

Paying the Poor to Live in Sin – a New Look at the Marriage Tax

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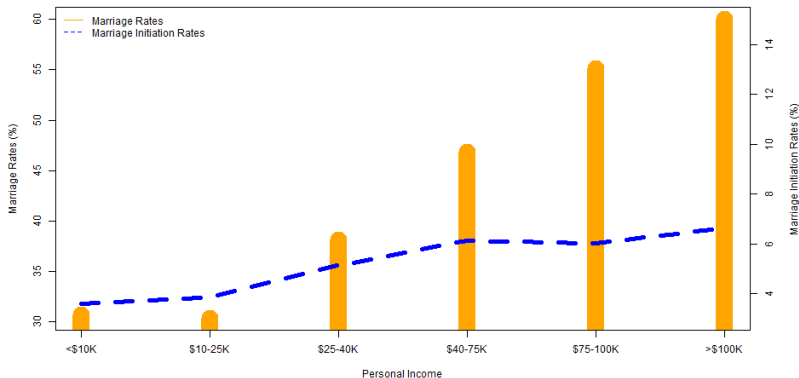
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Marriage Rate and Marriage Initiation Rate by Income. Age 18-30



Marriage and the U.S. Fiscal System

- **Public policy has historically promoted marriage among low-income individuals**
 - George W. Bush's Healthy Marriage Initiative
 - Main reason – better children's outcomes (*Amato (2005); DeLeire and Lopoo (2010); McLanahan and Sawhill (2015)*)

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- **However, the fiscal system can have unintended negative effects on the marriage initiation**

Marriage and the U.S. Fiscal System

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- **Income Tax Penalty** – *Whittington and Alm (1997); Alm and Whittington (1999); Chade and Ventura (2002); Alm and Whittington (2003)*
- **Transfer Penalty** – *Dickert-Conlin and Houser (1998); Dickert-Conlin (1999); Wilcox et al. (2016)*

Paper Overview

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- 3 Reevaluation of net marriage tax after TCJA and ACA**
 - Medicaid and ACA subsidies are main components of the net marriage tax
- 4 Impact of net marriage tax on marriage initiation**
 - Without net marriage tax, lower income female initiation rate would be 40 to almost 100% higher

Plan for Today

- 1 Methodology
 - Taxes, Transfers and Marriage
 - Definitions
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Idea & Definitions

- Define **PV of Lifetime Net Resources (R)** as:

$$R = W + H + B - Z$$

- W – private wealth
- H – human wealth
- B – present value of lifetime transfers
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- **Lifetime Net Marriage Tax:** $= \frac{T}{R} B$
 - **Lifetime Gross Marriage Tax:** $= \frac{T}{R}$
 - **Lifetime Transfer Penalty:** $= \frac{B}{R}$

The Fiscal Analyzer (TFA)

- **The Fiscal Analyzer** is a life-cycle consumption-smoothing program
 - Borrowing constraints
 - Lifespan uncertainty
 - Expected income growth
 - All major federal and state tax and transfer programs

TFA Details

See "**Marginal Net Taxation of Americans' Labor Supply**" by Altig, Auerbach, Kotlikoff, Ilin and Ye (2020) for more details

Taxes and Transfers Included in the Analysis

	Rules Level	Marriage Neutral
Taxes and Tax Credits		
Personal Income Tax	Federal, State	No
Earned Income Tax Credit (EITC)	Federal, State	No
Child Tax Credit (CTC)	Federal, State	No*
FICA Tax	Federal	Yes
Sales Taxes	State	Yes
Public Assistance Programs		
Social Security benefits	Federal	No
Social Security Disability Insurance (SSDI)	Federal	No
Supplemental Security Income (SSI)	Federal	No
Medicaid/Children's Health Insurance Program (CHIP)	Federal, State	No
Medicare Part B premiums	Federal	No
Medicare benefits	Federal	Yes
Marketplace subsidies	State	No**
Supplemental Nutritional Assistance Program (SNAP)	State	No
Temporary Assistance for Needy Families (TANF)	State	No
Section 8 Housing Vouchers	State, County	No
Child Care and Development Fund (CCDF) subsidies	State, County	No

*Marriage neutral if both parties make similar income

**Marriage subsidy can arise if the combined income of a couple is higher than the minimum-income eligibility threshold

Marriage Simulation in 2016 Survey of Consumer Finances

Sample of single/leveled respondents to 2016 SCF

Age 20-49

N=4,372

SCF Summary Statistics

Marriage Simulation in 2016 Survey of Consumer Finances

Sample of single/never-married respondents to 2016 SCF

Age 20-49

N=4,372

SCF Summary Statistics

Simulate "clone" marriage for each individual

Partner has exactly the same financial characteristics

Children (if any) assigned to the mother

No change in labor supply and no economy of joint living

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Compare projected Z and B for singles and married

