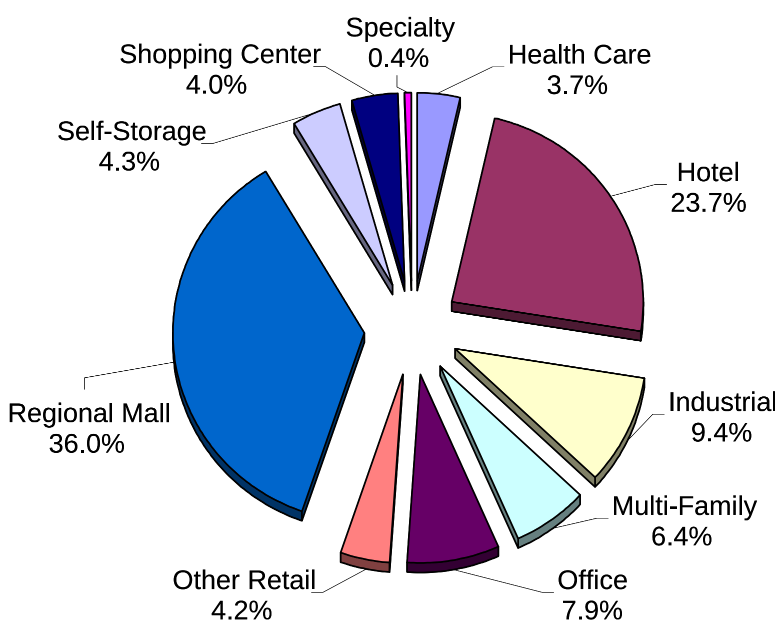
[47] See James Mak (2005), "Tourism demand and output in the U.S. Tourism Satellite Accounts: 1998-2003," *Journal of Travel Research*, **44** (1), pp. 4-5, and Eugene Tian, James Mak, and PingSun Leung, "The direct and indirect contributions of tourism to regional GDP: Hawaii," *UHERO Working Paper No. 2011-5* (July 28, 2011) (http://www.uhero.hawaii.edu/assets/WP_2011-5.pdf).

Figure 1. Public REIT-owned properties in Hawaii by type and number of properties



Source: SNL Financial

Figure 2. Public REIT-owned properties in Hawaii by type and initial cost



Source: SNL Financial

Figure 3. Per capita (resident) REIT investments by state, a partial ranking

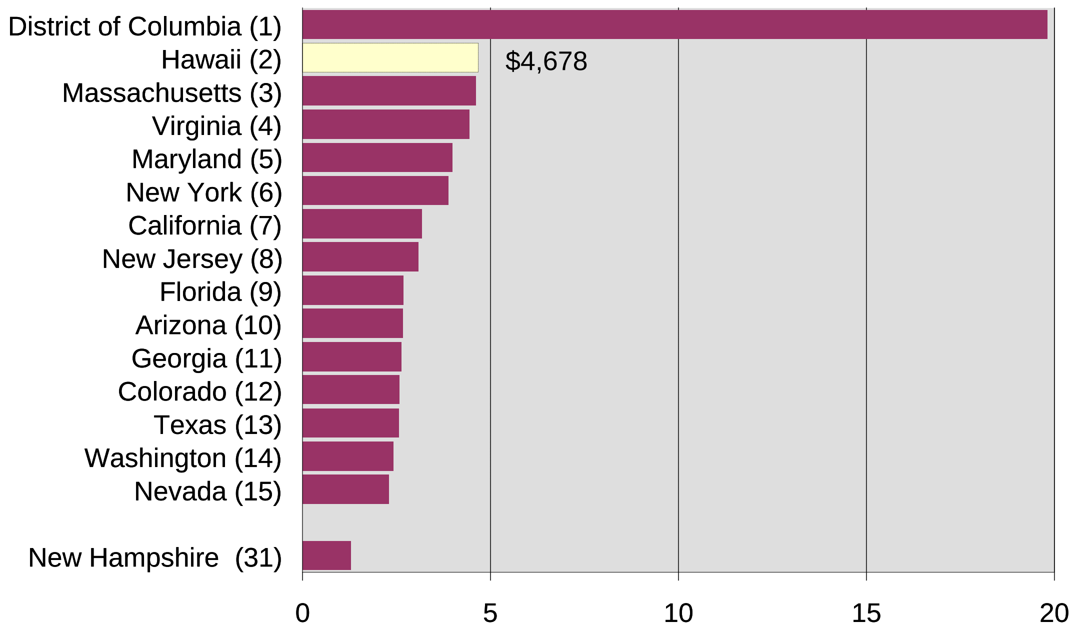
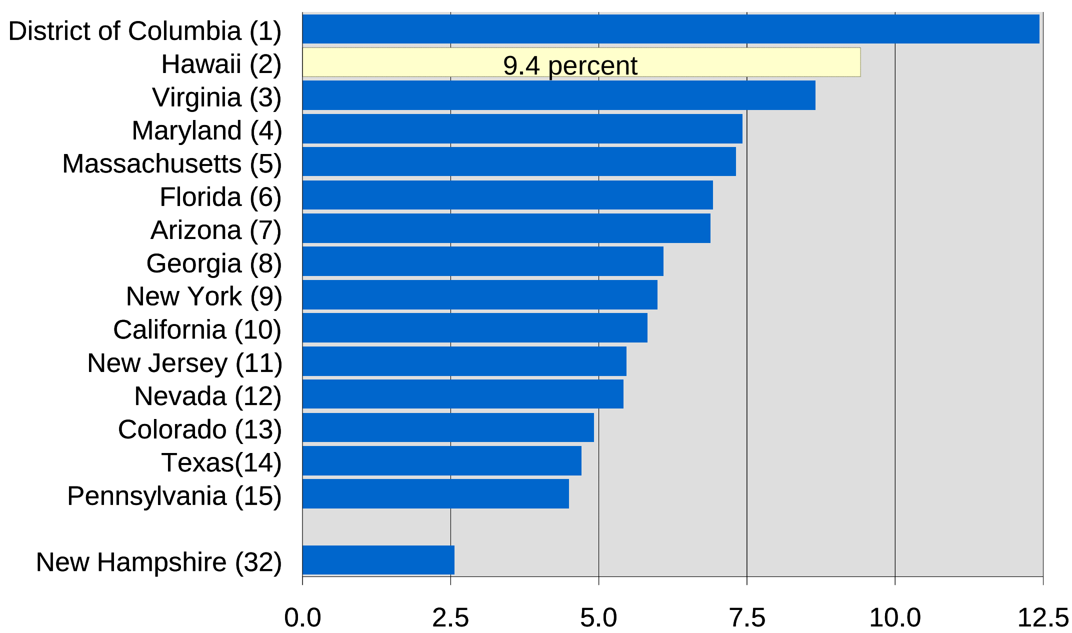


Figure 4. REIT investments as a percentage of state GDP, a partial ranking



Source: SNL Financial; U.S. Department of Commerce.

Table 1. Selected commercial properties owned by REITs in Hawaii

Office
Bishop Place
Bishop Square
Davies Pacific Center
Hale Pawa'a
Harbor Court
Honolulu Club
Kapiolani Medical Center for Women and Children
Kapiolani Medical Center Pali Momi
King Street/Fort Street Mall 1042
Pacific Business News
Pan Am Building
Waterfront Plaza
Hotel
Aston-Honolulu
Courtyard-Coconut Beach-Kauai
Courtyard-Waikiki Beach
Embassy Suites-Waikiki Beach Walk
Fairmont-Kea Lani Maui
Hyatt Ka'anapali Beach
Hyatt Place-Waikiki Beach
Hyatt Regency-Maui
Marriott-Lihue Kauai Resort
Marriott-Wailea Beach Resort & Spa
Retail
Ala Moana Center
International Marketplace
Pearlridge Center
Prince Kuhio Plaza
The Shops at Kalakaua
Waikele Premium Outlets
Waikiki Beach Walk Retail
Whaler's Village
Apartments
Moanalua Hillside Apartments
Villas at Royal Kunia
Waena Apartments
Kapolei Lofts

Sources: SNL Financial (based on publicly filed SEC data) (December 31, 2014), and Forest City Enterprise, Inc., (which will be a REIT effective January 1, 2016).

