

MARGINAL TAX RATES AROUND THE HAWAII ITEMIZED DEDUCTION CLIFF

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ABSTRACT

The State of Hawaii allows paid State taxes as an itemized deduction on the State income tax return. The deduction is available only for individuals with Federal adjusted gross income less than \$200,000. Hawaii also limits total itemized deductions to \$50,000 for individuals with Federal adjusted gross income of \$200,000 or above. These provisions create a tax cliff that implies extraordinary marginal tax rates. The added dollar of income from \$199,999 to \$200,000 triggers a loss of the entire tax paid deduction and caps itemized deductions at \$50,000. We compute marginal tax rates for adjusted gross income levels around the \$200,000 tax cliff. Results indicate marginal tax rates reach levels as high as 367,100 percent. The paper provides taxpayers with concise information regarding the importance of these Hawaii tax cliffs and suggests policy changes.

JEL: H2, H71

KEYWORDS: Hawaii State Taxes, Marginal Tax Rates

INTRODUCTION

Hawaii tax provisions include a tax cliff related to itemized deductions. The tax cliff has two components. The first component results from a provision that State taxes paid are deductible for married filing joint (MFJ) returns reporting Federal AGI below \$200,000. However, the tax is not deductible for MFJ returns reporting Federal adjusted gross income (AGI) of \$200,000 or above. The second component limits the sum of all itemized deductions to \$50,000 for MFJ returns reporting \$200,000 or more of Federal AGI. A provision that reduces itemized deductions by 3 percent for each dollar of Federal AGI in excess of \$166,800 further exacerbates the cliff.

This paper explores implications of the Hawaii Itemized Deduction Tax Cliff for taxpayers and recommends policy changes. Hawaii is one of several states to adopt itemized deduction limitations. However, other states, under pressure to increase revenues, may adopt similar policies or modify existing policies, which further explains our motivation for this study. Moreover, the Federal Tax Code is scheduled to impose itemized deduction limitations in 2013 through a provision called the Pease Limitation. These limitations will reduce certain Federal itemized deductions to the lesser of (1) 3% of the adjusted gross income above a certain amount, or (2) 80% of the itemized deductions otherwise allowed for the year. The results here provide some guidelines on how best to implement these Federal limitations. The results will also be useful for Hawaii taxpayers who must manage their income around these limitations through extensive tax planning.

Identification of marginal tax rates is important both for taxpayers and tax authorities (Scholes, Wolfson, Erickson, Maydew and Shevlin, 2005) whether or not a tax cliff is involved. On occasion tax laws impose unusually high or low marginal tax rates that motivate various behaviors among taxpayers clustered by income level, a phenomenon often referred to as *tax clienteles* (Scholes et al., 2005). In some situations these behaviors may be desired such as the case of tax credits associated with the installation of solar devices. In other situations the behavior may not be desired such as the use of IRA's

as a short-term income management tool (Jalbert, Fleischman and Jalbert, 2009). Extreme marginal tax rates can provide important motivations for small businesses to locate in one area or another.

The remainder of the paper is organized as follows. In the next section the paper discusses relevant Hawaii tax laws. The following section provides a review of the extant literature. Next, we compute marginal tax rates for income levels around the Hawaii tax cliffs. The paper closes with some policy recommendations and concluding comments that are applicable to policymakers in Hawaii as well as other states and the Federal government.

HAWAII TAX LAW

The State of Hawaii collects tax revenues through four primary sources: general excise taxes (GET) transient accommodations taxes (TAT), individual income tax (IIT) and corporate income taxes (CIT). Other taxes in Hawaii include the Fuel Tax, Unemployment Insurance Tax, Cigarette and Tobacco Tax, Insurance Premium Tax, Public Service Company Tax, Motor Vehicle Taxes and Fees, Liquor Tax, Conveyance Tax, Banks and other Financial Corporations Tax and Estate and Transfer Tax (2012 Study of Hawaii Tax System).

The Hawaii GET is based on gross proceeds of sales or income of businesses. It is responsible for about 57.6 percent of General Fund revenue. The tax is set a 4 percent. The county of Honolulu levies a 0.5 percent GET surcharge. GET tax is due on the tax collected, raising the effective tax rate to 4.686 and 4.166 for activities inside and outside of Honolulu County respectively (2012 Study of Hawaii Tax System, Final Report, p. 40-42).

The transient accommodation tax rate equals 9.25 percent. The tax is levied on the amount charged for rooms or apartments that will house a visitor who lives in the room for 180 consecutive days or less. Most receipts from this tax pass on to the respective counties within Hawaii. This TAT is responsible for 5.4 percent of total revenue and 1.4 percent of General Fund revenue (2012 Study of Hawaii Tax System, Final Report, p. 44-45).

