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## A HISTORICAL ANALYSIS OF THE "MARRIAGE TAX PENALTY"

*Abstract:* The marriage tax penalty resurfaces as a topic of interest when tax policy makers consider the economic consequences of increasing marginal tax rates on declining "family values". Alm and Whittington [1993] found that marriage taxes influence the incidence of marriage. A historical perspective of the marriage tax penalty and its counterpart, the marriage tax bonus or "subsidy", merit consideration and re-evaluation in light of current tax policy trends toward higher marginal tax rates.

This paper develops a historical framework for the study of the federal income tax and conducts a detailed analysis of the marriage tax for first quartile, weighted average, and third quartile taxpayers over the entire history of the United States personal income tax. It demonstrates that potential bonuses have historically been consistently more significant than penalties. In fact, penalties do not gain prominence until 1964.

The current trend toward increasing marginal rates will increase both the penalty and the bonus. Therefore, analysts interested in this area of policy should consider means of reducing both. The most successful method of mitigating the marriage penalty has been the "two-earner deduction".

### INTRODUCTION

Increased individual marginal federal income tax rates have recently been adopted for "high income" taxpayers. As tax rate schedules become more progressive, the "marriage tax penalty" (MTP) is again becoming a topic of interest (i.e., Alm & Whittington [1993], and Schultz [1993]).

This paper explores the historical development of components of basic individual federal income taxation leading to MTPs and the less frequently addressed "marriage tax bonuses" (MTBs) or "subsidies". Insight is provided to correct for confusion in contemporary research efforts, with respect to the historical incidence (or lack thereof) of "marriage neutrality". A

historical framework is developed which will be useful to future researchers as a means of examining the development of the entire federal income tax system. Within this general framework, a detailed discussion of MTPs and MTBs is presented. In addition, historical methods found to mitigate MTPs and MTBs are identified and their potential for application (and limitations) in future policy decisions is examined.

Basic historical tax law was reviewed to generate tax liabilities for married (filing jointly and with no dependents) and single, non-itemizer taxpayers. The "adjusted gross income" (AGI) levels used were developed from *Statistics Of Income*<sup>1</sup> (SOI) data provided by the Internal Revenue Service (IRS). The first such IRS publication (June 1918) emphasized descriptive statistics of 1916 tax returns, providing lesser information for the 1914 and 1915 tax years. Detailed data for 1913 individual federal income tax returns was omitted from analysis, due to the inconsistency of this ten month period (i.e., March 1 through December 31, 1913) with future tax years.

Analyses of MTPs and MTBs are based on the calculation of approximately 727 "short form" (i.e., non-itemized) tax returns for first (low income<sup>2</sup>) quartile, third (high income<sup>2</sup>) quartile, and weighted average-based taxpayer AGI levels.<sup>3</sup> (Appendix A provides a detailed list of these income levels for any tax researcher who is interested in a historical analysis of the tax law and its effect on a broad base of taxpayers.) All analyses presumed wages to be the only source of income.

The potential for marriage tax bonuses have exceeded that for marriage tax penalties in both frequency and amount, for

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<sup>1</sup>The SOI data is also compared with contemporary tax publications to check for any discrepancies in tax rules. See KixMiller, W. and, Baar, A., Eds. (1918-1927), *United States Income and War Tax Guide* (Commerce Clearing House); Pechman, Joseph A. (1987), *Federal Tax Policy*, 5th edition (The Brookings Institution; Washington, D.C.); and *United States Master Tax Guide*, (1937-1993; Commerce Clearing House).

<sup>2</sup>The terms "low income" and "high income" refer to the relative economic status of taxpayers required to file individual federal income tax returns. In fact, most taxpayers required to file returns for years prior to the mid-1940s would have generally been considered "high income".

<sup>3</sup>The first and third quartile, as well as the weighted average, was used to provide a broad based picture of the effect of the marriage tax on the average taxpayer. The weighted average is generated from the SOI data which is provided only by income class. This is calculated by taking the class midpoint and weighting it by the number of tax returns filed for that class.

first through third quartile-based taxpayer AGI levels throughout the history of our current system of federal individual income taxation. Such historical findings suggest that solutions to present and future MTPs must simultaneously address the exposure to revenue losses attributable to MTBs.

MTPs were effectively mitigated, throughout this range of taxpayer AGI levels via the variable standard deduction (1944 through 1963) and its predecessor, a revised "earned income credit" (1934 through 1943). The "two-earner deduction" (1982 through 1986) and its predecessor, a (\$500 maximum) "earned income" deduction (1944 and 1945), were also successful in reducing MTPs.

### DEFINITION OF THE MARRIAGE TAX PENALTY

Definitions of the "marriage tax penalty" have varied. Fox [1988] defined and analyzed the two separate components of the MTP as the "rate factor" and the "base factor". Rosen [1987] did not distinguish between the (relatively recent) more significant "rate" and less vital "base" effects, but included the impact of the current "earned income credit" (EIC) in his calculations of MTPs and MTBs. McIntyre [1988] suggested that disaggregation of the EIC would have been more useful in Rosen's analysis, distinguishing between "spending" (EIC) and "tax" (combined "rate" and "base" effects) policy issues. Jagolinzer and Strefeler [1986] and Tilt and Spencer [1983] used a more fully developed definition of the MTP in an effort to identify (but not to model the relative impacts of) all tax provisions resulting in different tax liabilities based solely on marital status.

This paper makes use of SOI-based AGI data and the standard deduction to quantify combined "base" and "rate" effects for non-itemizer taxpayers with no dependents. It, therefore, employs a definition consistent with those of Fox [1988] and McIntyre [1988] and the no dependent scenario included in studies conducted by Rosen [1987] and Alm and Whittington [1993].

The marriage tax penalty, then, refers to that situation where a legally married couple using married, filing joint (MFJ) or married, filing separate (MFS) tax rate schedules pays higher federal income taxes than what would be paid by two single taxpayers without dependents and with the same level of income.

## **"RATE" AND "BASE" EFFECTS**

Two primary factors causing the generation of the MTP are the "rate" effect and the "base" effect [Fox, 1988]. The base effect results from the current (and historical) "inequities" between married and single taxpayer's personal exemption (1913 through 1943) and standard deduction (1944 through 1993) amounts. For example, in 1993 two single people could take a standard deduction of \$3,700 each for a total of \$7,400; married couples, however, were limited to a standard deduction of \$6,200. The base effect (generally) is the result of the base differential combined with the marginal tax rate of the taxpayer(s) for all tax years prior to 1971.

For post-1970 tax years, a "rate" effect, independent of and in addition to the base effect, came into existence when substantively separate tax rate schedules were first produced in 1971 for single and married taxpayers. Currently, the primary generator of the MTP is the rate effect caused by separately developed progressive tax rates, though the base effect continues to exist for non-itemizer taxpayers. The MTP is maximized for "non-traditional" two-earner households or when spousal earnings occur at 50%/50% allocation levels. A MTB occurs and is maximized for the historically more "traditional" one-earner households or when spousal earnings occur at 0%/100% allocation levels. As tax rates become "flat" or less progressive, MTPs and MTBs decline. As tax rates become more progressive, MTPs and MTBs rise.

## **MISCONCEPTIONS REGARDING "MARRIAGE NEUTRALITY"**

Many contemporary researchers have focused on the rate effect and have ignored the base effect, in concluding that pre-1948 Revenue Act tax law provided for "marriage neutrality". Alm and Whittington [1993, p. 201] note the following:

The individual income tax was established in 1913, and originally used the individual as the unit of taxation, so that all individuals were taxed using a single progressive tax schedule not linked to marital status. Such a tax system was marriage neutral because *an individual's tax burden did not change upon marriage* (emphasis ours). . . . Departure from marriage neutrality developed with the adoption in 1948 of income splitting for married couples.

