The Marriage Tax Penalty and Subsidy Under Tax Reform

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1. INTRODUCTION

It is well-known that it is impossible for an income tax system to have all three of these characteristics: (a) marginal tax rates that increase with income; (b) joint filing for married couples; and (c) neutrality with respect to marital status, in the sense that the combined taxes owed by two people are independent of whether they are married. Indeed, probably a principal motivation for (b) is the intended violation of (c). Nonetheless, the violation of (c) by the U.S. tax law has periodically caused political dissatisfaction. Thus it is important to understand the nature of the empirical departures of the tax system from marriage neutrality.

The post-1969 U.S. tax system, with marginal tax rates that increase with income and with joint filing, has contained a marriage penalty for couples for which the income of the secondary earner is relatively close to that of the primary earner, and a marriage subsidy for those couples with secondary income substantially less than primary income. If the Tax Reform Act of 1986 had given us a single marginal tax rate, along with marriage-neutral per capita personal exemptions and standard deduction, then the reformed system would have been marriage neutral. In fact, the reformed system contains two widely separated marginal rates. In addition, a non-earning person benefits from the personal exemption only if married, and the per capita standard deduction is lower for married people than for single people.

Hence the new system, like the old, is not marriage neutral.

Departures from marriage neutrality can be measured by three indicators: (i) The maximum marriage subsidy occurs when the income of the secondary earner is zero, and is given by CST/MT contingent on $I_2 = 0$ (where CST is the combined tax paid by two individuals filing as single earners, MT is the tax paid by an equivalent married couple filing jointly, and $I_1$ is the income of the secondary earner). (ii) The maximum marriage penalty occurs when secondary income $I_2$ equals the income $I_1$ of the primary earner, and can be measured by CST/MT contingent on $I_1 = I_2$. (iii) The fraction of the range of possible values of $I_2$ from zero to $I_1$ for which a marriage subsidy occurs is $\frac{MT}{I_1}$, where $\frac{MT}{I_1}$ is such that CST = MT for a couple whose respective incomes are $I_1$ and $I_2$. (For $I_2 < I_1$, a marriage subsidy occurs, while for $I_2 > I_1$, a marriage penalty occurs.) The values of all three indicators are contingent on the value of $I_1$.

This paper presents the values of these three indicators for various levels of $I_1$. It is shown that all three indicators vary erratically with the primary income level, and indicators (i) and (iii) vary quite substantially. These results can be compared to those of Mitchell (1986) for the pre-tax-reform 1985 U.S. tax structure. The results for (i) and (ii)—the measures of the maximum marriage subsidy and maximum marriage penalty—are quite similar under the old and new tax structures, in that the erratic nature of indicators (i) and (ii) is essentially unchanged. However, indicator (iii)—the percentage of potential $I_2$ values which imply a marriage subsidy—varies substantially more erratically and widely under the reformed system. In this regard tax reform has exacerbated the lack of marriage neutrality of the system.

Section II of this paper describes the new tax system, and Section III presents the numerical features of the treatment of marriage in the new system. Section IV contains concluding comments.

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THE MARRIAGE TAX PENALTY

II. THE NEW TAX SYSTEM

The features of tax reform which are relevant to the marriage tax penalty or subsidy are the marginal rates, the personal exemptions, and the standard deduction. Taxable income equals income minus deductions minus personal exemptions. The personal exemption is $2,000 per person. The standard deduction is $3,000 for a single return or $5,000 for a joint return.

Taxable income is taxed at a 15% rate for the first $17,850 on a single return or the first $29,750 on a joint return. Beyond this cutoff the marginal rate is 28%.

In addition, beyond a certain level of taxable income ($71,900 on joint returns or $43,150 on single returns) the 15% rate on the first dollars of income is phased up to 28%. When this phase-up is complete (at a taxable income of $149,250 on joint returns or $89,560 on single returns), the phase-out of the personal exemptions begins. This latter phase-out occurs over an income range of $13,200 times the number of personal exemptions. The effect of the two phase-outs is to create an effective marginal tax rate of 33% over the range of taxable incomes covered by the two phase-outs.

III. TAX TREATMENT OF MARRIAGE

We consider a pair of individuals, alternatively married or not married, with no children, who take the standard deduction. Table 1 presents CST/M in and CST - MT for L = 0 for various levels of L, between 10,000 and 75,000, the same measures for the case of L = 1, and finally L and H, all under the reform system. For comparison purposes, Table 2 gives the same information for the pre-reform year 1985 (as adapted from Mitchell 1986).