The Hawaii Corporate Tax Rate ranges from 4.4 percent on income up to \$25,000 to 6.4 percent on income over \$100,000. State collections from this tax have declined by 19.4 percent since 2007. This may be attributable in part to tax loss carry forwards and carry backs (2012 Study of Hawaii Tax System, Final Report, p. 55). It may also be due to small business opting for non-corporate organizational forms.

The Hawaii Individual Income Tax is the second largest revenue generating tax, responsible for 28.8 percent of General Fund revenue. The Hawaii income tax has twelve brackets. The State income tax rate for married couples filing a joint return ranges from 1.4 percent on income up to \$4,800 (\$2,400 for single filers and \$3,600 for head of household filers) to 11 percent on incomes over \$400,000 (\$200,000 for single filers and \$300,000 for head of household filers). The standard deduction in Hawaii for the 2012 tax year is \$4,000 for Married couples filing a joint return (\$2,000 for Single or Married Filing Separate returns and \$2,920 for Head of Household). This is an important consideration. Because of these low thresholds, itemized deductions are perhaps a more important element of State taxes in Hawaii than in other states. The low standard deduction levels provide considerable motivation for taxpayers to itemize their deductions (2012 Study of Hawaii Tax System, Final Report, p. 42-43).

In general, expenses that qualify for itemizing in the state of Hawaii include medical and dental expenses that exceed 7.5 percent of State AGI, interest expense on home mortgages and on Investments, contributions to charities, casualty and theft losses that exceed ten percent of Hawaii AGI and State taxes paid. However, for tax years after 2010, the State placed some limitations on the amount of itemized deductions that can be claimed (Hawaii Tax 2012 form N-11, Itemized Deduction Worksheet).

Hawaii tax law specifies that taxpayers may take their choice of paid State income taxes or Hawaii paid GET tax as an itemized deduction on the state return. Hawaii Senate Bill 570 provides limitations on the extent to which income taxes paid can be deducted on the State return. It also provides a limitation on the total itemized deductions that can be claimed on the State return (Hawaii Senate Bill 570, 2011). These provisions have the effect of creating a tax cliff.

The first tax cliff component results from a provision that the deduction for State taxes paid is allowed only if Federal adjusted gross income is less than \$100,000 for single or married filing separately taxpayers, less than \$150,000 for head of household taxpayers, or less than \$200,000 for married taxpayers filing a joint return or qualifying widow or widower. Thus, taxes paid are entirely deductible, or entirely non-deductible, when AGI changes by a single dollar. Crossing the tax cliff implies the loss of a substantial tax deduction.

The second tax cliff component relates to a provision that establishes an itemized deduction limit for taxpayers with Federal AGI exceeding a threshold. For taxpayers having Federal AGI of \$200,000 or higher, the State itemized deduction is limited to \$50,000. The provision limits itemized deductions to \$37,500 for Head of Household taxpayers with Federal AGI above \$150,000 and \$25,000 for Single Taxpayers with Federal AGI above \$100,000. These deduction limits are scheduled to expire on December 31, 2015. Hawaii Senate Bill 1091 entered January 24, 2013 also proposes to exempt charitable contributions from these limitations. As of March 2013 this exemption law has not been passed.

Another Hawaii provision that states the sum of all itemized deductions must be reduced by 3 percent for each dollar of Federal AGI in excess of \$166,800 for MFJ (\$83,400 if filing separately) exacerbates both cliff components. Thus for a MFJ taxpayer having \$175,000 of Federal AGI and \$25,000 of otherwise qualifying itemized deductions, the allowed State tax deduction is reduced by \$246 $(\$175,000 - \$166,800) * 0.03$.

The 2012 Study of Hawaii Tax System, Final Report suggests a number of modifications to the Hawaii tax code. However, none of these suggestions address the tax cliff effects noted here. Thus, the specific objective of this paper is to critically evaluate these tax cliffs and to propose suggested alternatives to the Hawaii State tax system. The more general objective of this study is to illustrate the complex by-products of tax legislation which may be unintentional. Ultimately, we wish to underscore the absurd marginal tax rates that emanate here from well-intentioned tax policy designed to raise Hawaii revenues. These implications are relevant for policymakers in Hawaii as well as other states and the Federal government.

LITERATURE REVIEW

If individuals do not accurately perceive their marginal tax rates, taxing authorities can create tax provisions that take advantage of misperceptions even if some tax consequences were not intended. For example, Fujii and Hawley (1988) test the accuracy with which individuals perceive marginal tax rates. They compare perceived and computed marginal tax rates for 3,824 American households. They find that taxpayers accurately perceive the marginal tax rates they face. Bruce, Fox and Yang (2010) examine how state personal income tax structure affects the levels of state personal income tax bases. They examine panel data from fourteen states. Their results show that tax rates on wage and capital income have no impact on the bases reported by the states. They argue their findings imply that taxpayers engage in planning to control differential tax effects.