While there were no significant marriage tax penalties during this era, the income tax law was not marriage neutral. Tax law consistently provided marriage tax bonuses.

Strefeler [1982] qualifies his reference to pre-1948 Revenue Act conditions, as follows:

Until 1948, marital status was *relatively* (emphasis ours) unimportant . . .

Fraser [1986, p. 831] and Mitchell [1989, p. 113] point to the "impossibility" of a tax system that "simultaneously (1) is marriage neutral, (2) provides for joint filing for married couples, and (3) has marginal, nonlinear tax rates that increase with income." Though Mitchell [1989, p. 116] erred in his statement regarding the complete absence of a marriage tax penalty during the 1948 through 1969 tax years:

From 1948 to 1969 there did not exist the so-called marriage penalty . . .

Similarly, Neff [1990, p. 420] says:

The *introduction* (emphasis ours) of the marriage penalty in 1969 . . .

While the average taxpayer may not have suffered from marriage tax penalties, MTBs did exist. (Appendix B provides a historical listing of the potential bonus or penalty at each income level studied.) Penalties existed at the first quartile taxpayer AGI level during the 1964 through 1969 tax years and at the third quartile taxpayer AGI level for the 1968 and 1969 tax years.

## HISTORICAL FRAMEWORK

The history of federal income taxation can be divided into four base effect periods: Period I — the thirty-one year period of personal exemption-based deductions (1913 through 1943), Period II — the twenty year period of variable standard deductions (1944 through 1963), Period III — the thirteen year period of semi-variable standard deductions (1964 through 1976), and Period IV — the seventeen year (and current) period of fixed standard deductions (1977 through 1993).

The history of personal exemption/standard deduction-based penalties and bonuses (the base effect) is summarized using this framework (see Exhibit I). Since the base effect is the combination of the standard deduction and the tax rate, the

## EXHIBIT I

### The History of Personal Exemption/Standard Deduction-Based Amounts Available to Single and Married Taxpayers

#### I. Personal Exemption-Based (1913 through 1943):

Year(s)	Personal Exemption Single	Personal Exemption Married	Deduction Bonus	Deduction Penalty
1913-1916	\$ 3,000	\$ 4,000		\$ 2,000
1917-1920	\$ 1,000	\$ 2,000	\$ -0-	\$ -0-
1921-1924	\$ 1,000	\$ 2,500	\$ 500	
1925-1931	\$ 1,500	\$ 3,500	\$ 500	
1932-1939	\$ 1,000	\$ 2,500	\$ 500	
1940	\$ 800	\$ 2,000	\$ 400	
1941	\$ 750	\$ 1,500	\$ -0-	
1942-1943	\$ 500	\$ 1,200	\$ 200	

#### II. Variable Standard Deduction-Based (1944 through 1963):

10% of AGI with a \$1,000 maximum per tax return.  
 Minimum/Maximum deduction penalty at \$-0-\$1,000.

#### III. Semi-Variable Standard Deduction-Based (1964 through 1976):

Year(s)	Filing Status	Fixed Minimum	Component Variable Percent of AGI	Fixed Maximum	Deduction Minimum	Penalty Maximum
1964-1970	Both	\$ 200	10%	\$ 1,000	\$ 200	\$ 1,000
1971	Both	\$ 1,050	13%	\$ 1,500	\$ 1,050	\$ 1,500
1972-1974	Both	\$ 1,300	15%	\$ 2,000	\$ 1,300	\$ 2,000
1975	Single	\$ 1,600	16%	\$ 2,300	\$ 1,300	\$ 2,000
	Married	\$ 1,900	16%	\$ 2,600		
1976	Single	\$ 1,700	16%	\$ 2,400	\$ 1,300	\$ 2,000
	Married	\$ 2,100	16%	\$ 2,800		

#### IV. Fixed Standard Deduction-Based (1977 through 1993):

Year(s)	Standard Deduction Single	Standard Deduction Married	Deduction Penalty
1977-1978	\$ 2,200	\$ 3,200	\$ 1,200
1979-1984	\$ 2,300	\$ 3,400	\$ 1,200
1985	\$ 2,390	\$ 3,540	\$ 1,240
1986	\$ 2,480	\$ 3,670	\$ 1,290
1987	\$ 2,540	\$ 3,760	\$ 1,320
1988	\$ 3,000	\$ 5,000	\$ 1,000
1989	\$ 3,100	\$ 5,200	\$ 1,000
1990	\$ 3,250	\$ 5,450	\$ 1,050
1991	\$ 3,400	\$ 5,700	\$ 1,100
1992	\$ 3,600	\$ 6,000	\$ 1,200
1993	\$ 3,700	\$ 6,200	\$ 1,200

## EXHIBIT II

### The History of Federal Individual Income Tax Rates

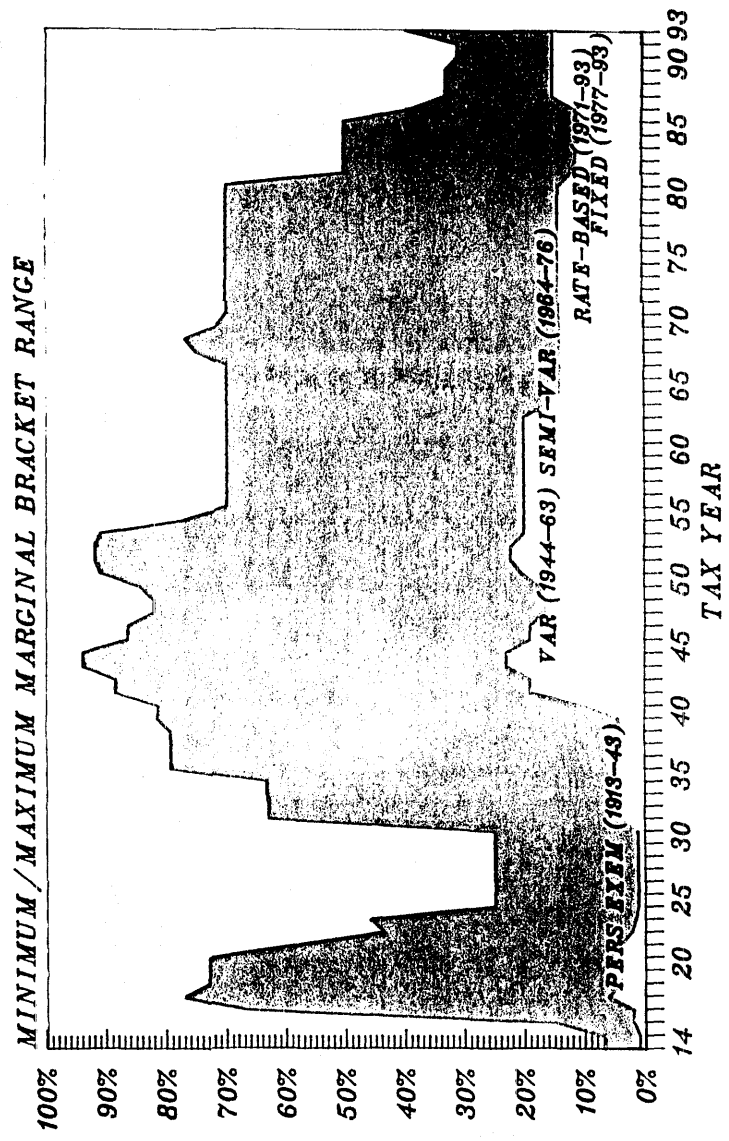
Year	Marginal Tax Brackets	
	Minimum Rate	Maximum Rate
I. Personal Exemption-Based Deductions (1913 through 1943):		
1913-1915	1%	7%
1916	2%	15%
1917	2%	67%
1918	6%	77%
1919-1921	4%	73%
1922	4%	58%
1923	2.25%	43.5%
1924	1.5%	46%
1925-1931	1.125%	25%
1932-1933	4%	63%
1934-1935	4% (A)	63%
1936-1939	4% (A)	79%
1940	4.4% (A)	81.1%
1941	10% (A)	81%
1942-1943	19% (A)	88%
II. Variable Standard Deduction-Based (1944 through 1963):		
1944-1945	23%	94%
1946-1947	19%	86.45%
1948-1949	16.6%	82.1275%
1950	17.4%	84.357%
1951	20.4%	91%
1952-1953	22.2%	92%
1954-1963	20%	91%
III. Semi-Variable Standard Deduction-Based (1964 through 1976):		
1964	16%	77%
1965-1967	14%	70%
1968	14%	75.15%
1969	14%	77%
1970	14%	71.75%
1971-1976	14%	70%
IV. Fixed Standard Deduction-Based (1977 through 1993):		
1977-1981	14%	70%
1982	12%	50%
1983-1986	11%	50%
1987	11%	38.5%
1988-1990	15%	33%
1991-1992	15%	31%
1993	15%	39.6%