Assuming full participation in public assistance programs

[Take Up Rates](#)

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Lifetime Marriage Penalties by Income

Decomposition of Net Marriage Tax

State Variation in the Net Marriage Tax

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Predicting Marriage Penalty

$$\begin{aligned}
 \text{isg} = & \beta_0 + \beta_1 F_{\text{isg}} (Y_{\text{isg}} + Y_{\text{isg}}^2) + \beta_2 K_{\text{isg}}^{0-12} F_{\text{isg}} (Y_{\text{isg}} + Y_{\text{isg}}^2) \\
 + & \beta_3 K_{\text{isg}}^{13-18} F_{\text{isg}} (Y_{\text{isg}} + Y_{\text{isg}}^2) + \beta_4 H_{\text{isg}} F_{\text{isg}} (Y_{\text{isg}} + Y_{\text{isg}}^2) + X_{\text{isg}} + \epsilon_{\text{isg}}
 \end{aligned}$$

{ marriage penalty

F { family size

H { housing status (home owner or renter)

K^{0-12} { indicator of children under the age 12

K^{13-18} { indicator of children age 13-18

Y { total household income from all sources

X { integer age and level of education

2018 American Community Survey

2018 American Community Survey

Age 20-49

Unmarried at the beginning of 2018

11.4% of females and 9.4% of males married in 2018

ACS Summary Statistics

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$$M_i = \beta_0 + \beta_1 \hat{\tau}_i + \beta_2 Y_i + \beta_3 X_i + \beta_s + \epsilon_i$$

M { indicator of marriage in the previous year

$\hat{\tau}$ { predicted (out of sample) net marriage tax rate

Y { total household income from all sources

X { integer age and level of education

s { state fixed-effect

Effects of Lifetime Marriage Penalties (std.err) [Mean Marginal Effect]

Empirical Magnitudes of the Probit Coefficients

Effects of Current-Year Marriage Penalties (std.err) [Mean Marginal Effect]

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Conclusion & Future Work

Lifetime measure of marriage penalties

Marriage affects current and future net resources

Average net marriage tax is 2.7% and higher for lower income

Significant state level variation

Large negative effect on marriage initiation

Eliminating the marriage tax would double marriage rates for females in the lowest income quintile

Future work

Account for imperfect take-up of public assistance programs

Sensitivity analysis on assortative mating

2018 (Post-TCJA) Federal Tax Brackets

Tax Rate	Taxable Income (Single)	Taxable Income (Married Filing Jointly)
10%	Up to \$9,525	Up to \$19,050
12%	\$9,526 to \$38,700	\$19,051 to \$77,400
22%	\$38,701 to \$82,500	\$77,401 to \$165,000
24%	\$82,501 to \$157,500	\$165,001 to \$315,000
32%	\$157,501 to \$200,000	\$315,001 to \$400,000
35%	\$200,001 to \$500,000	\$400,001 to \$600,000
37%	Over \$500,300	Over \$600,000

Back to [Taxes, Transfers and Marriage](#)

"Singleized" 2016 Survey of Consumer Finances

Back to [Marriage Simulation](#)



2018 American Community Survey

Back to [2018 American Community Survey](#)



Public Assistance Programs Take Up Rates

Back to [2018 American Community Survey](#)

TFA Overview

TFA uses dynamic program to smooth each household's living standard per equivalent adults subject to borrowing constraints

TFA's algorithm consists of three dynamic programs:

- Consumption smoothing
- Life insurance calculations
- Tax and transfers calculation

Total expenditures of the household (E_t) in the period t as:

$$E_t = c_t(N_t + K_t)$$

c_t is the consumption per equivalent adult

N_t is the number of adults in the household

K_t is the number of kids

α is the weight of children in the household (0.7)

α governs the "economy of joint living"

TFA Overview

In the period T household consumes all remaining resources:

$$E_T = R_T$$

Express consumption as a function of net resources:

$$c_T = C(R_T)$$

Smooth c_t going backwards in a way which equalizes consumption per equivalent adult across periods subject to the borrowing constraints

For the period $t - 1$:

$$C(R_{t-1}) = \begin{cases} C(R_{t-1}, E_{t-1}); & E_{t-1} = A_{t-1}(1+r) + I_{t-1} - T_{t-1} \\ A_{t-1}(1+r) + I_{t-1} - T_{t-1}; & \text{otherwise} \end{cases}$$

- A – total assets
- r – rate of return
- I – employment income
- T – net tax

Back to [The Fiscal Analyzer \(TFA\)](#)