Bach, Corneo and Steiner (2012) examine optimal top marginal tax rates under income splitting for couples. They derive a formula for the optimal top marginal tax rate that depends on the elasticity and

income distributions of both couples and singles in the economy. They examine the formula using German taxpayer data and find that the optimal tax marginal tax rate is about 66% and should be applied only to very high incomes.

A number of authors attempt to estimate marginal tax rates. Prante and John (2012) calculate the combined state and federal top marginal effective tax rate for each of the United States and for varying income sources. They find for tax year 2012, Hawaii taxpayers face a combined State and Federal top marginal tax rate of 44.4 percent on wages, which ranks Hawaii below only California as the highest taxed state. Magg, Steuerle, Chakravarti and Quakenbush (2012) examine the impact of high marginal tax rates on low-income families. They find that a single parent with two children can experience an average marginal tax rate of over 100 percent or as low as 26 percent as their income moves from 100% to 150 percent of the poverty level. Reed, Rogers and Skidmore (2011) develop a new method to compute marginal tax rates that are time variant. They find that Hawaii has the third highest marginal State tax rate at 12.5 percent. Hawaii trails only New York and Maine for highest state marginal tax rates.

Of critical importance to government policymakers is the extent to which tax and other policies stimulate or retard economic growth. A large body of literature examines this issue. McBride (2012) provides an excellent review of the literature. While most researchers find a negative relationship between tax levels and economic growth, the evidence is mixed. The bulk of the research suggests a negative relationship between higher taxes and economic growth. Barro and Redlick (2011) find that a one percent cut in the average marginal tax rate increases the following year per capita Gross Domestic Product (GDP) by 0.5 percent. Halcombe and Lacombe (2004) find that states that raised income taxes average a 3.4 percent reduction in per capita income. A number of other authors find negative relationships between tax rates and economic growth (see Ferde and Dahlby, 2012; Reed, 2008; Tomljanovich, 2004; Chernick, 1997 and Mullen and Williams, 1994). On the other hand, Mendoza, Milesi-Ferretti and Asea (1997) find overall that tax burden levels have no effect on investment or growth. Katz, Mahler & Franz (1983) find that taxes reduce savings, but do not affect growth or investment.

These mixed findings suggest that more research is needed to address marginal tax rate behavioral implications. We contend the present Hawaii tax cliff legislation provides a natural experiment to illustrate absurd marginal tax rate consequences that emanate from otherwise well-intentioned legislation that begs significant Hawaii taxpayer behavioral response as we shall illustrate.

MARGINAL TAX RATE CALCULATIONS

This section provides calculations of marginal tax rates surrounding the tax cliff identified above. The first section examines the paid State tax limitation on itemized deductions. The second section examines the total itemized deductions limitation.

State Taxes Paid Limitation

This section shows marginal tax rate computations for Federal AGI levels approaching and breaching the tax cliff and thereby triggering the State tax paid limitation on itemized deductions. Consider a married couple that files a joint return. The entire income of the couple is Hawaii state income. The taxpayer works a state job that pays \$135,000 per year. The taxpayer defers 30,000 in income through a combination of tax-deferred accounts. The spouse is self-employed. The self-employment income may be managed between tax years using a combination of income management, expense management and a Simplified Employee Pension account.

During 2012, the taxpayer made \$28,000 in estimated Federal tax payments and \$7,000 in estimated State payments all of which are applicable to the 2012 return. In addition, Hawaii State tax of \$2,000 was paid

in 2012, associated with the 2011 tax year return. The employer withheld the following amounts on wages paid to the taxpayer: \$12,600 for Federal taxes, \$6,500 for State of Hawaii taxes, \$4,624.50 for Social Security taxes and \$1957.50 for Medicare taxes. The State withholding rate here equals approximately 5.2 percent of employment income. The only listed deductions are taxes paid as noted above and interest expense on a first mortgage of \$25,000.

Using the above data, we calculate the total tax due by changing the amount of self-employment income realized in the tax year. We then compute the State marginal tax rate (SMTR), the Federal marginal tax rate (FMTR) and combined State and Federal marginal tax rate (CMTR) respectively using the following formulas:

$$SMTR = \frac{\text{Change in State Taxes Payable}}{\text{Change in Federal Adjusted Gross Income}} \quad (1)$$

$$FMTR = \frac{\text{Change in Federal Taxes Payable}}{\text{Change in Federal Adjusted Gross Income}} \quad (2)$$

$$CMTR = \frac{\text{Change in Federal} + \text{Change in State Taxes Payable}}{\text{Change in Federal Adjusted Gross Income}} \quad (3)$$

We use TurboTax Home and Business 2012 to complete all tax calculations. Table 1 shows the resulting computations relating to the State tax paid limitation on itemized deductions. Each column in Table 1 shows the results for a different income level. Column 1 shows the computations for Federal AGI of \$199,013 and Federal Taxable Income of \$150,913. The total Federal tax due equals \$32,587. Social Security Taxes represent \$2,552 of the tax due. For Hawaii tax purposes, the tax deduction is \$15,500 and the interest deduction is \$25,000. The 3 percent limit reduces these amounts to allowed deductions of \$39,534 implying taxable income of \$157,732. State tax due equals \$11,520.