(A) Before adjustment for 10% "net income"-based earned income credit.



### EXHIBIT III

#### The History of Federal Individual Income Tax Rates



ranges of the marginal tax rates are shown in Exhibit II. Exhibit III then provides a broad overview of the history of tax rates in the United States.

*Period I: Personal Exemption-Based Deductions  
(1914 Through 1943).*

The period began with the establishment of a "flat" or proportional "normal" tax and a progressive surtax (1913 through 1916). Only a few, high income taxpayers were subject to the tax. A progressive feature was later introduced to the "normal" tax in the form of two- and three-tiered brackets, and a greater portion of taxpayers became subject to the surtax as surtax thresholds (generally) declined (1917 through 1935). The period concluded with the return to a proportional "normal" tax (1936 through 1943), the complete elimination of the progressive surtax thresholds (1941 through 1943), and the establishment of a revised "earned income credit" (1934 through 1943) that would later take the form of a variable standard deduction during Period II.

The Revenue Act of 1913 provided for a "flat" or proportional "normal" tax, applying only to amounts in excess of the newly established personal exemption "credit". The proportional "normal" tax rate was 1% for the 1913 through 1915 tax years, increasing to 2% for the 1916 tax year. The personal exemption "credit", as it was called, was comparable to what would today be referred to as the personal exemption "deduction". Separate personal exemption amounts were established for single and married taxpayers, and were the primary source of MTP- (1913 through 1916) and MTB-based (1921 through 1940, 1942, and 1943) "deductions", reflected in Exhibit I. During this period the individual, rather than the family, was considered the taxpayer, (Groves [1963] provides a discussion of the historical evolution of the taxpaying unit).

Maximum marginal tax rates of 7% (1913 through 1915) and 15% (1916), as indicated in Exhibit II, resulted from the combination of the proportional "normal" tax and the progressive surtax.<sup>4</sup> The surtax applied only to taxpayers with "net in-

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<sup>4</sup>This progressive surtax (prior to any adjustments in the later years of this period) ranged from 1% through 6% (1913 through 1915), 1% through 13% (1916), 1% through 63% (1917), 1% through 65% (1918 through 1921), 1% through 50% (1922 and 1923), 1% through 40% (1924), 1% through 20% (1925

comes" in excess of \$20,000,<sup>5</sup> and was calculated prior to any reduction for appropriate personal exemption amounts. Therefore, "normal" tax and surtax "net incomes" were provided for through separate, differing calculations. However, the term "net income" is roughly comparable to what is today referred to as "adjusted gross income" (AGI).

Through the 1916 tax year, the maximum possible MTP for taxpayer's below the \$20,000 surtax threshold was \$40 (\$20 for the 1913 through 1915 tax years). These "base" effect MTPs resulted entirely from the taxpayer's marginal tax rate multiplied by the differing filing status-based personal exemption amounts for married and single taxpayers. Related "base" effect maximum MTBs for the same period was \$20 (\$10 for the 1913 through 1915 tax years).

Beginning with the 1917 tax year, a supplementary, proportional "War Tax" of 2% was added. This resulted in the imposition of federal income tax on incomes previously too low to be taxed (the number of tax returns filed increased from 437,036 to 3,472,890). This was the first use of a progressive "normal" income tax. The more progressive nature of the now two-tiered "normal" tax generally provided only MTBs (at the income levels reviewed for the 1917 through 1920 tax years).

The Revenue Act of 1918, made permanent this progressive, two-tiered feature of the "normal" tax. The first \$4,000 of income in excess of the personal exemption deduction was taxed at a flat rate of 6%. Any additional excess was taxed at 12%.<sup>6</sup>

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through 1931), 1% through 55% (1932 and 1933), 1% through 59% (1934 and 1935), 1% through 75% (1936 through 1940), 6% through 77% (1941), and 13% through 82% (1942 and 1943).

<sup>5</sup>The surtax threshold was decreased from \$20,000 (1913 through 1916) to \$5,000 (1917 through 1921), increased to \$6,000 (1922 and 1923), further increased to \$10,000 (1924 through 1931), then decreased to \$6,000 (1932 and 1933), and decreased further to \$4,000 (1934 through 1940) until the threshold was eliminated and all "surtax net income" became subject to the progressive surtax (1941 through 1943). Surtax thresholds were not exceeded at the third quartile or weighted average AGI levels for any tax years through 1940.

<sup>6</sup>The \$4,000 first bracket amount was maintained through the 1940 tax year, when it was reduced to \$2,000 (1941 through 1963), and further reduced to \$500 (1964 through 1976).

The unadjusted first bracket rates went through a series of reductions from 6% to 4% (1919 through 1922). "Blended" rates of 3% were developed for the 1923 (transitional) tax year. Three brackets were available for the 1924 through 1931 tax years. First bracket rates fell to 2% (1924), and 1.5% (1925 through 1931), before being restored to 4% (1932 through 1940) and increased to 6%

The Revenue Act of 1921 altered the temporary nature of many of the so-called "War Taxes". For the 1921 through 1923 tax years, married taxpayers with combined "net income" of \$5,000 or less, received a personal exemption of \$2,500. A reduced personal exemption of \$2,000 was available to married taxpayers with "net income" in excess of \$5,000. For the 1924 tax year, this reduced standard deduction provision was repealed and all married taxpayers received a \$2,500 standard deduction.

This reduced personal exemption amount for relatively high income, married taxpayers was the predecessor to the current "phase-out" of the personal exemption (and itemized deduction) amounts, which became effective during the 1991 tax year. Taxpayers affected by the \$500 reduction in their personal exemption deduction merely lost the marriage deduction-based bonus.

The minimum rate of 2.25%<sup>7</sup> for the 1923 tax year was the result of a "blending" of 1922 and 1924 tax rates, after adjustment for a 25% "earned income credit" (EIC). Effective for the 1923 through 1931 tax years, this EIC was limited to 25% of the "normal" tax and provided that the first \$5,000, but not more than \$10,000, of the "net income" of every individual was to be considered "earned income".

Beginning with the 1934 tax year, the personal exemption (and exemption for dependents) amount(s) was made deductible in arriving at "net income" for surtax purposes. (Previously, personal exemptions had been deductible for "normal" tax computation only.) A new, revised "earned income credit" (EIC) was made available through the 1943 tax year. Unlike the preceding EIC, this "credit" was comparable to what is today referred to as

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(1941 through 1943). Second bracket rates were reduced from 12% to 8% (1919 through 1922), decreased to a "blended" rate of 6% (1923), decreased further to 4% (1924), and 3% (1925 through 1931). Third bracket rates were in effect for the 1924 through 1931 tax years at rates of 5%.

