Econ 132 Fall 2016 FINAL EXAM: SOLUTIONS Version A Cameron

Version A

1.(a) (i) B (where have U(E[X])
(ii) Risk-averse (since diminishing marginal utility of X)

(b)(i) 10,000 ± 1.96×20,000×sqrt(100) = 10,000 ± 3920 = (<u>$6,080</u>, <u>$13,920</u>).
(Or could use 10,000 ± 2×20,000×sqrt(100) = 10,000 ± 4000 = (<u>$6,000</u>, <u>$14,000</u>).
(ii) Value is no more than posted price, so uniform on (50,90) with E[X] = (90-50)/2=70.
Since U(70) = 1.5×70 = 105 > 90 will <u>buy car</u>.
(c)(i) Elasticity = $\frac{(550 - 750) / [(550 + 750)/2]}{(30 - 0) / [(30+0)/2]} = \frac{-200/650}{30/15} = \frac{-4/13}{2} = -2/13 = -.154$.
(you can also multiply by minus one, in which case the answer is 0.154).

(ii) <u>Outpatient</u> (the first category in Table 2)

2. In this question other answers may also get credit. These are the most obvious correct answers.

(i) More companies selling insurance may lead to increased competition and lower prices.

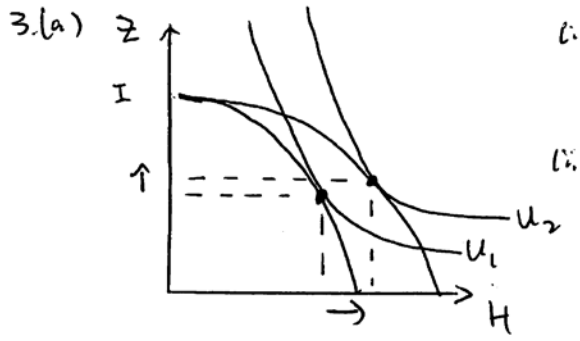
(ii) Insurance companies out of state may have troubles negotiating with in-state providers close to where people live. (Less obvious: regulation of insurance companies is currently at the state level).

(iii) An adverse selection spiral will occur due to high premiums forcing out some, so even unhealthier in pool, higher risk, ….. (in order for this to work there would need to be a very high subsidy of the insurance premium).

(iv) High deductible health plans can reduce moral hazard, reducing health care expenses.

(v) Health insurance premiums will increase as the healthiest will leave the insurance pool.

(vi) Clearly low income people will be most likely to drop insurance. Assuming they have lower (higher) health expenses this will decrease (increase) heatlh costs and hence insurance premiums.



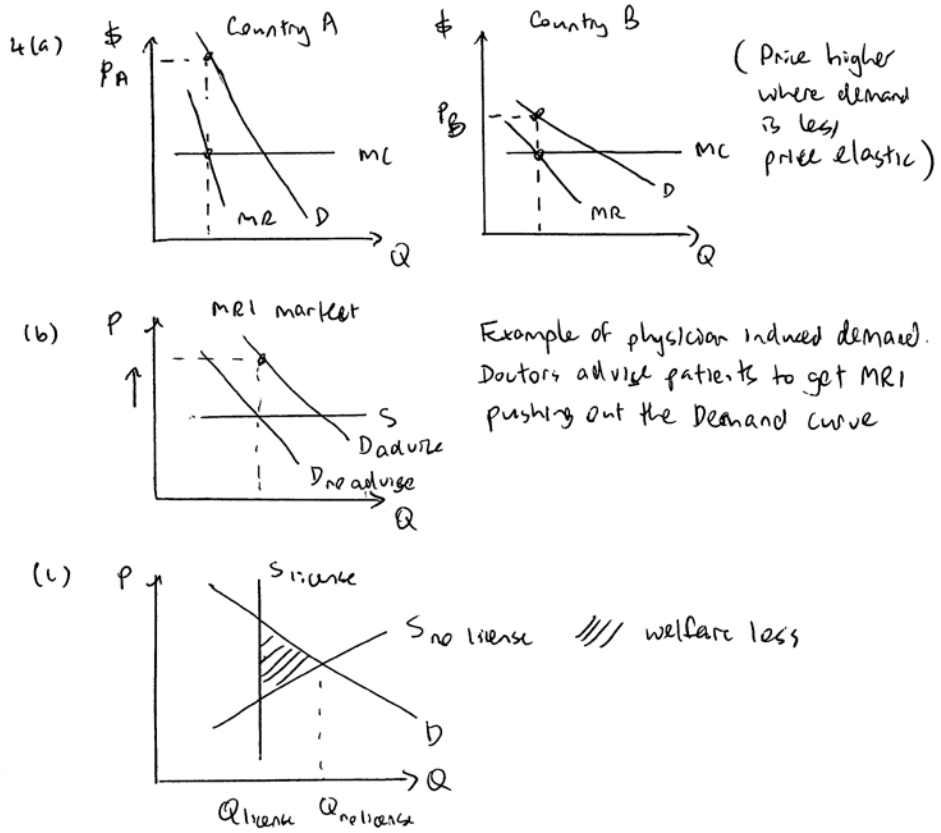
(i) Health prodn. possibilities curve swings out (and by more at higher H where more m)

(ii) As drawn z ↑ so out of pocket ↓
(But could draw so z ↓ and out of pocket ↑)

(b) Cost: 100,000 x $5 +0.9 x 1000 x $100 + 0.1 x 100,000 x $100 = 500,000+90,000+1,000,000 = $1,590,000 (or could instead have 0.1 x 99,000 x $100 unneeded tests giving$1,590,000 total).
Benefit = 0.9 x 1,000 x $10,000 = $9,000,000.
Do the test as benefit exceeds cost.