The second column shows results of computations for Federal AGI of \$199,999. The section labeled State Analysis shows the State AGI increased by \$986 over the previous estimate and the tax due increased by \$87 representing an 8.824 percent marginal tax rate.

The section labeled Fed Analysis W SS shows the Federal tax computations including the effects of Social Security Taxes. This analysis considers all taxes, including Social Security, in calculating the marginal tax rate. For Column 2, the results indicate a Federal AGI change of \$986. The Federal tax change of \$303 represents a 30.73 percent marginal tax rate.

The section labeled Fed Analysis WO SS ignores the effects of Social Security taxes when computing the marginal tax rate. We complete this analysis because, unlike other federal taxes, taxpayers receive a direct benefit from paying Social Security Tax. The benefit an individual receives depends directly upon the amount of money the individual pays into the system. Evaluating future benefits associated with paying additional Social Security Taxes is beyond the scope of this paper. We mitigate this element by providing computations with and without consideration of Social Security tax. The Column 2 results show a tax change of \$276 representing a 27.992 percent marginal tax rate.

The section labeled Federal + State shows the combined federal and state marginal tax rate. Calculations are completed both including and excluding Social Security taxes. The results show 39.544 and 36.815 percent combined marginal tax rates when considering and ignoring Social Security taxes respectively.

Table 1: Tax Computations for Hawaii Tax Deduction Limitation

Federal	1	2	3	4	5	6	7	8	9
Net Bus Income	95,289	96,289	96,290	97,289	98,289	99,289	100,289	101,298	102,289
Total Income	200,289	201,289	201,290	202,289	203,289	204,289	205,289	206,289	207,289
Fed AGI	199,013	199,999	200,000	200,986	201,973	202,959	203,946	204,932	205,919
Fed Tax Income	150,913	151,899	151,900	152,886	153,873	154,859	155,846	156,832	157,819
Fed Taxes	32,587	32,890	32,890	33,193	33,495	33,799	34,102	34,405	34,707
SS Portion of Fed	2,552	2,579	2,579	2,606	2,632	2,659	2,686	2,713	2,739
State									
State AGI	199,013	199,999	200,000	200,986	201,973	202,959	203,946	204,932	205,919
Tax Deduction	15,500	15,500	0	0	0	0	0	0	
Interest Deduction	25,000	25,000	24,004	23,974	23,945	23,915	23,886	23,856	23,826
Allowed Deduction	39,534	39,504	24,004	23,974	23,945	23,915	23,886	23,856	23,826
Taxable Income	157,732	158,789	174,290	175,306	176,322	179,044	178,396	179,412	180,471
State Tax Due	11,520	11,607	12,886	12,970	13,054	13,141	13,225	13,308	13,396
State Analysis									
State Tax Change		87	1,279	1,363	1,447	1,534	1,618	1,701	1,789
State AGI Change		986	1	987	1,974	2,960	3,947	4,933	5,920
State Marginal Rate		8.824	127,900	138.095	73.303	51.824	40.993	34.482	30.220
Fed Analy W SS									
Federal Tax Change		303	0	303	605	909	1,212	1,515	1,817
Fed AGI Change		986	1	987	1,974	2,960	3,947	4,933	5,920
Fed Marginal Tax Rate		30.730	0.000	30.699	30.648	30.709	30.707	30.712	30.693
Fed Analysis WO SS									
Fed Tax Change		276	0	276	552	829	1,105	1,381	1,657
Fed AGI Change		986	1	987	1,974	2,960	3,947	4,933	5,920
Fed Marginal Tax Rate		27.992	0.000	27.964	27.964	28.007	27.996	27.995	27.990
Combined Fed and State									
Combined Fed and State W SS		39.554	127,900	168.794	103.951	82.534	71.700	65.194	60.912
Combined Fed and State WO SS		36.815	127,900	166.059	101.266	79.831	68.989	62.477	58.209