The $11 billion estimate of the value of REIT-owned properties in Hawaii can be compared to other forms of capital in Hawaii. For example, researchers at the University of Hawaii estimated in the early 2000s that the value of *natural capital* embodied by the upland forests of the Koolau watershed on Oahu, in nexus with instream flows, aquifer recharge capacity, nearshore reef and marine habitats and all of the associated environmental services, was about $10 billion.[48] We know what happens when the watershed is degraded, because Honolulu ran out of potable water at the turn of the 20th century following a prior century of upland deforestation. Similarly, we can imagine what would happen to the economy if REIT-owned commercial and residential properties like those enumerated in **Table 1** suddenly "ran dry," or evaporated. Much physical capital formation underway in Hawaii today would not occur in the future if REITs' investment playing field was tilted unfavorably.

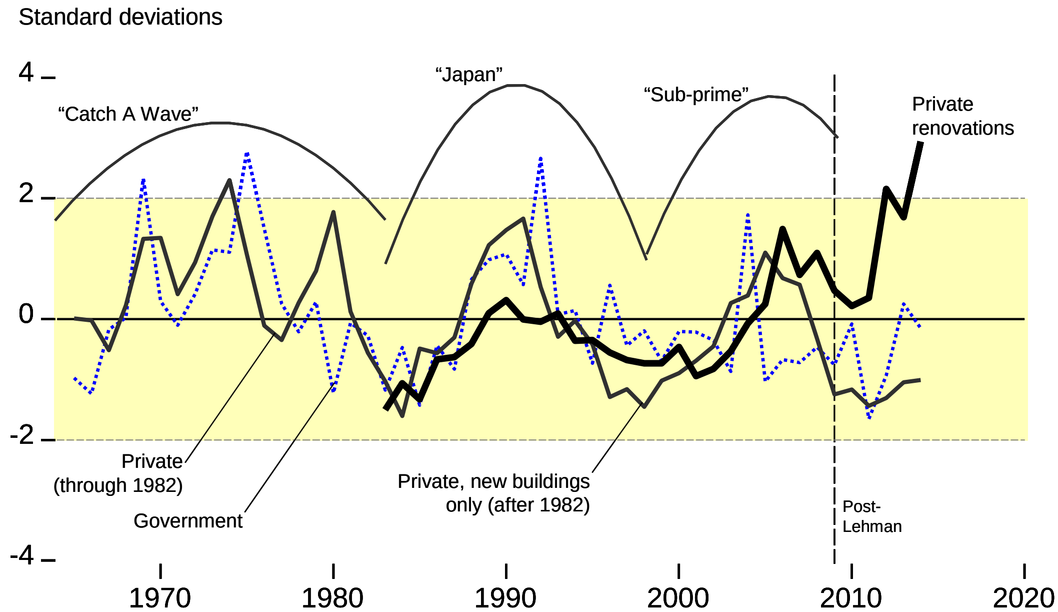
III. Economic impacts of REIT-related construction in Hawaii

A significant proportion of ongoing construction and investment activity in Hawaii is associated with REITs, perhaps more than at any time in the past. This section of the report provides estimates of economic impacts of this REIT-related activity. Even small numbers of selected, REIT-related projects illustrate their importance for overall Hawaii construction because of their large magnitudes and sheer scope. Hawaii physical capital formation through REITs provides access to deep pools of financial capital otherwise challenging to obtain in pursuit of large, transformative development and redevelopment undertakings.

A few REIT-related development projects in Hawaii illustrate what's at stake if Hawaii eliminates the dividends paid deduction for REITs, doubly-taxing investors' net incomes. For context, consider that in the half century since the early 1960, there have been three broad construction waves. The first wave, in the 1960s and 1970s with sub-cycles of its own, can be called the Catch A Wave cycle. The second wave in the 1980s and 1990s can be called the Japan Bubble. The third wave, in the early 2000s, aborted with the collapse of Lehman Brothers in 2008 and can be called the Sub-prime Bubble. The paths of private and public construction through these waves, as well as since 2009, are illustrated below in **Figure 5**.

[48] See Brooks Kaiser and James Roumasset (2002), "Valuing Indirect Ecosystem Services: the Case of Tropical Watersheds," *Environment and Development Economics* **7**:701-714, and extensions of this research program such as James Roumasset and Christopher Wada (July 30, 2010), "Optimal Provision and Finance of Ecosystem Services: the Case of Watershed Conservation and Groundwater Management," *UHERO Working Paper* No. 2010-12 (http://www.uhero.hawaii.edu/assets/WP_2010-12.pdf).

Figure 5. Private and public construction in Hawaii through three waves, 1964-2014 (depicted in standard deviations of inflation-adjusted values over fifty years)



Sources: County building departments, Hawaii DBEDT, Hawaii Department of Taxation, U.S. Bureau of the Census, based partly on historical compilations by Bank of Hawaii and First Hawaiian Bank.

In addition to the long-waves depicted in **Figure 5**, another notable trend is the growing dominance of renovations over new buildings in private construction commitments since the start of the 21st century.[49] Analogous to the role that foreign investors played during the Japan Bubble, and the role that mortgage lending and securitization played during the Sub-prime Bubble, REITs now are playing major role in Hawaii's 20-teens construction wave. Private renovations have become more and more important as an economic driver and some of the largest of these redevelopments involve REIT-owned commercial properties in Hawaii. REITs may be among the dominant investors in this renovation wave. Currently, renovations also appear to be more significant drivers than public construction in Hawaii at *all* levels of government (county, state, and federal combined), which only in the 20-teens has returned to its average of the previous half-century, in constant dollars, possibly because of public urban rail development. Private construction commitments in Hawaii for new structures in the years since

[49] Private renovations data here are the constant-dollar values of private building permits for additions and alterations, as opposed to permits for new buildings, subtracting the estimated value of construction commitments attributable to the State of Hawaii's renewable energy tax credits. The values of all construction commitments are deflated using the Census Bureau's implicit price deflator for construction which, unfortunately, is for residential construction only. (To the extent that this underestimates commercial construction inflation, cyclical upswings are overestimated.)

2008 are at an historic low ebb for investment cycles of the last half century.[50] Just how important a role REITs now play in private Hawaii construction activity, and what might be the consequences for construction in their absence, is considered in what follows.

To demonstrate the possibilities, a model of Hawaii construction activity was developed to estimate a counterfactual outcome in which several important REIT-related projects are removed from the data. Among the projects motivating this counterfactual calculation are the following:

- Waikiki Beach Walk, redeveloped from 2005-2009, initiated by Outrigger Enterprises and other investment participants (including California-based REIT American Assets Trust) on an "8 acre area, bordered by Kalakaua Avenue, Lewers Street, Kalia Road, Beach Walk and Saratoga Road, …completely rebuilt…[at] a total cost of $535 million."[51]

- Ala Moana Center redevelopment and refresh, from 2012-2015, a $573 million project initiated by General Growth Properties (with shares sold during redevelopment to AustralianSuper and TIAA-CREF).[52]

- International Market Place revitalization by development partners Taubman Centers, Inc. and CoastWood Capital Group, LLC, on 6 acres of Waikiki land owned by Queen Emma Land Company, from 2013-2016, at an estimated cost of $350 million.[53]

(In addition, for purposes of the counterfactual calculation, several hundred million dollars in other REIT-related construction, 2006-2014, are incorporated in the overall impact estimate.[54])

Actual Hawaii construction expenditure—constant-dollar contracting receipts on the State of Hawaii's General Excise and Use Tax Base—and counterfactual estimates with and without REIT-related construction are depicted below in **Figure 6**.

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[50] The numbers of new housing units authorized statewide for construction in Hawaii, 2009-2014 inclusive, is the lowest for *any* six-year period for which data are available since the 1950s. On Oahu, for which annual data are available back to 1928, new housing units authorized in the last six years are lower in absolute terms than at any time since World War II and, as a percent of the existing housing stock, are the lowest ever recorded except during world war. For Oahu new homebuilding, literally, "it's so good now, only world war was worse."

