# Fiscal Policy HW

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1 a) 30%

b) $125,000

$34,000 - 8,375 = 25,625 \quad 25,625 \cdot (0.1) = 2562.5$

$82,400 - 34,000 = 48400 \quad 48400 \cdot (0.2) = + 9680$

$125,000 - 82,400 = 42600 \quad 42600 \cdot (0.3) = + 12780$

Total tax: 25022.5

T — Average tax rate $= \frac{25022.5}{125,000} = 0.20018 =$ 20.018%

2 Tax revenue: $20,000 * 0.15 + 2000 = 5000$

TR → Transfers: $1500 - 0.10 \cdot 20000 = -500$

G → Gov Purchases = 3500 GDP = 20000

INT → Interest Payments = 300 Full GDP = 25000

a) Budget Deficit $= G + TR + INT - T$

$= 3500 + (-500) + 300 - (5000)$

$= -1700$

b) Primary Budget Deficit $= G + TR - T$

$= 3500 + (-500) - 5000$

$= -2000$

c) $T = 2000 + (0.15 \cdot 25000) = 5750$

$TR = 1500 - (0.10 \cdot 25000) = -1000$

$G = 3500$

$Int = 300$

Full Employment budget deficit $= 3500 + (-1000) + (300) - 5750$

$= -2950$

3 c

4 $(0.15)^2 \cdot x = 1500$

$x = 66666.6666$

$x \cdot (0.7)^2 = y$

$\boxed{y = \$32666.67}$

5 deficit = 0.05 * GDP

debt-GDP ratio = 0.9

gr of NGDP = 0.02

change in debt-GDP ratio = $\frac{0.05}{0.02} = 2.5$

6 a

7 b

8 a

9a primary budget deficit + INT = Deficit

400 + 250 = 650 ← deficit

change in debt-GDP ratio = $\frac{650}{2} = 325$

b 250 + 250 = 500 ← deficit

change in debt-GDP ratio = $\frac{500}{2} = 250$

c 750 + 250 = 1000 ← deficit

change in debt-GDP ratio = $\frac{1000}{4} = 250$

10 I do not think it holds because I believe that people today do not understand economics enough to see that a tax cut today would mean future taxes would rise. They would use their extra money from the tax cut thus, their spending would increase