Jonathan Gruber

Public Finance and Public Policy First Edition

Chapter 22:

Taxes on Savings

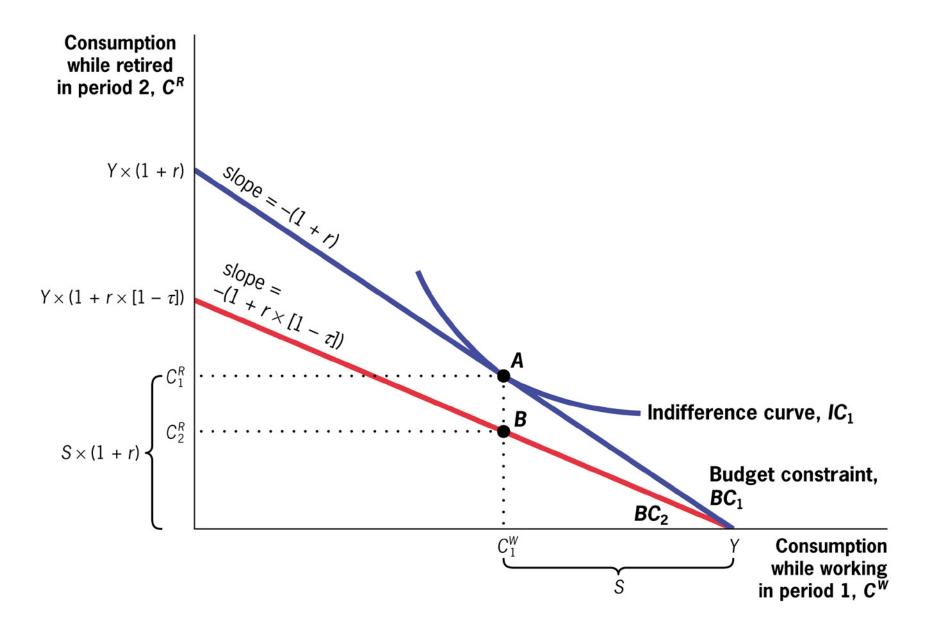


Figure 22.1 Taxation and the Intertemporal Consumption Decision Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers

(a) Substitution effect is larger $Y \times (1 + r)$ $Y \times (1 + r \times [1 - \tau])$ BC_2 BC_1 C_2^W C^{W} S_2

Figure 22.2 (a) Intertemporal Substitution Versus Income Effect Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers

(b) Income effect is larger C^R $Y \times (1 + r)$ $Y\times(1+r\times[1-\tau])$ $S_1 \times (1+r) \left\{ \begin{array}{c} C_1^R \\ C_2^R \end{array} \right\}.$ $S_3 \times (1+r \times [1-\tau]) \left\{ \begin{array}{c} C_1^R \\ C_2^R \end{array} \right\}.$ IC₃ BC₂ BC_1 C^{W} \dot{S}_1 S_3

Figure 22.2 (b) Intertemporal Substitution Versus Income Effect Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers

■ TABLE 22-1

Capital Taxation in an Inflationary Environment

Case	Inflation	Tax rate on interest	Savings	Nominal rate	Interest earnings	After-tax resources	Price of skittles	Bags of skittles
No inflation	0%	0%	100	10%	\$10	\$110	\$1.00	110
	0%	50%	100	10%	\$10	\$105	\$1.00	105
Inflation	10%	0%	100	10%	\$10	\$110	\$1.10	100
	10%	50%	100	10%	\$10	\$105	\$1.10	95.5
Constant real rate	10%	0%	100	21%	\$21	\$121	\$1.10	110
	10%	50%	100	21%	\$21	\$110.5	\$1.10	100.5

■ TABLE 22-2

The Tax Advantage of IRA Savings

Account type	Earnings	Tax on earnings (tax rate = 25%)	Initial deposit	Interest earned (interest rate = 10%)	Taxes paid upon withdrawal	Total amount withdrawn
Regular	\$100	\$25	\$75	\$7.50	$0.25 \times (\$7.50) = \1.88	\$75 + 7.50 - \$1.88 = \$80.62
IRA	\$100	0	\$100	\$10	$0.25 \times (\$110) = \27.50	\$100 + 10 - \$27.50 = \$82.50