<sup>7</sup> The calculations in arriving at the 2.25% rate follows:

1922 minimum rate of 4% x 50% = 2%

1924 minimum rate of 2% x 50% = 1%

1923 minimum "blended" rate of 3% x [100%-25%] = 2.25%.

The maximum bracket of 43.5% was the result of a transitional reduction/adjustment of the 1922 maximum bracket of 58% by 25% (i.e., 58% x [100%-25%] = 43.5%).

A more recent example of "blended" rates occurred for the 1987 tax year. Maximum marginal tax rates of 50% (1986) and 28% (1988, excluding the 5% surtax) were (approximately) "blended" to achieve the 38.5% maximum for the 1987 tax year.

a "deduction". It resulted in a reduction of the amount subject to the "normal" tax, but not the surtax. This "credit" on earned income was restricted in amount to 10% of the first \$14,000 of "net income" for a maximum deduction of \$1,400 for single or married taxpayers. This was the predecessor of the variable standard deduction available during Period II.

Married taxpayers filing separate tax returns were limited to one-half of this amount and if one spouse itemized deductions (or took the alternative EIC), the other was also required to itemize (or take the EIC). This provision prevented any "planning opportunities" or "loopholes" that may have otherwise been available through the use of the separate filing status for married taxpayers. This policy has been used consistently through the present (i.e., both itemize or both take the standard deduction when selecting the married filing separately (MFS) filing status).

Generally, the more progressive the tax rate schedules and the lower the ceiling for the elimination of the first bracket and initiation of the second bracket, the greater the dollar amount of any "base" effect-based MTB/MTP. Taxpayers through the third quartile AGI levels failed to exceed the first bracket established for any tax year from 1918 through 1943.

Without exception, MTPs failed to materialize for first and third quartile AGI taxpayers for the 1917 through 1943 tax years. MTBs did, however, occur (see Exhibits IV and V and Appendix B). In small amounts, and due entirely to personal exemption deduction bonuses (the base effect), annual MTBs ranged from \$0 to \$60 from 1917 to 1940. MTBs increased significantly during the 1941 through 1943 tax years where they reached a third quartile and weighted average AGI high of \$198 (see Exhibits IV and V, point A).

### *Period II: Variable Standard Deduction-Based (1944 Through 1963)*

The period began with a provision that alleviated any MTP for married filing jointly (MFJ) two-earner households (1944 and 1945). The "normal" and surtax rates schedules were merged, providing for a single calculation of "net income". The EIC was retained, taking the form of a variable standard deduction. These changes provided for a continuation of a "marriage subsidy" from Period I through Period II (1917 through 1963) for taxpayers through the third quartile AGI levels.

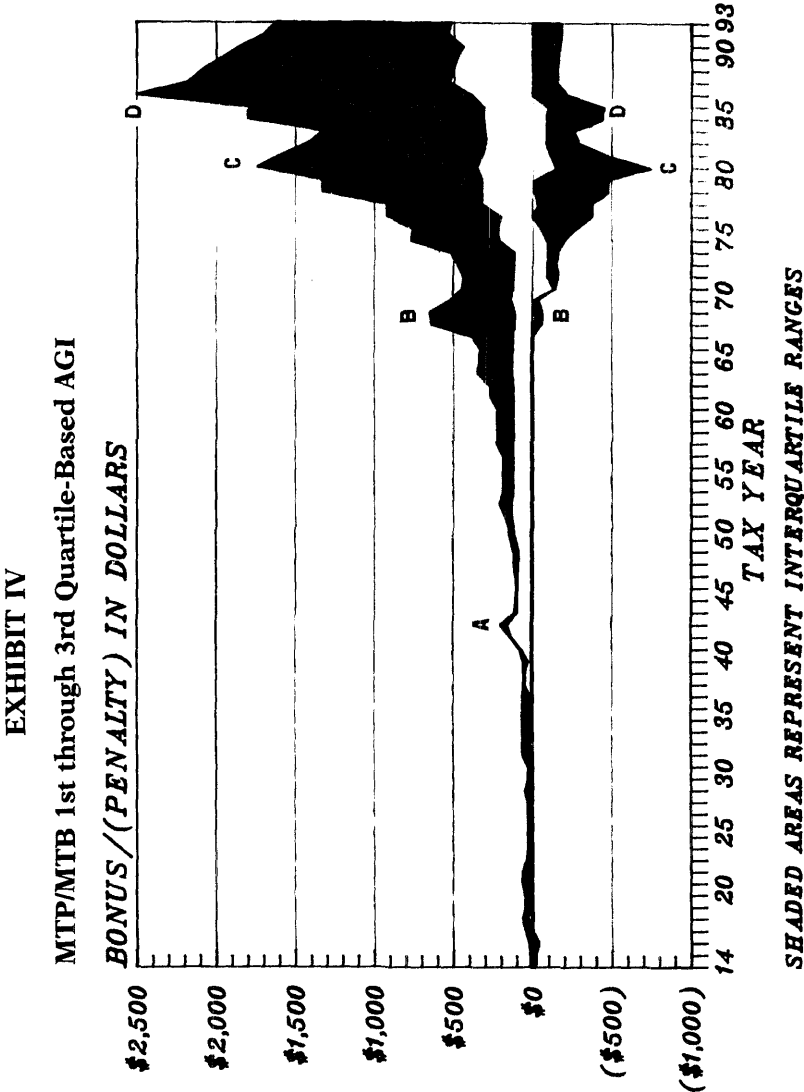
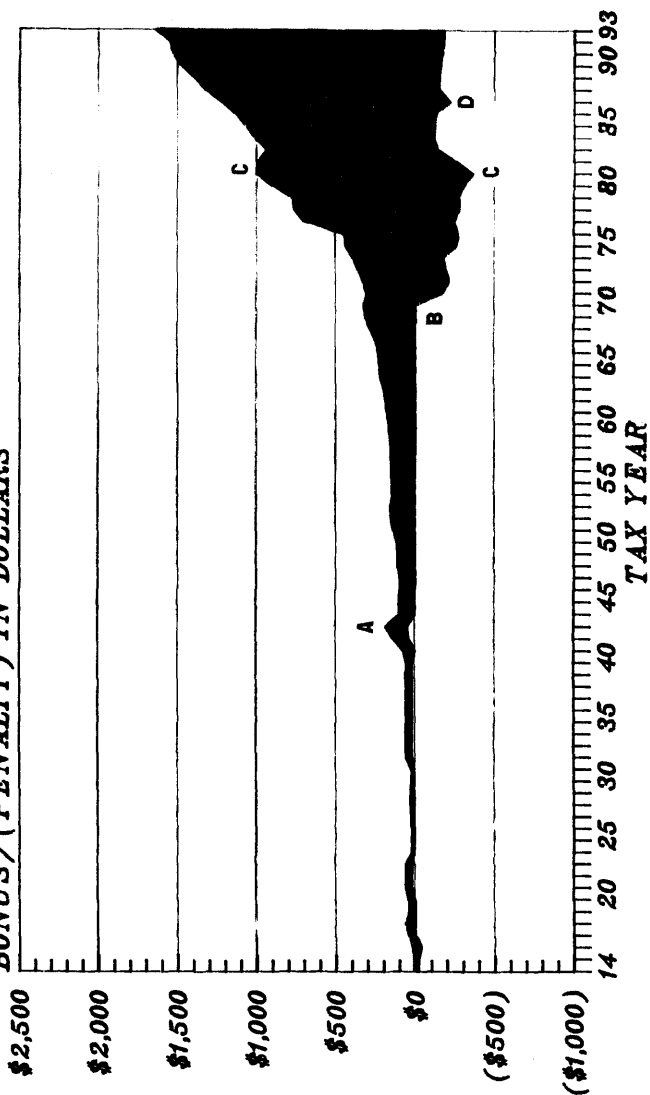


EXHIBIT V

MTP/MTB Using Weighted Average-Based AGI

$BONUS / (PENALTY) \text{ IN DOLLARS}$



SHADED AREA REPRESENTS RANGE OF  $(PENALTY) / BONUS$

The 1944 and 1945 tax years were the first for which a standard deduction was available for non-itemizer taxpayers in lieu of itemized deductions. The term "adjusted gross income" (AGI) was first used for the 1944 tax year, and the term "net income" was altered to represent AGI less itemized (or the new "standard") deduction(s).