Table 2 in Table 1 shows that the maximum marriage subsidy is extremely large in relative terms when primary income is $10,000. As L rises, from these CST/M declines, rises, and then declines again. The range of values covered by CST/M (between 1.67 and 1.23 for the income levels considered above $10,000) is substantial, and is very similar to that reported in Table 2 for the 1985 tax system.

Column 4 shows that the maximum marriage penalty, as measured by CST/M when L = 1, also fluctuates non-monotonically with L, but over a narrower range of values (between 0.86 and 0.95 for the income levels considered). This range is also similar to that reported in Table 2 for the 1985 tax structure.

The numbers in Columns 3 and 5 respectively show the maximum absolute marriage subsidy and penalty. In the new tax system the maximum absolute marriage penalty has declined substantially at almost all primary income levels, as compared to the pre-reform system, while the maximum absolute marriage subsidy has declined moderately at some primary income levels and risen moderately at others. Column 7 shows the fraction of possible values of secondary income which lead to a marriage subsidy. This fraction varies non-monotonically between 0.59 and 0.90 for the income levels considered. This is a much wider range than Table 2 reports for the 1985 tax system (the latter range being from 0.33 to 21). Notice that there are now some primary income levels for which a marriage subsidy exists for over 50% of the possible secondary income levels. This feature did not appear in the 1985 tax structure.

Note also the very abrupt rise in L for a, which now occurs between primary income levels of $20,000 and $35,000. Specifically, if L = 1, as $L$ rises from $5,000 to $14,754. This erratic pattern of L results from the large difference between the two adjacent marginal tax rates: 15% and 28%.

IV. CONCLUSION

This paper has shown that the recent reform of the U.S. tax system has not moved the system toward marriage neutrality. Departures from marriage neutrality vary just as erratically with primary income level—and in one respect more so—in the new tax system as in the pre-reform system. These aspects of the tax system suggest that future revisions should be based on explicit consideration of the implications for the tax treatment of marriage. Departures from marriage neutrality should be consistent across income levels, and the possibility of creating marriage neutrality by eliminating joint filing should be considered. If the tax system is not moved toward marriage neutrality, then labor market decisions of married secondary workers may continue to be distorted, and in some cases marriage decisions will continue to be influenced by tax considerations.
Evenhandedness In Arbitration: The Case of Major League Baseball

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I. INTRODUCTION

Arbitration has become a common mechanism for the settlement of disputes when parties in a collective bargaining agreement fail to reach agreement. Two types of arbitration are commonly employed: conventional arbitration, where the arbitrator explicitly determines a specific settlement, and final-offer arbitration, where the arbitrator must choose between the final offers of the two parties.

Economists have studied both of these types of arbitration.1 Much of this research has focused on differences in the expected outcomes of conventional and final-offer arbitration. Empirical work generally has focused on how arbitrators make decisions. The work leaves unanswered several interesting questions.

In this study, the focus is on how labor and management judge the degree of evenhandedness of arbitrators in major league baseball arbitration. Previous studies of arbitration have judged fairness strictly from the standpoint of an objective outside observer. Understanding the judgments of labor and management necessitates consideration of the decision process of arbitrators and its relationship to the willingness of the parties to undertake arbitration as opposed to reaching a negotiated settlement.

Because arbitration in professional baseball is interest arbitration with the single issue of wage determination, baseball provides an interesting context in which to study these issues.2 As part of the 1973 collective bargaining agreement between baseball owners and the Major League Baseball Players' Association, players with between two and six years of major league experience may settle salary disputes by submitting to final-offer arbitration, while players with six or more years experience may use arbitration with permission of the club. Owners may request arbitration at any time.3

II. MODELING ARBITRATOR BEHAVIOR

Before turning to how players and owners judge the evenhandedness of arbitrators, it is useful to consider how arbitrators make decisions—that is, how arbitrators choose between the offers of the two parties. In the arbitration process in major league baseball, the arbitrator is provided the following information: \( w_p \), the final offer of the player, \( w_c \), the final offer of the club, the recent and lifetime performance measures and other special qualities of leadership and public appeal, the record of the player's past compensation, salary data for all Major League Players as of the August 31 preceding the hearing, the recent performance and attendance of the club, and any special physical or mental defects of the player.4

From this information, the arbitrator determines a target salary, \( \bar{T} \), which represents the arbitrator's best estimate of the value of a player to the particular club involved in the hearings. Presumably the arbitrator will choose the player or club offer (\( w_p \) or \( w_c \), respectively) which is closest to \( \bar{T} \). Thus the player offer would be chosen if

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|w_p - \bar{T}| < |w_c - \bar{T}|
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and the club offer would be chosen if the inequality were reversed.

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