

A low-angle, upward-looking photograph of several large, light-colored stone columns of a classical building. The columns are fluted and have ornate capitals. The sky is a clear, pale blue. The perspective creates a sense of height and grandeur.

CONSUMPTION TAXATION

Chapter 19

Presentation prepared by Seuren Williams to teach Economics
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Questions For Discussion (1 of 3)

Zach lives two periods, earning \$31,500 in the first and nothing in the second. The rate of return on savings is 8 percent. Zach faces a sales tax rate of 5 percent and a tax rate on interest income of 20 percent. His pre-tax consumption level in the first period is \$16,000. The rest of his earnings are used to pay the sales tax and to save for the second period. Determine ^① how much Zach saves and ^② how much he consumes in the second period. Determine ^③ how much Zach pays in sales taxes in each period and how much he pays in interest income tax. ^⑤

① Sale tax paid in 1st period = $5\% \times 16,000 = 800$

Saving = $31,500 - 16,000 - 800 = 14,700$

Interest = $14,700 \times 0.08 = 1,176$

⑤ income tax = $1,176 \times 20\% = 235.2$

① total saving in 2nd period = $14,700 + 1,176 - 235.2$
 $= 15,640.8$

④ sales tax in 2nd = $15,640.8 \times 0.05 = 782.04$

② $15,640.8 - 782.04 = 14,858.76$

Questions For Discussion (2 of 3)

In the table below, with a GST rate of 5 percent, how much does each producer (a) collect in GST; (b) receive as a GST credit; and (c) remit to the government?

	Sale by producer X to producer Y	Sale by producer Y to producer Z	Sale by producer Z to consumer
Sale value	\$200.00	\$600.00	\$1,600.00
GST collected	$200 \times 0.05 = 10$	$600 \times 0.05 = 30$	$1600 \times 0.05 = 80$
GST credit	0	10	30
GST remitted	$10 - 0$	$30 - 10 = 20$	$80 - 30 = 50$

Key Points – Question 2

In the table below, with a GST rate of 5 percent, how much does each producer (a) collect in GST; (b) receive as a GST credit; and (c) remit to the government?

	Sale by producer X to producer Y	Sale by producer Y to producer Z	Sale by producer Z to consumer
Sale value	\$200.00	\$600.00	\$1,600.00
GST collected	\$10	\$30	\$80
GST credit	\$0	\$10	\$30
GST remitted	\$10	\$20	\$50

Questions For Discussion (3 of 3)

Amy and Shirley both live two periods. Both have earnings of \$1,000 in the present and zero in the future. The interest rate is 8 percent. Suppose that they are each subject to an income tax, and Amy's first period consumption is \$200 while Shirley's is \$300. Who has the higher lifetime tax burden? Under a proportional consumption tax, how would their lifetime tax burdens compare?

Hint: Try the case where the tax rate is 20% ($t=0.2$)