The standard deduction was variable (i.e., 10% of "total income") with a fixed ceiling of \$1,000 for both married and single taxpayers, and was deducted for the purpose of both the 3% "normal" tax and surtax computations. The 1944 and 1945 tax years' personal exemptions were deducted only for the purpose of calculating the normal tax.

All taxpayers were provided with a \$500 deduction for the 3% normal tax rate. Two-earner married taxpayers were effectively provided with an additional \$500 deduction, through a tax reduction of 3% of the smaller of the two incomes to a maximum of \$15. Unlike the "two-earner" deduction available during the 1982 through 1986 tax years, this provision completely eliminated any MTP for married taxpayers with minimum earnings of \$500 each. This "adjustment" eliminated base effect MTPs, whereas the 1982 through 1986 "two-earner deduction" attempted to mitigate "rate" effect MTPs. This additional deduction/tax reduction was the first direct example of a tax provision designed to alleviate a MTP.

Beginning with the 1946 tax year, normal tax and surtax rates schedules were combined and the move toward a completely progressive tax structure was completed. "Income-splitting" provisions were introduced to counter a growing movement toward adoption of community property laws. Eight (excluding California) of the nine (i.e., California, Louisiana, Texas, Idaho, Washington, Arizona, Colorado, Nevada, and New Mexico) community property states' married taxpayers had previously benefited from "income splitting" provisions [Groves, 1963, p. 60-65]. This enabled married taxpayers to go through the lower brackets twice. The tax benefits granted to taxpayers of states under which community property laws were in effect led to a movement toward the adoption of such laws by other states (i.e., Hawaii, Michigan, Nebraska, Oklahoma, Oregon). Effective for the 1949 tax year, the family became (and remains) the basic taxpaying unit.

The 1944 through 1950 tax years used the same basic tables (with varying regressive reductions to scheduled rates) in arriv-



ing at minimum and maximum tax rates.<sup>8</sup> For the 1951 through 1963 tax years, minor alterations were made to rates schedules. Beginning with the 1952 tax year, a separate, less progressive rate schedule became available for taxpayers with dependents and able to meet requirements for use of the head of household filing status. Beginning with the 1955 tax year, an additional rate schedule became available for married taxpayers.

With one exception (third quartile taxpayers in 1947, see Appendix B), the variable standard deduction resulted only in MTBs for the 1944 through 1963 tax years. The absence of MTPs was due to the variable nature of the 10% standard deduction amount and the fact that the fixed ceiling was, without exception, not achieved at either the weighted average or the third quartile AGI levels.

First quartile AGIs generated MTBs ranging from a low of \$87 to a high of \$133. Third quartile AGIs resulted in MTBs and provided for a broader range, from a low of \$95 to a high of \$264. And weighted average-based AGI levels produced MTBs ranging from a low of \$95 to a high of \$199. Therefore, this period concluded with a continuation of the “marriage subsidy” which dominated Period I.

### *Period III: Semi-Variable Standard Deduction-Based (1964 Through 1976)*

This period began with minimum and maximum marginal tax rate reductions and the establishment of identical fixed minimum and maximum standard deduction amounts for married and single taxpayers (1964 through 1970). The semi-variable nature of these standard deductions resulted in the reappearance of base effect MTPs for “low income”, first quartile (1964 through 1967) taxpayers. Both first and third quartile taxpayers had rate MTPs, as “tax-based” surtaxes (1968 through 1970) increased the progressive nature of tax rates schedules. The period concluded with both base and rate effect-based

<sup>8</sup> Minimum and maximum marginal tax rates were calculated (see Exhibit II), as follows:

Year	Minimum			Maximum		
	Unadjusted		Adjusted	Unadjusted		Adjusted
	Rate	Reduction	Rate	Rate	Reduction	Rate
1946-1947	20%	5%	19%	91%	5%	86.45%
1948-1949	20%	17%	16.6%	91%	9.75%	82.1275%
1950	20%	13%	17.4%	91%	7.3%	84.357%

MTPs, as substantively separate tax rates schedules were introduced (1971 through 1976).

The Revenue Act of 1964, in an effort to stimulate a sagging economy, provided for individual (and corporate) tax rate reductions. The 1964 tax year was the first for which a "minimum" fixed standard deduction amount became available. Those taxpayers at the lowest AGI levels were now provided with what came to be known as a \$200 "low income allowance". This "low income allowance" did not alter the variable nature or fixed ceiling of the standard deduction.

The "low income allowance", disproportionately benefiting low income singles, generated MTPs for first quartile taxpayers during the first four years (1964 through 1967) of this period. All taxpayers felt the impact of MTPs as the progressive nature of the basic tax rate schedules (1965 through 1970) was increased. Fixed tax-based surcharges, applied to progressive tax rate schedules in effect during the 1968 through 1970 tax years (see Exhibits IV and V, point **B**), effectively magnified the progressive character of the tax rates schedules.

Fixed minimum and maximum "allowances" and variable percentages available throughout the range were periodically increased (see Exhibit I) throughout Period III. The 1971 tax year was the first year for which MTPs were independently reflected in the tax rate schedules and resulted in the first purely rate effect-based MTP (see Table I) at a maximum of \$4,800. Separate, independent "allowances" were developed for married and single taxpayers beginning with the 1974 and 1975 tax years.

Prior to the 1971 tax year, few MTPs were generated. During the 1971 through 1976 tax years, increases in the semi-variable "low income allowances" combined with the newly implemented and more significant rate effect-based MTP contributed to the generation of larger MTPs. Maximum MTPs of \$148 (1971), \$274 (1976), and \$271 (1976) occurred for taxpayers at the first quartile, third quartile, and weighted-average AGI levels, respectively. MTBs also increased, approximately doubling during Period III.