Table 1: Continued

Federal	10	11	12	13	14	15	16	17	18
Net Bus Income	103,289	104,289	105,289	106,289	107,289	112,289	117,289	122,289	147,289
Total Income	208,289	209,289	210,289	211,289	212,289	217,289	222,289	227,289	252,289
Fed AGI	206,906	207,892	208,879	209,865	210,852	215,785	220,718	225,651	250,316
Fed Tax Income	158,806	159,792	160,779	161,765	162,752	167,685	172,618	177,551	202,216
Fed Taxes	35,011	35,314	35,617	35,920	36,223	37,738	39,253	40,768	48,344
SS Portion of Fed	2,766	2,793	2,820	2,847	2,873	3,007	3,141	3,275	3,945
State									
State AGI	206,906	207,892	208,879	209,865	210,852	215,785	220,718	225,651	250,316
Tax Deduction									
Interest Deduction	23,797	23,767	23,738	23,708	23,678	23,530	23,382	23,234	22,495
Allowed Deduction	23,797	23,767	23,738	23,708	23,678	23,530	23,382	23,234	22,495
Taxable Income	181,487	182,544	183,560	184,576	185,635	190,799	195,963	201,127	226,947
State Tax Due	13,480	13,567	13,651	13,735	13,822	14,248	14,674	15,100	17,230
State Analysis									
State Tax Change	1,873	1,960	2,044	2,128	2,215	2,641	3,067	3,493	5,623
State AGI Change	6,907	7,893	8,880	9,866	10,853	15,786	20,719	25,652	50,317
State Marginal Rate	27.117	24.832	23.018	21.569	20.409	16.730	14.803	13.617	11.175
Fed Analysis W SS									
Federal Tax Change	2,121	2,424	2,727	3,030	3,333	4,848	6,363	7,878	15,454
Fed AGI Change	6,907	7,893	8,880	9,866	10,853	15,786	20,719	25,652	50,317
Fed Marginal Tax Rate	30.708	30.711	30.709	30.712	30.710	30.711	30.711	30.711	30.713
Fed Analysis WO SS									
Fed Tax Change	1,934	2,210	2,486	2,762	3,039	4,420	5,828	7,235	14,168
Fed AGI Change	6,907	7,893	8,880	9,866	10,853	15,786	20,719	25,652	50,317
Fed Marginal Tax Rate	28.001	27.999	27.995	27.995	28.001	27.999	28.129	28.204	28.157
Fed and State									
Fed and State W SS	57,825	55,543	53,727	52,281	51,120	47,441	45,514	44,328	41,888
Fed and State WO SS	55,118	52,832	51,014	49,564	48,411	44,730	42,932	41,821	39,333

This table shows tax computations for a married couple that files a joint return. The entire income of the couple is Hawaii state income. The taxpayer works a state job that pays \$135,000 per year. The taxpayer defers 30,000 in income through a combination of tax deferred accounts. The spouse is self-employed. The self-employment income may be managed between tax years using a combination of income management, expense management and a Simplified Employee Pension account. During 2012, the taxpayer made \$28,000 in estimated Federal tax payments and \$7,000 in estimated State payments all of which are applicable to the 2012 return. In addition, a tax of \$2,000 was paid in 2012, associated with the 2011 tax year return. The employer withheld the following amounts on wages paid to the taxpayer: \$12,600 for Federal taxes, \$6,500 for State of Hawaii taxes, \$4,624.50 for Social Security taxes and \$1957.50 for Medicare taxes. The only listed deductions are taxes paid as noted above and interest expense on a first mortgage for \$25,000.

The third column shows tax computations when Federal AGI equals \$200,000, a single dollar more than the results reported in column two. The additional dollar of income affects the Hawaii tax cliff. In this case, the paid State tax deduction of \$15,500 is no longer allowed. Total State itemized deductions are reduced by \$15,100 (\$39,504 – 24,404). State taxable income increases by \$15,501 (from \$158,789 to \$174,290) and state tax increases by \$1,279. This tax increase, associated with a single dollar of additional income, implies a 127,900 percent marginal tax rate! The Federal tax does not change, as the dollar of additional income does not result in an additional dollar of taxes.

Column four shows results when State AGI increases to \$200,986, an additional \$987 over the \$199,999 AGI reported in column two. This change results in a state tax increase of \$1,363 implying a 138.095 percent Hawaii State marginal tax rate on the \$987 additional income. Federal tax increases by \$303 and \$276 when Social Security taxes are included and excluded respectively. The implied marginal Federal tax rates equal 30.699 percent and 27.964 percent. Combined State and Federal marginal tax rates equal 168.794 and 166.059 percent respectively, when including and excluding Social Security taxes.

An examination of the remaining columns in Table 1 shows the combined marginal tax rate for Federal AGI of \$201,973 continues to exceed 100 percent. Thus, the combined Federal and State tax authorities confiscate the entire addition to earnings from Federal AGI of \$199,999 to approximately \$202,000. As AGI increases, the marginal tax rate on income over \$199,999 decreases as the tax paid deduction loss has a smaller impact. Indeed the itemized deduction limitations impact asymptotically disappears with Federal AGI increases. However, the State marginal tax rate remains above 30 percent, and the combined State and Federal tax rates remain above 60 percent for Federal AGI levels up to approximately \$206,000. The State marginal tax rate remains above 25 percent for Federal AGI levels up to approximately \$207,500. It remains above 20 percent for AGI levels up to approximately 210,000.