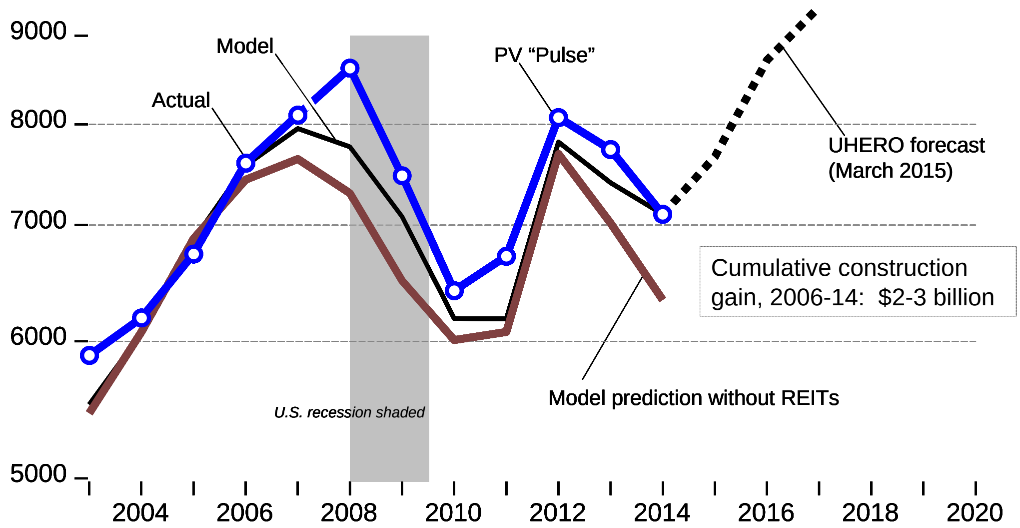
[51] Outrigger Enterprises Group (http://www.waikikibeachwalk.com/press_release_detail.aspx?prid=87).

[52] General Growth Properties (http://www.ggp.com/properties/development-projects/ala-moana-center) and Duane Shimogawa, *Pacific Business News* (http://www.bizjournals.com/pacific/news/2014/12/17/ala-moana-centers-573m-redevelopment-in-pictures.html and other articles by this reporter).

[53] International Market Place (http://shopinternationalmarketplace.com/media/).

[54] This estimate is very loosely motivated by knowledge of renovations at many of the properties identified in the descriptive section of this report in which identifiable REIT-owned properties in Hawaii are enumerated, as well as new projects by developers believed to have REIT relationships.

Figure 6. Actual, model estimates, and counterfactual estimates of annual Hawaii construction outlay in million 2014 dollars



Sources: County building departments, Hawaii DBEDT, Hawaii Department of Taxation, U.S. Bureau of the Census, University of Hawaii Economic Research Organization (http://uhero.hawaii.edu/assets/15Q1HawaiiConstructionForecast-Public.pdf).

The point of this exercise is not to build a construction forecast model *per se*, although the model employed here can be used to forecast construction. Rather, the point of this exercise is to estimate construction impacts with and without REIT-related construction. The impact of segregating approximately $1.5 billion in construction commitments represented by the three projects described above combined with other projects for a total just under $2 billion in REIT-related construction commitments is a counterfactual construction spending estimate $2-3 billion *less* than actually occurred cumulatively between 2006 and 2014 in constant-dollar Hawaii contracting receipts.

To be sure, $2-3 billion less construction over a nine-year interval (inclusive) against an annual average $7.5 billion in Hawaii contracting receipts may not be earth-shattering on its own. On the other hand, $2-3 billion is a lot of construction activity associated with a lot of construction jobs. Using State of Hawaii input-output multipliers, it is associated with roughly $4-6 billion in Hawaii gross product and *at least* an annual average 1,100 jobs over nine years would conservatively taking into account labor-saving productivity growth.

The economy-wide impact in Hawaii of REIT-related construction in the last five years, since the end of the Great Recession in 2009, using the State of Hawaii's input-output model, is presented below in **Table 2**.

Table 2. Economy-wide impacts of REIT-related investment, 2010-2014 using the State of Hawaii input-output model[55]

Million 2014$; jobs as noted	2010	2011	2012	2013	2014
GDP	417	250	279	849	1,624
Earnings	124	74	83	252	482
State tax	24	15	16	50	95
Jobs	3,172	1,877	2,064	6,208	11,728

Sources: This study and Research and Economic Analysis Division, Hawaii Department of Business, Economic Development, and Tourism (DBEDT) (Revised December 2013), The Hawaii State Input-Output Study: 2007 Benchmark Report (http://dbedt.hawaii.gov/economic/reports_studies/2007-io/); estimates exclude ongoing impacts of Ward Village in Kakaako, whose developer de-listed as a REIT in 2015, and adopts DBEDT's productivity growth assumptions (and consequent declining construction labor force requirements over the estimation interval). Additional assumptions regarding the amount of retail sales displacement associated with newly-developed retail square footage are taken from DBEDT's 2007 report. However, the estimates in **Table 2** de-emphasize outlays on architecture, engineering, and other development costs for which details are unknown and do not speak to certain longer-term effects associated with the creation of and reinvestment in productive capacity in retail distribution, food and beverage services, and in arts, entertainment, and recreation activities that may be associated with the transformed facilities.

These are relatively simple estimates based on the estimated differences between actual and counterfactual Hawaii construction illustrated in **Figure 6** for the most recent five years, 2010-2014 inclusive. The estimates include *all* economy-wide impacts—direct, indirect, and induced impacts—associated with REIT-related construction and investment activity and, through backward and forward linkages with construction, throughout the Hawaii economy.

Because the construction model from which these estimates is drawn involves a multi-year trajectory (a time series model), the cumulative impacts in constant (2014) dollars can be

[55] See **Table 2** source listings for details. Ongoing construction impacts prior to the completion dates of some of the projects are included but the impact estimates exclude other known REIT-related projects for which formal construction commitments have not been acquired (certain entitlements and building permits), even though planning, architecture, engineering and entitlement acquisition-oriented activities are underway. The economy-wide Hawaii impact estimates in **Table 2** can be broken down into those directly associated with construction and those indirect and induced impacts arising from inter-industry relationships with those projects. On average from 2010-2014 there were 2,063 construction jobs and 2,947 other jobs associated annually with these projects, yielding an annual average $135 million in construction earnings and $46 million in other earnings. Construction-related annual State tax revenue associated with these projects was $27 million on average; another $8 million arose annually from other associated impacts over the same five years. Annual average contributions to Hawaii GDP were $1 billion from construction activity and $429 million in other activity associated with these REIT-related investments. All breakdowns are expressed in constant, 2014 dollars, but not in present-value terms.

expressed equivalently in terms of present values in 2010, discounting subsequent years' outcomes. This answers the question, given what we now know about 2010-2014, evaluated at the start of the recovery in present-value terms and adjusted for construction cost inflation: "how much were REIT-related construction projects worth to Hawaii in total economy-wide impacts as they rippled through the economy via measured inter-industry effects?" The answer is a partial answer, as these projects will continue to have impacts in 2015, 2016, and possibly 2017. New projects will doubtless arise not included here, and even this partial answer ignores the *permanent* impacts of the new productive capacity created by these REIT-related developments. (For example, in its present form this study does not include estimates of the present values of future property tax revenues in real, inflation-adjusted terms.)

The summary impacts, 2010-2014, of REIT-related construction in Hawaii, in present-value terms from the standpoint of 2010 in inflation-adjusted, 2014 dollars are:

(*a*) $3.1 billion in additional Hawaii GDP over the five-year period, about half coming in 2014 as this construction activity and its multiplier impacts reached a crescendo.

(*b*) $934 million in workers' earnings during those five years, half coming in 2014.

(*c*) $184 million in State of Hawaii tax revenues (ignoring property taxes) over five years (the equivalent of 2-3 years' *total* Hawaii corporate income tax receipts).