#### *Period IV: Fixed Standard Deduction-Based (1977 Through 1993)*

The Tax Reduction and Simplification Act of 1977 attempted tax system simplification, in part, through the establishment of fixed, filing status-based, "zero-bracket" amounts (i.e., standard (exemption) deductions). Standard deduction

**TABLE I**  
**The First Rate-Based Marriage Tax Penalty**  
**(1971-1976)**

Taxable Income Above		Marginal Bracket			Penalty	Cumulative Penalty
Single	Married	SGL	MFJ	Difference		
\$ -0-	\$ -0-	14%	14%	-0-%	\$ -0-	\$ -0-
\$ 500	\$ 1,000	15%	15%	-0-%	\$ -0-	\$ -0-
\$ 1,000	\$ 2,000	16%	16%	-0-%	\$ -0-	\$ -0-
\$ 1,500	\$ 3,000	17%	17%	-0-%	\$ -0-	\$ -0-
\$ 2,000	\$ 4,000	19%	19%	-0-%	\$ -0-	\$ -0-

**MTP at Taxable Incomes Above \$4,000 (SGL)/\$8,000 (MFJ)**

\$ 4,000	\$ 8,000	21%	22%	1%	\$ 40	\$ 40
\$ 6,000	\$ 12,000	24%	25%	1%	\$ 40	\$ 80
\$ 8,000	\$ 16,000	25%	28%	3%	\$ 120	\$ 200
\$ 10,000	\$ 20,000	27%	32%	5%	\$ 200	\$ 400
\$ 12,000	\$ 24,000	29%	36%	7%	\$ 280	\$ 680
\$ 14,000	\$ 28,000	31%	39%	8%	\$ 320	\$ 1,000
\$ 16,000	\$ 32,000	34%	42%	8%	\$ 320	\$ 1,320
\$ 18,000	\$ 36,000	36%	45%	9%	\$ 360	\$ 1,680
\$ 20,000	\$ 40,000	38%	48%	10%	\$ 400	\$ 2,080
\$ 22,000	\$ 44,000	40%	50%	10%	\$ 800	\$ 2,880
\$ 26,000	\$ 52,000	45%	53%	8%	\$ 960	\$ 3,840
\$ 32,000	\$ 64,000	50%	55%	5%	\$ 600	\$ 4,440
\$ 38,000	\$ 76,000	55%	58%	3%	\$ 360	\$ 4,800

**MTP Fixed at Taxable Incomes Above \$44,000 (SGL)/\$88,000 (MFJ)**

\$ 44,000	\$ 88,000	60%	60%	-0-%	\$ -0-	\$ 4,800
\$ 50,000	\$ 100,000	62%	62%	-0-%	\$ -0-	\$ 4,800
\$ 60,000	\$ 120,000	64%	64%	-0-%	\$ -0-	\$ 4,800
\$ 70,000	\$ 140,000	66%	66%	-0-%	\$ -0-	\$ 4,800
\$ 80,000	\$ 160,000	68%	68%	-0-%	\$ -0-	\$ 4,800
\$ 90,000	\$ 180,000	69%	69%	-0-%	\$ -0-	\$ 4,800
\$ 100,000	\$ 200,000	70%	70%	-0-%	\$ -0-	\$ 4,800

amounts remained constant with only one change from the 1977 through 1984 tax years, but were independently inflation-indexed (and rounded to \$10 increments) beginning with the 1985 through 1987 tax years. Inflation-indexing of the standard deduction was introduced following double-digit inflation and heightened concerns over "tax bracket creep". Standard deduction bases were revised for the 1988 tax year and independent inflation-indexing (rounded to \$50 increments) continued.

The maximum possible rate effect-based MTP for the 1977 and 1978 tax years increased to \$6,480 and peaked at \$7,790 (see Exhibits IV and V, point C) during the 1979 through 1981 tax years (see Table II).

The Economic Recovery Tax Act of 1981 (ERTA81) reduced top individual rates from 70% to 50% and provided "non-traditional" households with an "adjustment to income" (i.e., "above the line" deduction), intended to partially alleviate this growing potential MTP. The "two-earner deduction" of 10% (5% for 1982) of the lesser of the two spouses' earned income to a maximum of \$30,000, was available for the 1982 through 1986 tax years and resulted in a maximum deduction of \$3,000 with maximum MTP reductions of \$1,500 (\$750 for 1982) per year. It was repealed with the passage of the Tax Reform Act of 1986 (TRA86), under the expectation that marginal tax rate reductions (i.e., a move toward "flatter" tax rate schedules) would reduce the MTP (see Table II and Exhibits IV and V, point D).

**TABLE II**  
**The History of the Rate-Based Marriage Tax Penalty (1971-1993)**

Year	MTP	- ERTA81 MTP	= Rate Effect	+ Base Effect	= Maximum MTP
III. Semi-Variable Standard Deduction-Based (1964 through 1976):					
1971-1976	\$4,800	N/A	\$4,800	\$1,400	\$ 6,200
IV. Fixed Standard Deduction-Based (1977 through 1993):					
1977-1978	\$5,640	N/A	\$5,640	\$ 840	\$ 6,480
1979-1981	\$6,950	N/A	\$6,950	\$ 840	\$ 7,790
Maximum "Two-Earner Deduction" (1982 through 1986)					
1982	\$4,813	\$ 750	\$ 4,063	\$ 600	\$ 4,663
1983	\$5,056	\$ 1,500	\$ 3,556	\$ 600	\$ 4,156
1984	\$5,530	\$ 1,500	\$ 4,030	\$ 600	\$ 4,630
1985	\$5,754	\$ 1,500	\$ 4,254	\$ 620	\$ 4,874
1986	\$5,976	\$ 1,500	\$ 4,467	\$ 645	\$ 5,112
"Two-Earner Deduction" Eliminated (Post-1986)					
1987	\$2,012	N/A	\$ 2,012	\$ 508	\$ 2,520
1988	\$1,493	N/A	\$ 1,493	\$ 330	\$ 1,823
1989	\$1,547	N/A	\$ 1,547	\$ 330	\$ 1,877
1990	\$1,624	N/A	\$ 1,624	\$ 347	\$ 1,971
1991	\$1,365	N/A	\$ 1,365	\$ 341	\$ 1,706
1992	\$1,442	N/A	\$ 1,442	\$ 372	\$ 1,814
1993 (A)	\$1,485	N/A	\$14,985	\$ 535	\$15,430

(A) The 1993 Tax Act increased the potential MTP for very high income taxpayers. The maximum penalty is reached at a joint income of approximately \$.5 million

NOTE: "'Base' Effects" were calculated by multiplying the "Deduction Penalty" (see Exhibit I) by the "Maximum Rate" (see Exhibit II).

As maximum tax rates remained constant at 50% (1982 through 1986), greater rate effect-based MTPs were built into the annually revised tables, gradually offsetting the tax savings resulting from the "two-earner deduction". Further declines in maximum rates to their pre-1993 Tax Act levels of 31%, and the introduction of inflation-indexing of tax rate/bracket thresholds, have seen modest, constant increases in MTPs coupled with the more significant, constant increases in MTBs for taxpayers at the weighted average AGI level.

For the average taxpayer, MTPs have declined from their Period IV high of \$365 (1981) to their current level of \$180 (1993). MTBs have consistently risen from their beginning of Period IV low of \$702 (1977) to their current Period IV high of \$1,648 (1993).

First quartile taxpayer MTPs have held constant at \$0 (1987 through 1993) and related MTBs have risen gradually to their current level of \$518 (1993). Third quartile taxpayer MTPs have risen gradually, but remain below 1977 through 1986 levels of \$180 (1992 and 1993). Related MTBs have declined and current levels have fallen from a 1987 high of \$2,554 to \$1,618 (1993).

A "phase-out" (beginning with the 1991 tax year) of (1) deductions for exemptions and (2) itemized deductions was established for "high income" taxpayers. However, neither of these changes affect the calculations through third quartile AGI levels.

The Revenue Reconciliation Act of 1993, with its increased marginal rates, significantly increases the maximum potential rate and base effect-based MTPs to \$15,430 (Table II). However, this increased potential MTP does not affect taxpayers at the income levels reviewed here. The Revenue Reconciliation Act of 1993 also increases the MTP for low income taxpayers starting in 1994 with the expansion of the earned income credit (EIC) and its extension to childless people. Childless married taxpayers at the first quartile AGI of approximately \$10,000 will not receive any EIC while two single people with AGI of \$5,000 each (a joint AGI of \$10,000) would each receive a credit of \$306 (or a combined total of \$612).