Maximum Itemized Deduction Limitation

In this section, we examine the \$50,000 limitation on total itemized deductions for MFJ taxpayers with Federal AGI of \$200,000 or more. Consider the same taxpayer discussed above. However, the taxpayer experiences an additional \$70,000 medical expense for the tax year. Serious medical and other events can result in such large expenses for many taxpayers. Medical expenses are subject to the limitation that only those medical costs that exceed 7.5 percent (in 2012) of Federal adjusted gross income are allowed as an itemized deduction. The additional deduction affects the \$50,000 total itemized deduction limit. In a manner analogous to the previous section, taxes due and marginal tax rates are again calculated.

Table 2 displays the results relating to the total itemized deduction limitation of \$50,000 for MFJ taxpayers with Federal AGI of \$200,000 or more. The first column shows computations for Federal AGI of \$199,013. Federal tax due equals \$18,568. State tax due equals \$6,967. The tax deduction equals \$15,500 and the interest deduction equals \$25,000. The medical deduction equals \$55,074. The total deduction equals \$94,608 representing the phase out of deductions of 3 percent for each dollar of income in excess of \$166,800. The total deduction does not reflect the \$50,000 limitation because Federal AGI has not yet crossed the \$200,000 threshold.

Column 2 shows the results when Federal AGI equals \$199,999. The results show allowable itemized deductions equal \$94,504. The increase in Federal AGI over the previous column is \$986. The increase in State taxes equal \$94, implying a 9.533 percent marginal tax rate. Federal tax increases by \$290 and \$263 implying 29.412 and 26.673 percent marginal Federal tax rates when considering and excluding Social Security effects respectively. The combined marginal tax rates are 38.945 and 36.207 percent respectively.

Table 2: Analysis of Total Itemized Deduction Limitation

Federal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
Net Bus Income	95,289	96,289	96,290	97,289	98,289	99,289	100,289	101,298	102,289
Total Income	200,289	201,289	201,290	202,289	203,289	204,289	205,289	206,289	207,289
Fed AGI	199,013	199,999	200,000	200,986	201,973	202,959	203,946	204,932	205,919
Fed Tax Income	95,839	96,899	96,900	97,960	99,021	100,081	101,142	102,202	103,263
Fed Taxes	18,568	18,858	18,870	19,160	19,448	19,739	20,032	20,324	20,615
SS Portion of Fed	2,552	2,579	2,579	2,606	2,632	2,659	2,686	2,713	2,739
State									
State AGI	199,013	199,999	200,000	200,986	201,973	202,959	203,946	204,932	205,919
Tax Deduction	15,500	15,500	0	0	0	0	0	0	0
Interest Deduction	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Medical Deduction	55,074	55,000	55,000	54,926	54,852	54,778	54,704	54,630	54,556
Allowed Deduction	94,608	94,504	50,000	50,000	50,000	152,959	50,000	50,000	50,000
Taxable Income	102,658	103,789	148,294	149,280	150,267	151,295	152,282	153,268	154,297
State Tax Due	6,976	7,070	10,741	10,823	10,904	10,989	11,070	11,152	11,237
State Analysis									
State Tax Change		94	3,671	3,753	3,834	3,919	4,000	4,082	4,167
State AGI Change		986	1	987	1,974	2,960	3,947	4,933	5,920
State Marginal Rate		9.533	367,100	380,243	194,225	132,399	101,343	82,749	70,389
Fed Analysis W SS									
Federal Tax Change		290	12	302	590	881	1,174	1,466	1,757
Fed AGI Change		986	1	987	1,974	2,960	3,947	4,933	5,920
Fed Marginal Tax Rate		29.412	1,200	30,598	29,889	29,764	29,744	29,718	29,679
Fed Analysis WO SS									
Fed Tax Change		263	12 ¹	275	537	801	1,067	1,332	1,597
Fed AGI Change		986	1	987	1,974	2,960	3,947	4,933	5,920
Fed Marginal Tax Rate		26.673	1,200	27,862	27,204	27,061	27,033	27,002	26,976
Federal + State									
Fed + State W SS		38,945	368,300	410,841	224,113	162,162	131,087	112,467	100,068
Fed + State WO SS		36,207	368,300	408,105	221,429	159,459	128,376	109,751	97,365