(*d*) Approximately 5,000 jobs on average over five years, although more than twice that many as associated economic activity peaked in 2014.

Again, it should be expected that this REIT investment-originating impulse in real Hawaii economic activity would continue while tapering off in 2015 and 2016, and possibly 2017, not including any future, as yet unknown REIT-related activity.

Some of the dynamic impacts of REIT-related construction take the form of additional construction activities *induced* by the REIT-related projects themselves and implicitly picked up by the specification of the construction model.[56] For example, contractors employed in REIT-related developments may expand their warehouse, industrial, and job training facilities, or they may engage in their own private residential renovations as a consequence of the economic stimulus and wealth-enhancement attributable to REIT-related projects. The model is able to pick up an anomalous surge in photovoltaic panel installation driven by State renewable energy tax credits, peaking in 2012, and segregates it from the REIT effects, indicated by the label "PV pulse" in **Figure 6**. Also illustrated in **Figure 6** are published Hawaii construction forecasts by the University of Hawaii Economic Research Organization (UHERO). UHERO anticipates continued growth in real (inflation-adjusted) construction activity in Hawaii for the next several years. Doubtless some of this future construction activity also is associated with REITs.

[56] These indirect and induced effects are fleshed out in the input-output model, which relies on interindustry linkages to compare two static economic equilibria—with and without REIT-related construction—but does not compare alternative economic trajectories

Without getting too hung up on false precision, the point illustrated is straightforward. As with REIT property ownership in Hawaii, REIT-related construction in Hawaii is significant. Its presence has been material to recent Hawaii economic performance improvement more generally, and its contribution to Hawaii's ongoing construction upswing is especially notable.

As important as *magnitudes* of REIT-related construction activity are the *characteristics* of REIT-related construction. The three projects highlighted in the counterfactual estimation exercise are distinguished as major, transformative urban redevelopment initiatives in Honolulu. Redevelopment of Waikiki Beachwalk, Ala Moana Center, and International Market Place all involve *repositioning* of major, existing resort retail (and lodging) commercial real estate assets. In each instance the projects individually as well as collectively have been transformative investments for Waikiki and for Oahu, helping redefine the island as a tourism destination. The projects also adapt productive capacity to changing resident consumer preferences.

Very few individual investors—if any—and fairly small numbers of corporate players in Hawaii have capital markets access equivalent to what is enabled by REITs in these instances. Redevelopment may be even more important than suggested by the estimates reported here. The counterfactual analysis even some excluded REIT participation in Honolulu's urban core for technical reasons, so as not to appear to overestimate its impacts.[57]

Urban redevelopment as transformative repositioning of residential and commercial real estate assets in Hawaii is of growing significance in the early 21st century. During the mid-20th century, development was centered on building new productive capacity in Hawaii for emerging tourism exports and a burgeoning strategic role for Hawaii in Pacific geopolitics, as manufacturing and agricultural exports such as sugar and pineapple were eclipsed. Today, in the 21st century, development is centered on rebuilding existing productive capacity, enhancing it qualitatively while expanding it quantitatively. Especially on Oahu, urbanization is evolving away from greenfield development characterized by urban sprawl and outward spatial radiation of Honolulu's urban footprint, to redevelopment and more intensive use of existing urban spaces.

Oahu's "space-time continuum" increasingly is bogged down by negative congestion externalities. The value of open space and of agricultural and conservation lands as natural capital on Oahu—partly through inter-relationships with upland watersheds and nearshore environments—has become better appreciated. Just as renovation has grown relative to construction of new buildings in Hawaii, as illustrated in **Figure 5**, urban redevelopment is of growing relative importance in the formation of productive capacity in Hawaii compared to suburban and rural development. This refresh of Honolulu's urbanscape has been facilitated by REITs, which are folding large-scale development back into the urban core. REITs are an important financial vehicle for realizing more efficient use of existing Honolulu urban areas, and for reducing the need to pave over the islands' agricultural and conservation areas while expanding Hawaii's productive capacity.

[57] One Kakaako developer (Howard Hughes Corporation) revoked its subsidiary's status as a real estate investment trust in 2015. Another Hawaii developer, Forest City Enterprises, Inc. (parent of Forest City Hawaii, a major participant in U.S. Department of Defense privatization of military housing on Oahu since 2000), is electing REIT status effective January 1, 2016. Neither developers' activities are included in the counterfactual estimates.

IV. Hawaii tax policy and REITs

This section of the study informally considers three tax policy subjects from the perspective of public economics that are related to REITs in Hawaii. First, a review of simple tax economics is sketched, primarily because of Hawaii legislative consideration of removal of the dividends paid deduction (DPD) accorded to REITs, and because of the regulatory requirement and competitive practice assuring that virtually all REIT net income is paid to shareholders as dividends. Second, the particular and idiosyncratic nature of Hawaii corporate net income tax revenues is considered, partly for context. Third, some conjectures that might loosely be considered dynamic scoring hypotheses are suggested; true dynamic scoring quantifies revenue impacts of tax policy changes after *including* the behavioral changes *in response to* the policy change.

A. *Tax economics for undergraduates*

Revenue adequacy, economic efficiency, and fairness or equity are three pillars of a sound tax system, according to what is commonly taught to undergraduate economic students.[58] Tax revenue is adequate only in the context of government expenditures which, typically in democratic process, rely on mechanisms for revelation of public preferences to be set "just right."[59] Social democracies that embrace public mass transit and universal health care coverage, for example, tend to have tax levels higher than polities that eschew public mass transit and incompletely provide citizens access to health care.[60] An efficient tax system is one in which economic outcomes are least likely to diverge from those in a setting without taxes, if it were possible for the modern economy to function without a public sector. For example, the prevailing view among economists is that double taxation of corporate income causes economic distortions and market inefficiencies resulting in the *mis*allocation of capital.[61] Because the evaluation of fairness or equity involves interpersonal comparisons of welfare, economics tends to offer limited if often quantitatively rigorous guidance with regard to what is fair and what isn't in taxation. Economic is not as well-suited to questions of equity as it is questions of efficiency.

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[58] See, for example, a more expansive variation on these themes emphasizing equity (fairness) on pages 9-10 of *the Final Report of the Real Property Tax Advisory Commission* (January 2012) of the City & County of Honolulu (http://www4.honolulu.gov/docushare/dsweb/Get/Document-120786/cc15.pdf). This section also draws partly on the author's lecture notes for Economics 311, *Hawaii's Economy*, at the University of Hawaii, following a tradition established by the course's originator, Professor James Mak of the Department of Economics at the University of Hawaii at Manoa.

[59] Paul H. Brewbaker, "Are taxes in Hawaii too high?" chapter 13 in Randall W. Roth (ed.), James Mak and Jack P. Suyderhoud (technical editors) (1992), *The Price of Paradise*, Mutual Publishing, Honolulu.

[60] See, for example, comparable data on central government tax revenues as a percent of GDP for such countries as Austria (18.3 percent, 2006-2010) and the United States (10.2 percent, 2006-2010) published by the World Bank (http://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS).

[61] *See, e.g.*, http://taxfoundation.org/article/eliminating-double-taxation-through-corporate-integration or http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_15_en.pdf.

A recent Hawaii legislative proposal to eliminate the DPD for REITs directly raises such issues as revenue adequacy, economic efficiency, and fairness or equity. Perennial issues of revenue adequacy are one context for consideration of REIT DPD removal.[62] REITs pay out virtually their entire net income to shareholders through dividends, where it is taxable as dividend income. This was intended by the U.S. Congress in establishing REITs as an investment vehicle. Absent a dividends paid deduction, a REIT paying Hawaii State corporate net income taxes first, and then distributing its after-tax income as dividends, would subject its shareholders to double taxation. Double taxation of capital income is a notorious distortion in the economic theory of taxation, one that reduces society's welfare. It reduces investment, other things equal, which is the formation of new capital, the economy's productive capacity. So, eliminating the DPD for REITs is a mechanism through which Hawaii, over time, would form less productive capacity—less investment in new productive capacity—risking lower productivity and lower aggregate income in the future.