## LIMITATIONS

This paper is primarily descriptive and intended to provide a historical insight on a topic that resurfaces during periods of rising (or in anticipation of rising) marginal federal individual income tax rates. As is the case in some of the recent literature

[Alm and Whittington, 1993], calculations were based on the assumption that taxpayers did not itemize at any income level. Wages were presumed to be the sole source of income, and first quartile, third quartile, and weighted average AGI levels were developed from data available from SOI publications. Furthermore, though descriptively valid, calculations are not combined with any relative weighting of the MTBs and MTPs experienced for any tax year. Finally, those MTPs/MTBs falling outside of the rate and base categories [Jagolinzer and Strefeler, 1986, and Tilt and Spencer, 1983] have not been isolated or independently addressed.

## SUMMARY

Recent literature has focused on the MTP. References to post-1948 through 1970 marriage tax subsidies are often cited (i.e., Rosen, [1987]), though historical findings (for the first and third quartile taxpayer) presented in this paper would suggest that the "subsidy" period began with the 1917 tax year. The broad-based "potential" for MTBs, throughout the history of the United States individual federal income tax, has consistently far exceeded the "potential" for MTPs, and remains so.

Historically, the MTP has most effectively been mitigated through use of the (purely) variable standard deduction represented during Period II (1944 through 1963). It was also successfully mitigated during Period I (i.e., 1934 through 1943 tax years) when the form of the variable standard deduction was that of a revised "earned income credit". However, neither of these periods had the independently developed tax rate schedules for married and single taxpayers that exist during the current post-1970 period. The variable standard deduction only mitigated the "base" effect and not the "rate" effect-based MTP for nonitemizers.

In order to effectively mitigate the rate effect a different mechanism is needed. A reconstruction of some form of the "two-earner deduction", with some provision or ceiling on applicable earned income levels, appears to possess the greatest historical merit toward mitigating tax "rate" effect-based MTPs. Since the rate effect-based MTP is becoming the dominant factor, this more recent mechanism holds the greatest promise for future mitigation. This is particularly so when one considers the likelihood of further increases in marginal tax rates.

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# APPENDIX A

Measures of AGI used for MTP/MTB Calculations/Graphics  
 1914 through 1989 and 1990 through 1993 (Estimated)  
 (in thousands of dollars)

Quartile				Quartile			
Year	First	Third	Mean	Year	First	Third	Mean
1914	\$4.50	\$ 7.5	\$10.826	1954	\$1.75	\$ 5.5	\$ 4.107
1915	\$4.50	\$12.5	\$12.993	1955	\$1.75	\$ 5.5	\$ 4.334
1916	\$4.50	\$12.5	\$14.733	1956	\$1.75	\$ 5.5	\$ 4.612
1917	\$1.50	\$ 4.0	\$ 4.150	1957	\$1.75	\$ 5.5	\$ 4.786
1918	\$1.50	\$ 4.0	\$ 3.840	1958	\$1.75	\$ 6.5	\$ 4.865
1919	\$1.50	\$ 4.0	\$ 3.983	1959	\$2.25	\$ 6.5	\$ 5.189
1920	\$1.50	\$ 4.0	\$ 3.483	1960	\$2.25	\$ 6.5	\$ 5.293
1921	\$1.50	\$ 2.5	\$ 3.134	1961	\$2.25	\$ 6.5	\$ 5.451
1922	\$1.50	\$ 4.0	\$ 3.343	1962	\$2.25	\$ 7.5	\$ 5.653
1923	\$1.50	\$ 4.0	\$ 3.419	1963	\$2.25	\$ 7.5	\$ 5.870
1924	\$1.50	\$ 4.0	\$ 3.677	1964	\$2.50	\$ 8.5	\$ 6.385
1925	\$1.50	\$ 4.0	\$ 5.526	1965	\$2.50	\$ 8.5	\$ 6.699
1926	\$1.50	\$ 4.0	\$ 5.598	1966	\$2.50	\$ 8.5	\$ 6.995
1927	\$1.50	\$ 4.0	\$ 5.813	1967	\$2.50	\$ 9.5	\$ 7.405
1928	\$1.50	\$ 4.0	\$ 6.499	1968	\$2.50	\$12.5	\$ 7.729
1929	\$1.50	\$ 7.5	\$ 6.406	1969	\$2.50	\$12.5	\$ 8.176
1930	\$1.50	\$ 4.0	\$ 5.197	1970	\$3.50	\$11.5	\$ 8.685
1931	\$1.50	\$ 4.0	\$ 4.496	1971	\$3.50	\$12.5	\$ 9.234
1932	\$1.50	\$ 4.0	\$ 3.211	1972	\$3.50	\$12.5	\$ 9.845
1933	\$1.50	\$ 4.0	\$ 3.156	1973	\$3.50	\$13.5	\$10.528
1934	\$1.50	\$ 4.0	\$ 3.351	1974	\$3.50	\$14.5	\$11.192
1935	\$1.50	\$ 4.0	\$ 3.495	1975	\$4.50	\$17.5	\$11.912
1936	\$1.50	\$ 4.0	\$ 3.820	1976	\$4.50	\$17.5	\$12.893
1937	\$1.50	\$ 4.0	\$ 3.590	1977	\$4.50	\$17.5	\$13.892
1938	\$2.50	\$ 2.5	\$ 3.293	1978	\$5.50	\$17.5	\$15.127
1939	\$2.50	\$ 2.5	\$ 3.276	1979	\$5.50	\$22.5	\$16.178
1940	\$1.50	\$ 2.5	\$ 2.603	1980	\$5.50	\$22.5	\$17.628
1941	\$1.50	\$ 2.5	\$ 2.747	1981	\$6.50	\$27.5	\$19.145
1942	\$1.50	\$ 2.5	\$ 2.712	1982	\$6.50	\$27.5	\$20.036
1943	\$1.50	\$ 4.0	\$ 3.056	1983	\$6.50	\$27.5	\$20.806
1944	\$1.25	\$ 3.5	\$ 2.551	1984	\$7.50	\$27.5	\$22.210
1945	\$1.25	\$ 2.8	\$ 2.479	1985	\$7.50	\$35.0	\$23.481
1946	\$1.25	\$ 2.8	\$ 2.622	1986	\$7.50	\$35.0	\$24.838
1947	\$1.25	\$ 3.5	\$ 2.817	1987	\$7.50	\$35.0	\$26.703
1948	\$1.25	\$ 3.5	\$ 3.293	1988	\$8.50	\$35.0	\$28.466
1949	\$1.25	\$ 3.5	\$ 3.254	1989	\$8.50	\$35.0	\$29.656
1950	\$1.63	\$ 4.3	\$ 3.402	1990	\$8.50	\$35.0	\$31.257*
1951	\$1.63	\$ 4.3	\$ 3.676	1991	\$8.50	\$35.0	\$32.570*
1952	\$1.75	\$ 4.8	\$ 3.867	1992	\$9.50	\$35.0	\$33.873*
1953	\$1.75	\$ 5.5	\$ 4.022	1993	\$9.50	\$35.0	\$35.228*

\* Weighted means were "projected" using Consumer Price Index estimates for 1990 and 1991 (5.4% and 4.2%, respectively) and 4% for 1992 and 1993 tax years.