(c) Change for affected is 10 – 4 = 6 and for not affected is 7 – 2 = 5.
Difference in difference estimate is 6 – 5 = 1.
Or .. Difference (affected vs. not affected) in 2000 is 10 – 7 = 3 and in 1990 is 4 – 2 = 2.
Difference in difference estimate is 3 – 2 = 1.

Econ 132 Final Exam Solutions F16 Version A



5.(a) False. There has been a substantial fall to 10% uninsured.

(b) False. This is payment for e.g. gall bladder surgery regardless of the amount of inputs used.

(c) True.

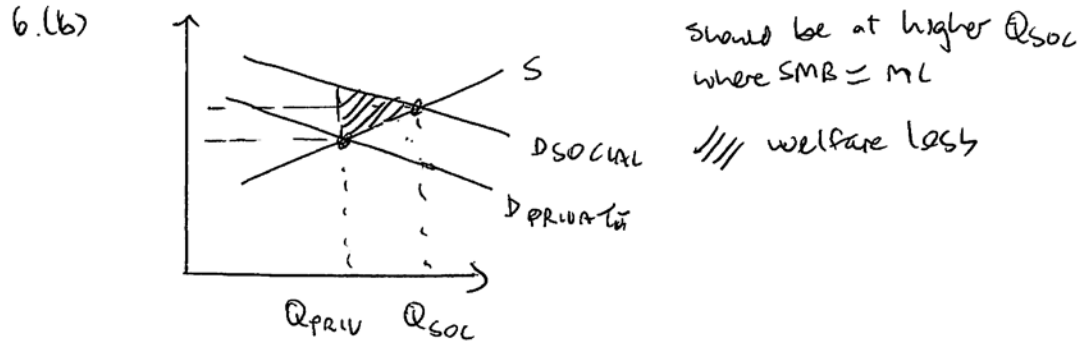
(d) True. This was found to be the case in the data exercise of assignment five.

(e) False. This is used in legal damages case, but not for health policy.

(f) True. Life expectancy in 2015 is calculated using 2015 mortality rates in each age group.

6.(a) (i) and (ii) This question was in error. All students get two points.

(ii) For Jill use just her MB. At P = MC = 300 this is Q = 30.



(c))(i) Cost benefit analysis was used. (With one year of life at full health valued at $100,000)

(ii) Major medical technological improvements (such as in treatment of heart attack, low birthweight babies and cataracts) was worthwhile as MB > MC.

Version A

7.(a) 626 × 0.6134 = 384 (since the mean of coins0 gives the proportion in the coins0 plan).

(b) 1399.75 ± 1.96×2397.923/sqrt(626) = 1399.75 ± 187.85 = (1211.9, 1587.6)
[or 1399.75 ± 2×2397.923/sqrt(626) = 1399.75 ± 191.68 = (1208.1, 1591.4)

(c) (209.45, 909.62) from first regression output.

(d) .0000396 ×1000 × 100 = 0.0396 × 100 = 3.96% using last regression output.

(e) regress lnout lnincome

(f) This estimates mean spending in the 0% coinsurance plan
(Aside: = 1056.52 from first regression when coins0==0).

Multiple choice

Question		
1	d	The order is hospitals, physicians, pharmaceuticals
2	c	Since health demand is the same regardless of price.
3	c	Insurance company pays 0.8 × (4000 – 1000) = 2400
4	b	The Miller and Luft study cited in the course notes.
5	a	
6	a	Any number of tests is better than none, but 2 or 3 are optimal.
7	b	As in notes and assignment 1
8	b	ICER = 50000 - 20000
9	d	
10	d	
11	b	Once the drug ingredient is discovered it is public information
12	a	
13	a	Medicare has to cover drugs that are approved by FDA regardless of price
14	d	
15	d	
16	a	
17	c	Since health as % GDP rises as GDP rises the income elasticity of health is > 1
18	a	

Scores out of 60

75th percentile: 46.5 (78 %); Median: 41.5 (69 %); 25th percentile: 35 (68%)

Curve (Indication only: Course Grade is based on Total Score!)

Average GPA on curve 2.67

A	48.5 and above
A-	46.5 and above
B+	44.5 and above
B	42 and above
B-	40 and above
C+	38 and above
C	35.5 and above
C-	33.5 and above
D+	31.5 and above
D	29 and above
D-	27 and above