Table 2: Continued

Federal	10	11	12	13	14	15	16	17	18
Net Bus Income	103,289	104,289	105,289	106,289	107,289	112,289	117,289	122,289	147,289
Total Income	208,289	209,289	210,289	211,289	212,289	217,289	222,289	227,289	252,289
Fed AGI	206,906	207,892	208,879	209,865	210,852	215,785	220,718	225,651	250,316
Fed Tax Income	104,324	105,384	106,445	107,505	108,566	113,869	119,172	124,475	150,990
Fed Taxes	20,907	21,199	21,491	21,783	22,075	23,534	24,994	26,454	34,001
SS Portion of Fed	2,766	2,793	2,820	2,847	2,873	3,007	3,141	3,275	3,945
State									
State AGI	206,906	207,892	208,879	209,865	210,852	215,785	220,718	225,651	250,316
Tax Deduction									
Interest Deduction	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Medical Deduction	54,482	54,408	54,334	54,260	54,186	53,816	53,446	53,076	51,226
Allowed Deduction	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Taxable Income	155,284	156,311	157,298	158,284	159,313	164,329	169,345	174,361	199,442
State Tax Due	11,318	11,403	11,484	11,565	11,650	12,064	12,478	12,892	14,961
State Analysis									
State Tax Change	4,248	4,333	4,414	4,495	4,580	4,994	5,408	5,822	7,891
State AGI Change	6,907	7,893	8,880	9,866	10,853	15,786	20,719	25,652	50,317
State Marginal Rate	61.503	54.897	49.707	45.561	42.200	31.636	26.102	22.696	15.683
Fed Analysis W SS									
Federal Tax Change	2,049	2,341	2,633	2,925	3,217	4,676	6,136	7,596	15,143
Fed AGI Change	6,907	7,893	8,880	9,866	10,853	15,786	20,719	25,652	50,317
Fed Marginal Tax Rate	29.666	29.659	29.651	29.647	29.642	29.621	29.615	29.612	30.095
Fed Analysis WO SS									
Fed Tax Change	1,862	2,127	2,392	2,657	2,923	4,248	5,601	6,953	13,857
Fed AGI Change	6,907	7,893	8,880	9,866	10,853	15,786	20,719	25,652	50,317
Fed Marginal Tax Rate	26.958	26.948	26.937	26.931	26.933	26.910	27.033	27.105	27.539
Federal + State									
Fed + State W SS	91.168	84.556	79.358	75.208	71.842	61.257	55.717	52.308	45.778
Fed + State WO SS	88.461	81.845	76.644	72.491	69.133	58.546	53.135	49.801	43.222

This table shows tax computations for a married couple filing a joint return. The entire income of the couple is Hawaii state income. The taxpayer works a state job that pays \$135,000 per year. The taxpayer defers 30,000 in income through tax-deferred accounts. The spouse is self-employed. Self-employment income may be managed between tax years using income management, expense management and a Simplified Employee Pension account. During 2012, the taxpayer made \$28,000 in estimated Federal tax payments and \$7,000 in estimated State payments all of which apply to the 2012 return. The taxpayer also paid \$2,000 of tax in 2012, associated with the 2011 tax year return. The employer withheld the following amounts on wages: \$12,600 for Federal taxes, \$6,500 for State of Hawaii taxes, \$4,624.50 for Social Security taxes and \$1,957.50 for Medicare taxes. Listed deductions include taxes paid as noted above, interest expense on a first mortgage for \$25,000 and \$70,000 of medical expenses. ¹ Notice the Federal AGI Change is \$1 and Federal tax change is \$12. This occurs because the added dollar of income causes a category change in the tax table. Taxable income of \$96,899 falls between "at least \$96,850 but less than \$96,900" with a corresponding tax of \$16,279. Taxable income of \$96,900 falls between "at least \$96,900 but less than \$96,950" with a corresponding tax of \$16,291.

The third column shows results when Federal AGI equals \$200,000. In this column, both limitations have been activated. The State tax paid deduction is no longer allowed because Federal AGI now exceeds \$200,000. However, due to the large medical expense this loss of deduction is not the determining factor for allowed itemized deductions. The second component, which limits total itemized deductions to \$50,000, determines the allowed itemized deductions. Thus, for a single dollar of additional Federal AGI, the allowed itemized deduction is reduced by \$44,504 (\$94,504 - \$50,000). The tax due reflects this loss of deductions. The State tax due increase by \$3,671 (\$10,741 - \$7,070). This increase implies a 367,100 percent State marginal tax rate! The federal tax increases by \$12 implying a 1,200 percent marginal tax rate. This rather large federal marginal tax rate occurs because the additional dollar of income triggers a shift in tax table categories. The combined Federal and State tax rate equals 368,300 percent!

The fourth column shows the calculations for Federal AGI of \$200,986. State taxes increase to \$10,741, an increase of \$3,671 over the results for Federal AGI of \$199,999. The change represents a 380.243 percent marginal State tax rate. Federal Taxes increase by \$302, representing a 30.598 percent marginal tax rate. The combined State and Federal Marginal tax rates now equal 410.841 and 408.841 percent respectively when including and excluding Social Security taxes. The State Marginal tax rate exceeds 100 percent until Federal AGI reaches approximately \$204,000. The combined State and Federal Tax rate does not fall below 100% until Federal AGI reaches approximately \$206,000. Thus the entire increase in Federal AGI from \$199,999 to \$206,000 is confiscated by the either the Federal or State tax authority. The combined marginal tax rate remains above 75 percent until Federal AGI surpasses approximately \$210,000. The combined marginal tax rate remains above 50 percent until Federal AGI surpasses approximately \$226,000.