## APPENDIX B

### Summary of MTP/MTB by Category 1914 through 1989 and 1990 through 1993 (estimated)

Year	1st Quartile		3rd Quartile		Weighted Average	
	MTP	MTB	MTP	MTB	MTP	MTB
I. Personal Exemption-Based (1913 through 1943):						
1914-1915	\$ 5	\$ 10	\$ 20	\$ 10	\$ 20	\$ 10 (a)
1916	\$ 10	\$ 20	\$ 40	\$ 20	\$ 40	\$ 20 (a)
1917	\$ 0	\$ 10 (b)	\$ 0	\$ 40	\$ 3 (c)	\$ 40 (a)
1918	\$ 0	\$ 30 (b)	\$ 0	\$ 60	\$ 0	\$ 60
1919-1920	\$ 0	\$ 20 (b)	\$ 0	\$ 40	\$ 0	\$ 40
1921	\$ 0	\$ 20 (b)	\$ 0	\$ 60 (b)	\$ 0	\$ 60 (a)
1922	\$ 0	\$ 20 (b)	\$ 0	\$ 60	\$ 0	\$ 60
1923	\$ 0	\$ 11 (b)	\$ 0	\$ 34	\$ 0	\$ 60
1924	\$ 0	\$ 8 (b)	\$ 0	\$ 23	\$ 0	\$ 23
1925	\$ 0	\$ 0 (b)	\$ 0	\$ 23	\$ 0	\$ 23 (a)
1926	\$ 0	\$ 0 (b)	\$ 0	\$ 23	\$ 0	\$ 24 (a)
1927	\$ 0	\$ 0 (b)	\$ 0	\$ 23	\$ 0	\$ 26 (a)
1928	\$ 0	\$ 0 (b)	\$ 0	\$ 23	\$ 0	\$ 34 (a)
1929	\$ 9	\$ 9 (b)	\$ 0	\$ 45	\$ 0	\$ 33
1930-1931	\$ 0	\$ 0 (b)	\$ 0	\$ 23	\$ 0	\$ 23 (a)
1932-1933	\$ 0	\$ 20 (b)	\$ 0	\$ 60	\$ 0	\$ 60
1934-1937	\$ 0	\$ 14 (b)	\$ 0	\$ 60	\$ 0	\$ 60
1938-1939	\$ 0	\$ 50 (b)	\$ 0	\$ 50 (b)	\$ 0	\$ 60 (a)
1940	\$ 0	\$ 24 (b)	\$ 0	\$ 53	\$ 0	\$ 53 (a)
1941	\$ 0	\$ 69 (b)	\$ 0	\$ 75	\$ 0	\$ 75 (a)
1942	\$ 0	\$ 133	\$ 0	\$ 133	\$ 0	\$ 139 (a)
1943	\$ 0	\$ 158	\$ 0	\$ 198	\$ 0	\$ 187
II. Variable Standard Deduction-Based (1944 through 1963):						
1944	\$ 0	\$ 100	\$ 0	\$ 113	\$ 0	\$ 100
1945	\$ 0	\$ 100	\$ 0	\$ 100	\$ 0	\$ 100
1946	\$ 0	\$ 95	\$ 0	\$ 95	\$ 0	\$ 95
1947	\$ 0	\$ 95	\$ 3(c)	\$ 105	\$ 0	\$ 96
1948	\$ 0	\$ 87 (b)	\$ 0	\$ 115	\$ 0	\$ 110
1949	\$ 0	\$ 87 (b)	\$ 0	\$ 115	\$ 0	\$ 109
1950	\$ 0	\$ 104	\$ 0	\$ 136	\$ 0	\$ 116
1951	\$ 0	\$ 122	\$ 0	\$ 147	\$ 0	\$ 137
1952	\$ 0	\$ 133	\$ 0	\$ 173	\$ 0	\$ 154
1953	\$ 0	\$ 133	\$ 0	\$ 205	\$ 0	\$ 158
1954	\$ 0	\$ 120	\$ 0	\$ 181	\$ 0	\$ 142
1955	\$ 0	\$ 120	\$ 0	\$ 181	\$ 0	\$ 146
1956	\$ 0	\$ 120	\$ 0	\$ 181	\$ 0	\$ 151
1957	\$ 0	\$ 120	\$ 0	\$ 181	\$ 0	\$ 154
1958	\$ 0	\$ 120	\$ 0	\$ 222	\$ 0	\$ 156
1959	\$ 0	\$ 120	\$ 0	\$ 222	\$ 0	\$ 164
1960	\$ 0	\$ 120	\$ 0	\$ 222	\$ 0	\$ 170
1961	\$ 0	\$ 120	\$ 0	\$ 222	\$ 0	\$ 178
1962	\$ 0	\$ 120	\$ 0	\$ 264	\$ 0	\$ 189
1963	\$ 0	\$ 120	\$ 0	\$ 264	\$ 0	\$ 199

# **APPENDIX B (continued)**

Year	1st Quartile		3rd Quartile		Weighted Average	
	MTP	MTB	MTP	MTB	MTP	MTB
III. Semi-Variable Standard Deduction-Based (1964 through 1976):						
1964	\$ 24	\$109	\$ 0	\$ 324	\$ 0	\$ 220
1965	\$ 22	\$103	\$ 0	\$ 307	\$ 0	\$ 227
1966	\$ 22	\$103	\$ 0	\$ 307	\$ 0	\$ 235
1967	\$ 22	\$103	\$ 0	\$ 361	\$ 0	\$ 248
1968	\$ 24	\$111	\$ 59	\$ 636	\$ 0	\$ 285
1969	\$ 24	\$113	\$ 61	\$ 651	\$ 0	\$ 318
1970	\$ 8	\$138	\$ 34	\$ 513	\$ 0	\$ 328
1971	\$148	\$117	\$143	\$ 435	\$171	\$ 306
1972	\$ 98	\$119	\$164	\$ 431	\$213	\$ 333
1973	\$ 98	\$119	\$146	\$ 473	\$194	\$ 364
1974	\$ 98	\$119	\$156	\$ 523	\$175	\$ 398
1975	\$ 95	\$214	\$198	\$ 770	\$261	\$ 443
1976	\$ 54	\$222	\$274	\$ 757	\$271	\$ 449
IV. Fixed Standard Deduction-Based (1977 through 1993):						
1977	\$ 0	\$199 (b)	\$376	\$ 921	\$244	\$ 702
1978	\$ 42	\$322	\$376	\$ 921	\$280	\$ 767
1979	\$ 14	\$318	\$478	\$1,330	\$275	\$ 776
1980	\$ 14	\$318	\$478	\$1,330	\$304	\$ 907
1981	\$154	\$358	\$747	\$1,744	\$365	\$1,009
1982	\$113	\$316	\$471	\$1,589	\$258	\$ 992
1983	\$ 85	\$295	\$292	\$1,419	\$142	\$ 936
1984	\$ 91	\$304	\$253	\$1,325	\$115	\$1,020
1985	\$ 95	\$308	\$443	\$1,804	\$123	\$1,077
1986	\$101	\$311	\$448	\$1,793	\$133	\$1,137
1987	\$ 0	\$387 (b)	\$222	\$2,554	\$222	\$1,226
1988	\$ 0	\$533 (b)	\$150	\$2,179	\$150	\$1,329
1989	\$ 0	\$510 (b)	\$150	\$2,091	\$150	\$1,396
1990	\$ 0	\$480 (b)	\$158	\$1,970	\$158	\$1,483
1991	\$ 0	\$443 (b)	\$165	\$1,851	\$165	\$1,535
1992	\$ 0	\$540 (b)	\$180	\$1,700	\$180	\$1,553
1993	\$ 0	\$518 (b)	\$180	\$1,618	\$180	\$1,648 (a)

- (a) Weighted mean-based AGI exceeds third quartile-based AGI.
- (b) First and third quartile-based AGI years where MFJ calculations resulted in \$0 tax liability. The weighted mean-based AGI calculations yielded tax liabilities for the MFJ status for all tax years.
- (c) Penalty attributable to "rate" effect (i.e., MTP results from MFJ amount above first bracket and SGL amount below first bracket thresholds).