Double-taxing capital income reduces optimal productive capacity in a couple ways. It increases the cost of the capital itself. A given amount of investment funding cannot finance as much actual development if returns on those investments are reduced by increasing taxes on their investment income. That is, double taxation of capital income reduces the optimal *stock* of productive capacity. Given today's capital stock, a lower optimal stock of capital tomorrow implies a smaller *flow* of investment transforming today's existing productive capacity into tomorrow's new productive capacity. That is, double taxation of capital income reduces construction, the flow of new capital formation. Double taxation of capital income could induce *dis*investment, not just relatively less construction of new productive capacity, but actual deconstruction of productive capacity to achieve a lower capital stock.

By reducing competition or contestability in Hawaii commercial real estate markets, the introduction of double taxation of capital income arising from a *particular* form of investment, such as REITs, might enhance the dynamic gaming strategies of wealthy individual investors. Historically, this is a classic example of protectionism or special interest politics and a more prominent feature of the ruling oligarchy during Hawaii's Territorial Era before statehood. The Congress specifically sought to counter such concentrations of wealth and political power when it enabled REITs in 1960. Limiting competition or inhibiting contestability in markets for commercial real estate reduces the probability that properties will be operated in the most efficient way possible, to generate the greatest rents, and to maximize community benefits.[63]

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[62] Revenue adequacy will confront the new City & County of Honolulu Real Property Tax Advisory Commission (http://erniemartinatcitycouncil.com/tag/oahu-real-property-tax-advisory-commission/) and were important to the State of Hawaii Tax Review Commission 2010-2012 (http://tax.hawaii.gov/stats/a9_2trc/).

[63] *See* William Hardin III, Matthew Hill, and James Hopper (2009) Ownership Structure, Property Performance, Multifamily Properties, and REITs. *Journal of Real Estate Research*: 2009, Vol. 31, No. 3, pp. 285-306.
"[I]ncreased operating performance (due to higher rents when REIT owns and operates properties) provides another reason REITs are willing to acquire properties at slight premiums to the prices paid by other investor groups. As an investment vehicle, REITs can benefit from increases in effective rent at the property level as well as previously documented cost or scale efficiencies. In a general sense, the REIT ownership structure represents diversified scale operators with property management skills. The benefits are not only cost related scale economies, but also include

Financial innovation in Hawaii since REITs were enabled in 1960 relies on an important principle customarily embraced by Hawaii tax law. This is the principle that a financial conduit which simply pools investor resources, distributing net incomes from collective investments back to those same investors, should *not* itself be taxed on those flows. The *individuals* should be taxed, not the conduit.

In Hawaii, this is related to the principle that exempts commercial banks, savings and loans, and credit unions from paying the Hawaii general excise tax, a gross receipts tax, on deposits received from or interest paid to their banking customers.[64] After all, these financial institutions are receiving funds from their depositors (and shareholders, in the case of credit unions), who then receive interest. These depository institutions *intermediate* between creditors (depositors) and debtors (borrowers), but the act of receiving a deposit does not create a taxable gross receipt, nor is the income earned from borrowers who pay interest on their loans a taxable gross receipt. It's true that commercial banks and savings banks—but not credit unions—pay a corporate net income tax, but that's because, unlike REITs which are single-purpose vehicles, most depository institutions have multiple lines of business across the spectrum of financial services, and because, unlike REITs, financial institutions have no distribution requirements.[65] Commercial banks and savings banks also can retain corporate earnings or deploy them through share buybacks to enhance shareholder value quite apart from operating more efficiently as lending institutions. Nevertheless, the principle that intermediaries to the extent possible should not be taxed on intermediation *per se* is a common thread in financial regulation.

Interest income earned by the commercial bank, savings bank, or credit union depositor—the individual's income—*is* subject to individual income taxation, just as is an individual's dividend income. Interest and other financial services income at a bank is not income of its corporate shareholders *until* costs of funding bank loans and other costs of financial services operations are netted out. Only then, and only because it then becomes an individual shareholders' income tax liability, is such dividend income subject to Hawaii income tax. The same is true of dividends paid to individuals who are REIT investors in Hawaii: they pay income tax on their dividend income, as they do on other income such as wages and salaries.

A wealthy individual who incorporates ownership of an apartment building, for example, must pay Hawaii's corporate net income tax because the corporation owns the apartment building. She also has to pay the individual income tax on the dividend income she earns from

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revenue enhancements due to the ability to better assess market and sub- market supply and demand and make adjustments in rent. The results imply that the structure of property ownership impacts property performance."

[64] Strictly speaking, financial institutions in Hawaii pay a franchise tax in lieu of the general excise tax which, in principle, still should apply to *non*financial intermediation-related income. In the language of the *Report of the Tax Review Commission* (December 1, 1989) (page 41): "Consistent with the concept of a consumption based tax, the GET should not be levied on the entire amount of insurance premiums since much of it is a form of savings rather than consumption. Similarly, dividend and interest income earned from investment portfolios are not consumption and should be [GET] exempt." See http://files.hawaii.gov/tax/stats/trc/docs1989/1989_TRC_Report.pdf.

[65] At any rate Hawaii corporate net income taxes apply only at the holding company level for deposit-taking financial institutions because of the broad array of assets, typically across the full spectrum of asset classes including real estate, from which financial subsidiary net incomes are upstreamed to the holding company level.

any dividends that are distributed by her corporation, the one that owns the apartment building. For that matter, she would pay individual income tax if she owned a lunch wagon, or a nail salon, or an industrial equipment leasing company, as long as they generate income for her. The choice whether to structure holdings as personal assets, in partnerships or corporations, or in more financially innovative vehicles, however, is a personal financial decision. If double-taxation *is* a problem arising from such decisions for *some* investors in Hawaii, the better remedy for those investors is to solve their problem directly, not to make a problem for other investors.

Financial innovation generally, and the enabling federal legislation that made REITs an investment vehicle in 1960, in particular, both are a part of a process of *democratization* of financial markets and institutions in their evolution during the late-20th century.[66] This process of financial innovation improved society's welfare. In addition to increasing individual investor access to financial asset ownership, financial innovation increased access to credit because obtaining credit requires being able to pledge collateral—some portion of personal wealth. One hundred years ago in Hawaii, when assets (and especially real estate assets) were held by small numbers of wealthy individuals and families, access to ownership *and* to credit was limited for the rest of the population, excluded from real estate ownership in the absence of REITs.

Modern-day securitization provides a channel for greater inclusivity. Rather than owning real estate outright, or instead of forming a family *hui* or a partnership or corporation, real estate investment trusts are able to provide access to ownership of many different kinds of real estate assets for millions of individual investors, for small investors. People participate in REIT ownership either through their personal investing or through their pension funds, insurance companies, and other investment services providers. This enables less wealthy individuals and households to build wealth portfolios combining smaller, diverse investment holdings. It provides them with the collateral and access to credit that previously they would not have had. The democratization of the U.S. financial system through financial innovation and securitization in large part is the reason why the U.S. ranks so highly, worldwide, in financial sophistication and accessibility. REITs are part of the process by which the U.S. financial system has become more efficient and its benefits more fairly distributed.

B. *Hawaii corporate net income taxes*

Hawaii collects a statistically insignificant amount of its total State budget from corporate income tax revenues. Hawaii corporate net income tax revenues were constant-dollar annual average of $95 million in 2014 dollars for the last forty-five years, out of total state revenues exceeding $14 billion in the current fiscal year (14.0 versus 0.1).[67] On trend, Hawaii real

[66] *See*, e.g., F. Packer, T. Riddiough & J. Shek, *Securitization and the Supply Cycle: Evidence from the REIT Market*, J. Portfolio Management, Vol. 39 pp. 134-143.