These marginal tax rates require individuals and businesses to carefully plan their Federal AGI. Discovering that your income exceeds the tax cliff after the tax year has closed would be a costly error so prudent forward-looking tax planning is essential. However, a careful entrepreneur may be able to manage Federal AGI after the tax year close by opening a SIMPLE or SEP retirement account. These actions are not without cost since such an account might not be otherwise optimal.

POLICY IMPLICATIONS

We do not argue the policy appropriateness or inappropriateness of phasing out itemized deductions for higher income taxpayers. In their wisdom, the Hawaii governing authority has determined that such action is desirable. However, few would argue the marginal tax rates presented here represent an optimal taxation system. Thus, we suggest an alternate tax system that might function better without detracting from the primary objectives of existing laws. We recommend the Hawaii tax authority modify the tax system to phase in the itemized deduction limitations. Such a phased approach would create less onerous marginal tax rates. Perhaps a reasonable goal in setting the phase in would be to ensure that marginal State tax rates for any income level do not exceed 20 percent.

We recommend eliminating the current combined three itemized deduction limitation system. We suggest relying instead on a variation of the three percent limitation to accomplish a goal similar to the existing combined three limitations. The proposed system would be simpler to implement, create more equitable marginal tax rates and treat all itemized deductions equally. Indeed, there are certain issues associated with providing preference for one class of itemized deductions over another. The Hawaii Senate Bill 1091 entered for consideration January 24, 2013 proposes to exempt charitable contributions from these limitations. Certainly, a case can also be made for exempting medical expenses from the limitation. We recommend equal treatment for all limitations with regard to total deduction limits.

We propose the following: Begin the phase out of itemized deductions at Federal AGI of \$100,000. For Federal AGI levels of \$100,000 or less, limit itemized deductions to Federal AGI. For Federal AGI above

\$100,000, the maximum allowed itemized deduction declines by \$0.25 for each dollar of Federal AGI exceeding \$100,000. Thus, for a taxpayer with Federal AGI of \$200,000 the maximum allowed itemized deduction equals \$75,000 ($\$100,000 - (\$200,000 - \$100,000) * 0.25$). For a taxpayer with \$201,000 of Federal AGI, the maximum allowed itemized deduction equals \$74,750. For taxpayers with Federal AGI above \$300,000 the maximum allowed deduction equals \$50,000. We recommend designing the approach to integrate with the Federal Tax Code Pease Limitation. The approach described here substantially achieves the objectives of the current law. However, the approach described here results in more reasonable implied marginal tax rates.

CONCLUDING COMMENTS

This study analyzes Hawaii State income tax itemized deduction limitations that currently create a tax cliff. The tax cliff includes two components. The first component occurs because the Hawaii State taxes paid itemized deduction is disallowed for married filing jointly taxpayers with Federal AGI of \$200,000 or above (\$100,000 for single or married filing separately and \$150,000 for qualifying heads of household). The second component limits total itemized deductions claimed on the State return to \$50,000 for married filing joint returns with income of \$200,000 or more (\$37,500 for qualifying Head of Household taxpayers with Federal AGI of \$150,000 and \$25,000 for single or married filing separately tax returns). A third provision that mandates the sum of all itemized deductions be reduced by 3 percent for each dollar of income in excess of \$166,800 (\$83,400 for separate filers) exacerbates the tax cliff.

We calculate marginal tax rates associated with each component of the tax cliff. Results show the State tax-deduction limitation can result in marginal Hawaii State tax rates than can reach or exceed 127,900 percent. That is, a single dollar of additional income increases the tax due by \$1,279. Results show the \$50,000 limitation on total itemized deduction can produce marginal State tax rates that reach or exceed 367,100 percent where a single dollar of additional income implies an increase in State taxes of \$3,671.

Clearly these tax rates are sub-optimal. We provide recommendations for redesigning the Hawaii State tax system that achieves the general objectives of itemized deduction limitations without injecting extraordinary marginal tax rates into the system. We encourage lawmakers to consider these and other proposals to improve the Hawaii tax system. We also encourage the Federal tax authority and states seeking to adopt similar proposals to consider the issues identified here in developing their own policies.

It is rare for extraordinary marginal tax rates to exist. While they present certain problems as identified in this research, they also present a unique opportunity for research as well as incentivized tax planning. Future research might examine how Hawaii taxpayers respond to the tax cliffs. Taxpayers should plan their Federal AGI to minimize the effects of the limitations. For example, taxpayers may temporarily avoid the Hawaii tax cliff by selling capital loss stocks to offset capital gains or shifting discretionary business income into another taxable year. A possibly better strategy would be to increase deductible contributions into a qualified retirement plan. Because of tax planning, we expect a large number of Hawaii taxpayers to report Federal AGI clustered just below \$200,000. These taxpayers have an incentive to manage their income and deductions to remain within the itemized deduction limitation. There might also exist a corresponding void in taxpayers with Federal AGI of incomes that just exceed \$200,000. The extent that Federal AGI clustering occurs presents a significant opportunity for future research.

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