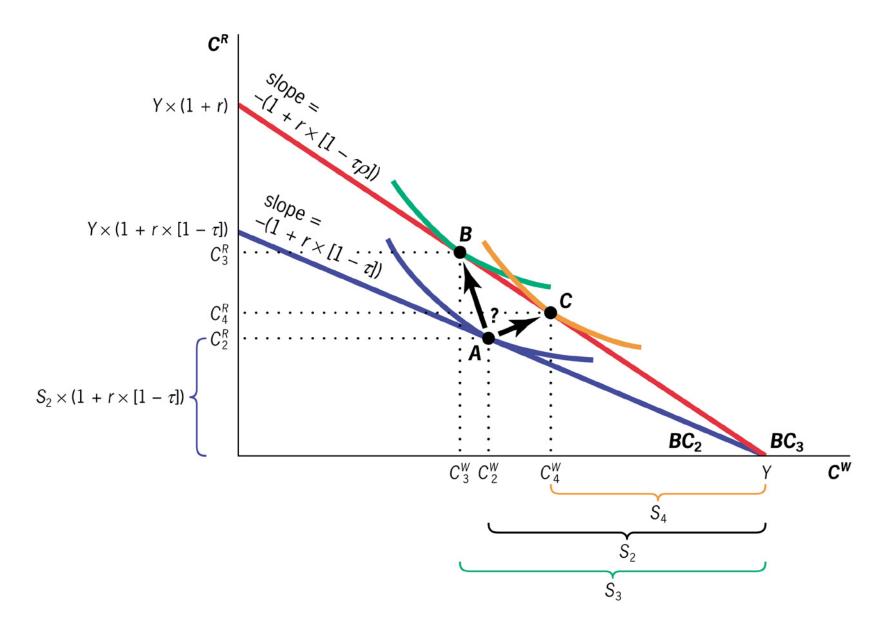


Figure 22.3 Tax Subsidies and the Intertemporal Consumption Trade-off Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers

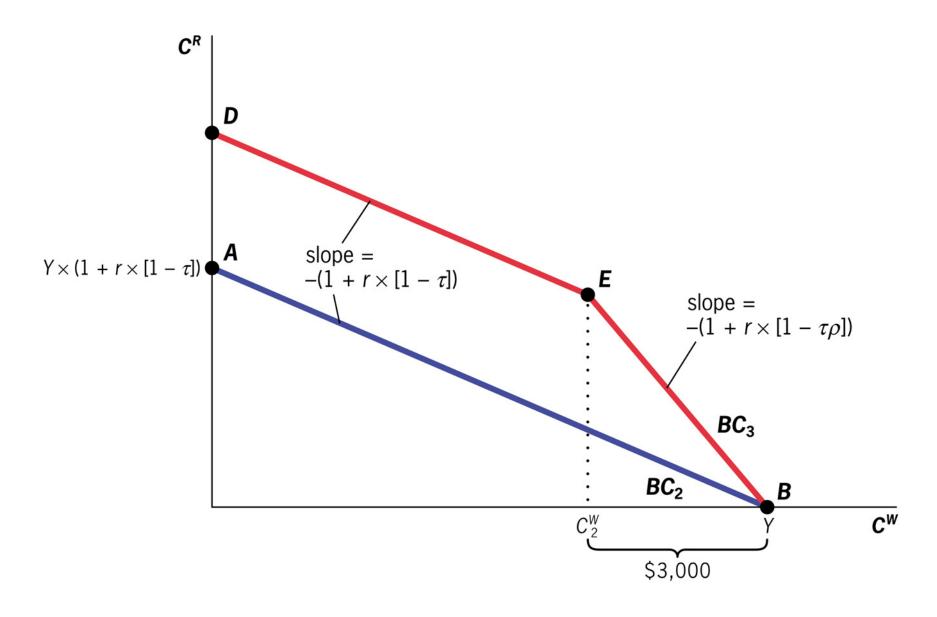


Figure 22.4 IRAs and the Intertemporal Consumption Decision Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers

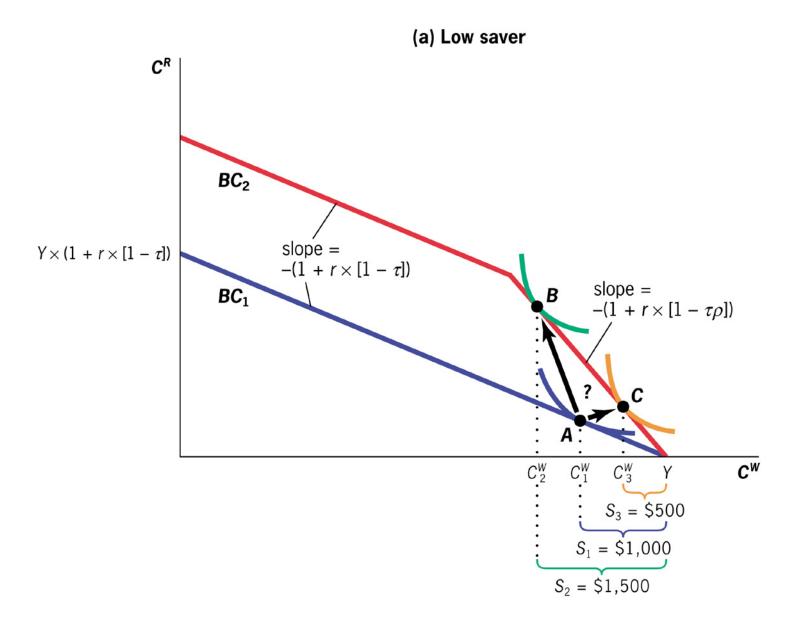


Figure 22.5 (a) Low Savers Versus High Savers Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers

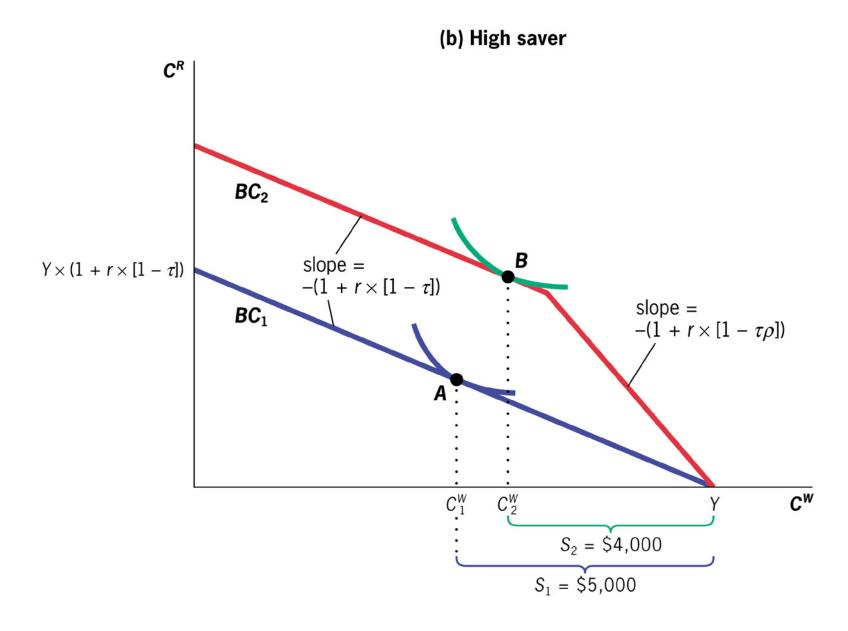


Figure 22.5 (b) Low Savers Versus High Savers Gruber: Public Finance and Public Policy, First Edition Copyright © 2005 by Worth Publishers