[67] Hawaii Council on Revenues. See the September 2015 General Fund tax revenue forecast http://files.hawaii.gov/tax/useful/cor/2015gf09-03_with0910_Rpt2Gov.pdf, and projected revenue from sources other than General Fund tax revenues http://files.hawaii.gov/tax/useful/cor/2015gf09-03_attach_3.pdf.

corporate net income tax revenues were about $66 million in 2014,[68] and fiscal year 2015 corporate tax revenues were $52 million.[69] By contrast, the largest State of Hawaii revenue components are the General Excise Tax (GET) ($2.97 billion in 2014, $3.05 billion in fiscal 2015), federal revenue sharing (a projected $2.86 billion in fiscal 2015), charges for current services (projected $2.20 billion in fiscal 2015), and the individual income tax ($1.82 billion in 2014, $1.99 billion in fiscal 2015), which includes taxes on REIT dividend income.[70]

The idea that doubly-taxing REIT net incomes would have a material impact on Hawaii corporate net income tax revenues is implausible. Doubly-taxing REIT net income may make it untenable for REITs to fulfill their shareholder obligations by owning real estate assets in Hawaii. When combined with the direct reduction in GET and income taxes from diminished REIT-related construction, fewer jobs, and lower earnings, and from the reduction in business and individual incomes because of indirect and induced impacts of lower REIT-related construction, the State of Hawaii is likely to incur a net revenue loss if it removes the DPD for REITs.[71]

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[68] Calculated by regressing the natural logarithm of the annual constant-dollar value of Hawaii corporate net income tax revenues on a time trend, and projecting log-linearly the regression model's estimate.

[69] Department of Taxation (http://files.hawaii.gov/tax/stats/monthly/2015-07.zip). FY 2015 corporate income tax revenues were less than 0.8 percent of Hawaii General Fund Revenue, and less than 0.4 percent of total revenue.

[70] State of Hawaii non-revenue receipts are projected at $2.04 billion in fiscal 2015 (see footnote 67).

[71] Hawaii's "foregone" corporate income tax revenue from REITs is *not* equal to the product of Hawaii-sourced rental income times the Hawaii corporate net income tax rate, arithmetic that reflects several invalid assumptions regarding taxation of multistate business entities. The bad math considerably exaggerates any potential corporate tax revenue from REITs. First, the math fails to recognize that most multistate corporations engaged in the rental property business file what is known as a combined tax return in Hawaii. Essentially, such corporations must calculate combined taxable income of all of the various business entities in the rental property business at the federal level and then apportion this taxable income among the various states in which they do business based on a combination of factors. Not all rental income earned in Hawaii would be apportioned back to Hawaii (*see* http://www.cost.org/workarea/downloadasset.aspx?id=70000.) Second, if Hawaii increased the tax rate on income apportioned to Hawaii, affected REITs would re-allocate capital, payroll, and property to other states (or countries) where greater returns on investment would be available. This redeployment would reduce further the taxable income apportioned to Hawaii. Third, public REITs operating in Hawaii need to revisit capital markets regularly to raise additional capital. Non-REIT entities, in contrast, employ significantly higher levels of debt and utilize the corresponding interest deductions (along with other tax minimization techniques) to reduce their taxable income. Public REITs incur only modest amounts of debt. Eliminating the DPD would encourage investors in Hawaii to incur more debt and to increase their interest deductions in order to reduce any potentially taxable income. Fourth, while Hawaii might be able to collect some increased corporate income tax from double taxing REITs in the very short term, capital is highly mobile and REITs can allocate their resources elsewhere where returns on investment would be higher. This would shift Hawaii property ownership towards tax-*exempt* investors which are not subject to tax on rental income in Hawaii. (See http://nreionline.com/institutional-investors/pension-funds-endowments-hunger-real-estate-assets and https://www.preqin.com/docs/reports/Preqin-Investor-Outlook-Alternative-Assets-H1-2015.pdf). They also tend not to have the extensive management experience of public REITs, and are less likely to make the extensive investments necessary to generate the increased economic activity and jobs from which additional net income and tax revenue arise. Thus, while there might be a short-term blip of increased corporate income tax revenues initially, if Hawaii doubly-taxed REITs, it could mean a net reduction in overall tax revenues as a result of dynamic impacts, through disinvestment and capital flight.

Hawaii's corporate net income tax revenue from *all* Hawaii corporations with a tax liability hasn't been material to overall State of Hawaii revenues or even to General Fund revenues in Hawaii for several decades. As recently as this January, 2015, the author's testimony to a joint informational briefing of Hawaii legislative money committees underscored this point.[72] On that occasion it was observed, but only upon being asked by a committee member, that corporate net income tax receipts not only were immaterial to State revenues and spending, they frequently were smaller than the tolerance interval (plus or minus one or two percentage points) that Hawaii Council on Revenues members informally assigned to their State General Fund revenue growth forecasts as an acceptable margin of error.

In 1997, when discussions involving Governor Cayetano's Economic Revitalization Task Force (ERTF) recommendations were underway, it was observed that eliminating Hawaii's corporate net income tax altogether might have a signaling benefit to Hawaii greater than the revenue the State receives by taxing corporations. The ERTF recommended reducing corporate tax rates by half. Among the reasons cited by Chris Grandy in his review of ERTF proposals:

> *Economists concerned with economic efficiency focus on* rates *of taxation rather than the total or average amounts collected. They believe that people respond to the world incrementally, that the decision to take a second job or to expand into a new line of business depends on the expected* additional *costs and* additional *benefits* [emphasis in the original text].[73]

During the economic recovery since the Great Recession of 2008-2009, calendar year Hawaii corporate net income tax receipts have followed the business cycle from a recession low of $41.1 million (in 2014 dollars) during 2009, the last year of recession. An abortive corporate income tax rebound in 2010 unraveled in 2011, when the annual total was $20.7 million (in 2014 dollars). Economic recovery thereafter increasingly took hold, buoyed by a sharp rise in commodity prices (like sugar), and corporate tax revenues rose to $137.3 million during 2013 (in 2014 dollars). An economic Soft Patch in Hawaii and an unwinding of the global commodity price bubble led Hawaii corporate tax revenues to drop to $65.7 million in 2014, as alluded to earlier, and to $52.3 million in the fiscal year ending June 30, 2015, not adjusted for inflation.

In constant, 2014 dollars, Hawaii corporate net income tax receipts have been trending downward for nearly a half century, from around $110 million in 1969 to around $66 million in 2014 (calendar years). This represents annualized erosion in real terms of about 0.45 percent each year over the last 45 years.[74] The reasons for this erosion may have to do with more

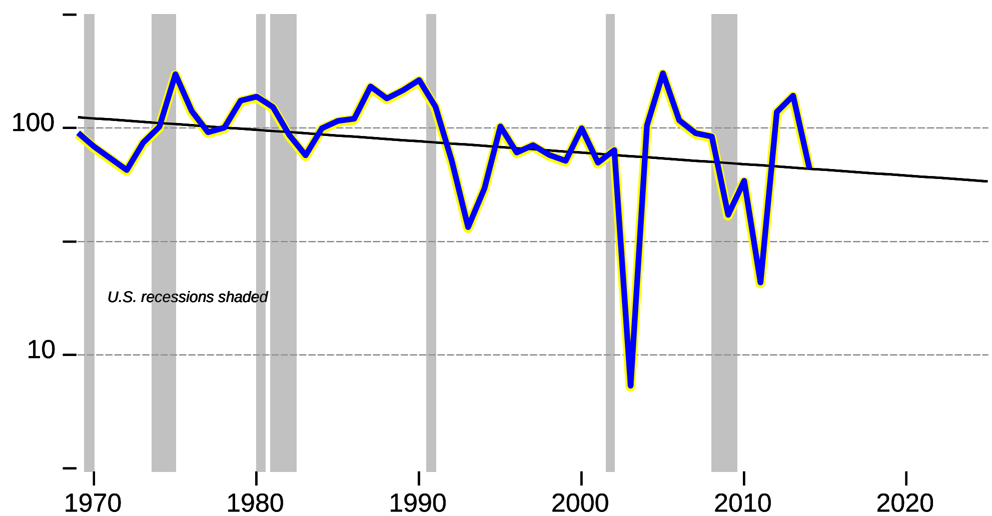
[72] The author's testimony posted on the Hawaii Senate Ways and Means Committee web site includes only his PowerPoint slides, not reference to the commentary following in the Q&A. See: http://www.capitol.hawaii.gov/session2015/testimony/Info_Testimony_WAM-FIN_01-21-15_Brewbaker.pdf.

[73] Christopher Grandy (2002), *Hawaii Becalmed: Economic Lessons of the 1990s*, University of Hawaii Press, Honolulu, page 67, and its Appendix 1, pp. 115-117, for itemization of the ERTF policy proposals.

[74] In 1969, when the Hawaii Department of Planning and Economic Development's estimate of Hawaii GDP was $10.6 billion in current dollars, corporate income taxes in Hawaii were $14.4 million, about 0.135 percent of GDP.

aggressive corporate tax planning, among other things, but it is clearly a phenomenon that is not unique to Hawaii, and precedes the introduction of the Internet in the mid-1990s.[75]

Figure 4. Hawaii annual corporate net income tax receipts, 1969-2014, calendar years, in millions of constant, 2014 dollars (log scale)



Source: Hawaii Department of Taxation, Bureau of Labor Statistics (author's calculations).

Even if Hawaii corporate net income tax revenue had not declined steadily for the last 45 years, the political reality is that the corporate income tax is retained mostly because of populist considerations, not because of economic considerations. If Hawaii legislatures were seriously concerned about the potential amounts of foregone State revenue upon repeal of the corporate income tax, they could eliminate or claw back state tax credits that result in an even greater annual revenue loss to the State. For example, the Hawaii State Auditor estimates that high technology business investment tax credit claims have cost the state an average of $70.4 million annually, fiscal years 1999-2012, annual amounts larger than corporate net income tax receipts in calendar 2014, annual amounts approaching average constant-dollar corporate tax receipts 2000-

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In 2014, the U.S. Bureau of Economic Analysis estimate for Hawaii GDP was $77.4 million, and corporate income taxes in Hawaii were $65.7 million, about 0.085 percent of GDP.

[75] See Appendix D to the 2001-2003 Hawaii Tax Review Commission Report, by William F. Fox and LeAnn Luna (June 5, 2002), *State Corporate Tax Revenue Trends: Causes and Possible Solutions* (http://files.hawaii.gov/tax/stats/trc/docs2003/trc_app_d2003.pdf).

2014 ($83 million), and more annually than the corporate income tax trend projection in **Figure 4** for the years 2015-2025.[76]

The 2005-2007 Hawaii Tax Review Commission proposed eliminating the Hawaii corporate net income tax altogether. In its final report, this commission argued:

> *The academic literature on the topic* [of corporate net income taxation] *indicates that small open economies, such as individual states, shoot themselves in the foot when they tax corporate income, because in the long run the burden of the tax is borne by local landowners and workers, not, as popularly believed, by the corporate shareholders.*[77] *Such jurisdictions can improve the competitiveness of their economies and the welfare of their residents by exchanging corporate income taxes for taxes on wages and land.*[78] *Popular notions of equity may explain why many small jurisdictions continue to apply corporate income taxes.*

The answer to the question, "why are REITs not subject to corporate income taxation?" is simple: REITs distribute most net income which is taxable as dividends to shareholders, in keeping with the principle that intermediation should not be taxed, only final income. A more interesting question is why, when yielding so little revenue, does Hawaii still have a corporate net income tax? Its elimination or diminution repeatedly has been proposed, and the State gives away much more in tax credits of dubious efficacy than it receives in corporate tax revenue.

C. *Barriers to capital mobility*

This study has highlighted the idea that eliminating the dividends paid deduction for REITs in Hawaii would reduce investment in Hawaii, or induce disinvestment in Hawaii, and as a consequence would be unlikely to generate significant corporate net income tax revenue. It

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[76] The Hawaii State Auditor estimates that $1.7 billion in technology tax credits have been distributed as tax expenditures and that an estimate of $2 billion is not unreasonable, given that the credits have no sunset date and no cap, and no mechanism for evaluating their efficacy. See, "Credits Continue to Tax the State: Follow-Up on Recommendations Made in Report No. 12-05, Audit of the Department of Taxation's Administrative Oversight of High-Technology Business Investment and Research Activities Tax Credits *Report No. 15-11* (September 2015) (http://files.hawaii.gov/auditor/Reports/2015/15-11.pdf).

[77] [Footnote in original text] "These arguments are presented in greater detail in Tax Research and Planning Office, Hawaii State Department of Taxation, *Study on the Progressive or Regressive Nature of Hawaii's Taxes*, and Tax Research and Planning Office, *Study on the Question 'Is Hawaii's Tax Structure Adequate?'* report prepared for the 2005-2007 Tax Review Commission, November 2006."

[78] [Footnote in original text] "In a letter to the 2001-2003 Tax Review Commission (included in the last two pages of the [Commission's] report), Lowell Kalapa, President of the Tax Foundation of Hawaii, argued that the Commission should consider reducing or eliminating the Corporation Income Tax, on grounds that it contributed little to the State's revenue, but that reducing the rate would 'go a long way toward improving the attractiveness of Hawaii as a place to invest and do business.'"

conjectures that elimination of the DPD risks a net revenue loss to the state and negative consequences for the state economy.[79]

The dividends paid deduction, together with the requirement to distribute nearly all taxable income to shareholders, are the foundation of the REIT concept. The requirement to distribute at least 90 percent of taxable income to shareholders is not economically feasible without the complementary dividends paid deduction to offset the nearly total payout of the REIT's income.

If the dividends paid deduction were removed on a national basis, REITs would stop operating as REITs to eliminate the income distribution requirement. However, if eliminating the dividends paid deduction *only* in Hawaii, REITs would not choose to change their form of organization and lose their investors by shedding their REIT status; they would simply stop doing business in Hawaii, where REIT investments are second highest nationwide on a per resident and per GDP basis (see **Figure 3** and **4**). Creating an economic barrier to capital mobility that induces REITs to leave Hawaii, by disinvesting, would shrink the state economy. Construction impacts associated with REITs similar to those analyzed earlier in this study, illustrated in **Figure 6**, and enumerated in **Table 2**, would be foregone.

It is highly unlikely that capital from local investors would be sufficient to make up for the loss of REIT-supplied capital associated with these jobs and incomes, because REITs are not limited to raising capital from one geographical area or from one type of investor. REITs are aggregators of capital, not just from one state or even one country, but from around the world. Their investors are as diverse as the individual investors who own mutual funds and individual stocks, the mutual funds that make up our nation's 401(k) retirement plan system, the large pension funds that invest to provide retirement security for public employees throughout the country, and the sovereign wealth funds that invest in national assets. REITs bring all of these diverse sources of capital to bear on projects that offer the promise of higher returns and divert capital from areas with lower returns. They have the ability to put capital to work to support jobs and income in Hawaii or to take capital elsewhere, which would put more than 10,000 Hawaii jobs and more than $600 million in labor income at risk.

Eliminating the REIT dividends paid deduction in Hawaii may benefit only a small class of potential investors, especially when policy-makers simply could lower or eliminate corporate income taxes to the benefit of not only this class but of all corporations in Hawaii, potentially raising investment. Hawaii could even reduce corporate taxation in a revenue-neutral fashion, *and* in a manner that improves economic efficiency, through compensatory elimination of poorly-regarded tax credits. The point is that better alternatives exist to making bad tax policy (eliminating the REIT dividends paid deduction) on top of already bad tax policy (increasingly fruitless taxation of corporate net incomes).

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[79] The hypothesis of adverse State revenue and state economic impacts arising from elimination of the DPD for REITs in Hawaii might best be tested using a class of models known as computable general equilibrium models parameterized to Hawaii economic conditions, but this exercise goes beyond the current scope of this study.

There are two ways that additional taxation as a barrier to capital mobility might reduce REIT investments in Hawaii. First, an increase in taxes—beyond *existing* taxes on REIT investors' dividend incomes—would raise what is called the user cost of capital. Intuitively, this is the economic cost of using capital for an additional period. Even if you are "renting" your own capital from yourself there is an opportunity cost from tying up its use. Construction is physical capital formation, an adjustment from a lower current to a higher future capital stock. A higher user cost of capital is associated with a lower future capital stock. If you're planning to expand a shopping mall, a higher capital cost decreases its target size. Less investment ensues.

Adding a tax or withdrawing an exemption raises the cost of capital, making it more expensive to build new productive capacity. It's not that a hypothetical tax increase is *the* only thing that could to undermine a construction project's viability: higher interest rates do the same thing. However, in an economic union like the United States with highly mobile capital, a union in which *every* other state except one does not impose an additional tax on REITs, competition may lead capital to flow to one of the 48 states without the tax distortion, away from Hawaii. Unlike rising interest rates that affect all states equally through higher user cost, a higher tax in Hawaii benefits all *other* states by only raising the user cost of capital in Hawaii.

The second way adverse consequences may arise from elimination of the dividends paid deduction for REITs is a phenomenon known as signaling. Although capital is highly mobile—giving every state competitive access to global capital markets—information available to investors is asymmetric. People in Hawaii know more about how things work in Hawaii than people outside Hawaii. Not every Wall Street investor, pension fund, or insurance company investment committee is as familiar as are people in Hawaii about political and economic conditions in the islands. Local knowledge is costly for outsiders to obtain, presenting a challenge for Hawaii in attracting capital. Information technology has diminished information asymmetry. Still, a good reputation as an investment host is valuable because it reduces investors' costs of verification. Conversely, a reputation for changing rules in the middle of the game can signal adversely the credibility of a host jurisdiction's commitments to investors.

If for fifty years a state has taxed REIT dividends only once, an investor may take that as a signal that the state's investment climate is stable and predictable. Tax environments vary from state to state. Legislatures try *not* to misalign their tax systems too extremely from others' systems to avoid deterring investment by sending the wrong signal to investors. While tax systems can vary so far as either not having an individual income tax (like Texas) or having the lowest major city residential property tax rate in the country (like Honolulu),[80] when evaluated as a whole Hawaii frequently ranks among the higher-taxed states overall.[81] There's more at

[80] U.S. Bureau of the Census, *Statistical Abstract of the United States 2012*, Table 448. Residential Property Tax Rates for Largest City in Each State: 2009 (https://www.census.gov/compendia/statab/2012/tables/12s0448.pdf).

[81] Or, Hawaii is more regressive: *op cit*. footnote 78, Table 447. Estimated State and Local Taxes Paid by a Family of Three for Largest City in Selected States: 2009 (https://www.census.gov/compendia/statab/2012/tables/12s0447.pdf). The 2010-2012 Hawaii Tax Review Commission compiled findings of prior commissions, three of which (1988-90, 1995-97, and 2005-07) recommended "Lower[ing] the overall level of [Hawaii] state taxes" (http://files.hawaii.gov/tax/stats/trc/docs2012/trc_rpt_2012_appendices_A-H.pdf).

stake for Hawaii, perceived as a higher-taxed state, in signaling accurately what investors will face.

Investment can be undermined by higher uncertainty, which reduces risk-adjusted investment returns just as do higher interest rates or higher taxes. Predictability of the investment environment reduces the inherent uncertainty facing large or irreversible construction and investment decisions. Signaling that Hawaii supports investment, based on consistent tax rules, helps build a reputation that helps to overcome uncertainty. In recent years, Hawaii’s reputation as an investment host suffered after its Supreme Court in 2009 excluded an interisland passenger ferry already in commercial operation, bankrupting it. More recently, construction of high-elevation astronomical facilities, following nearly fifty years of space research on the same mountaintops, has been clouded by the lack of clarity regarding new facilities’ prior regulatory approvals. The signal being sent to investors in these instances is more mixed and less predictable. The resulting increase in uncertainty tends to reduce investment.

Repeal of the DPD for REITs in Hawaii probably would result in a net revenue loss to the State from a combination of bad consequences for the Hawaii economy. By raising the user cost of capital, double-taxation of REIT income would reduce investment returns directly. By reducing the future optimal stock of productive capital, double-taxation of REIT income would reduce the flow of construction and investment. Doubly taxing REITs in Hawaii would diminish urban redevelopment and would inhibit repositioning of major commercial real estate assets in Hawaii. The magnitudes of adverse impacts for Hawaii construction are suggested by imagining that Waikiki Beachwalk, Ala Moana Center, and International Market Place had not been redeveloped by REITs. These projects are only highlights in potentially foregone recent construction of at least several billion dollars—around twice that much in overall economic activity— if Hawaii’s state tax environment already had been made more hostile to REITs. Imagine what could have happened but never will in the future, if Hawaii doubly taxes future REIT income. By giving financial capital an incentive to flow *away* from Hawaii, eliminating the dividends paid deduction for REITs in Hawaii unambiguously would make the Hawaii economy and its residents worse off.

Appendix I

Umbrella Partnership REITs (UPREITs)

Like most other real estate owners, many of the almost 200 publicly traded REITs hold all of their assets through an operating partnership (OP), the majority of the interests of which are held by the REIT. These REITs are known as umbrella partnership REITs or UPREITs.

An UPREIT generally consists of a publicly traded REIT that owns substantially all of its assets and conducts substantially all of its operations through an OP. As a general rule, the REIT will own a number of “common units” in the OP equal to the number of shares of common stock that the REIT has outstanding. In addition, if the REIT has preferred stock outstanding, the REIT will own “preferred units” in the OP that correspond to the shares of preferred stock that the REIT has outstanding.

The limited partnership interests held by partners in the OP other than the REIT also are denominated as “units.” Because the REIT owns substantially all of its assets and conducts substantially all of its operations through the OP, and because the REIT owns a number of OP units equal to the number of shares of common stock that it has outstanding, there is effectively an economic identity of interest between the units in the OP that are owned by the outside limited partners and the shares of common stock outstanding in the REIT.

Typically, the REIT acquires its interest in the OP in one of two ways, both evidencing a substantial equity investment in the OP. First, the REIT may sell its shares in an initial public offering and contribute the cash proceeds to the OP. Alternatively, the REIT may contribute real property or partnership interests in partnerships that own real property to the OP. Then, the REIT (or a subsidiary) typically acts as the sole general partner of the OP, and has the exclusive right to manage the affairs of the OP, subject to limitations intended primarily: 1) to preserve the effective economic identity of interest that exists between the units and the REIT shares, and, 2) to avoid the REIT or OP taking actions that would eliminate or adversely affect the redemption/exchange right for unitholders described below.

The third party unitholders typically acquire their interests in the OP in one of two ways: either by i) contributing their direct interests in real property to the OP in exchange for OP units, or, ii) by contributing their interest(s) in pass through entities that own real property to the OP in exchange for OP units.

If new partners are admitted to the OP, the REIT’s interest in the OP diminishes over time, typically not below 50%. Conversely, as a REIT issues secondary offerings and contributes cash to the OP (probably the norm), the REIT’s interest in the OP increases. The REIT’s interest also may increase as unitholders exercise their redemption/exchange rights described below.

The first reported UPREIT transaction was that of Taubman Centers, Inc. in 1992. Currently, based on equity market capitalization, over 60% of the publicly traded REITs are UPREITs.

The UPREIT structure was developed to facilitate the desire of real estate owners to be able to access the public capital markets through the flow-through structure commonly used in the real estate industry while deferring the immediate recognition of taxable gain that would result if they were to transfer their properties or property-owning partnership interests directly to the REIT in exchange for REIT shares, rather than to the OP in exchange for units.

Appendix II

Biography

Paul H. Brewbaker, Ph.D., is principal of TZ Economics, a Hawaii consultancy. Dr. Brewbaker was formerly Chief Economist and Senior Vice President at Bank of Hawaii, where he worked for more than 25 years. He earned his Ph.D. in Economics at the University of Hawaii, Manoa, did graduate work in Economics at the University of Wisconsin—Madison, and received his undergraduate degree in Economics at Stanford University. A frequent university lecturer through the years, Brewbaker was an inaugural recipient of the Certified Business Economist (CBE) designation by the National Association for Business Economics (NABE), in 2015.