

Ann, Bob. apples, bananas

(19) BC

$$\frac{d(19)}{dP}$$

= (19), line 2

} very informative

$$\frac{\partial(19)}{\partial T}$$

= (19), line 1

$$(19) - (20) = -Q + P + T$$

Use (20) and rewrite (18). Looks promising

Use income effect to simplify (21)

Note (23): If have FB world $MU_i^i = MU_i^j \forall i, j$.

• Not true in SB (just look at rhs - some are overtaxed / undertaxed)

Use Slutsky - plug it into (21) to get rid of demand derivative. It goes away!

Rearrange terms - pull things out into different pieces.

This will give you (26)

Make use of optimization, look all these income derivatives have gone away

Simplify, get (28), and solve for (29), the tax rate.

Compare (29) and (6). Very similar. Different notation also have Lagrangian in (29). λ played a big

role back in (23).

Sum up over everybody in (23). Get (30)

Substitute for tax rate with FOC for tax. Can get (31). Rearrange to get (32).

In terms of (29), we are collecting this tax. Collect a little more, give a little back. This is for and away the most complicated thing in this class.

Go back over this line-by-line: (1) - (32).

Coase thm: If core is non-empty, then we can reach a Pareto optimum.

- Depending how property rights are allocated, this affects income distribution.
- Calabresi - lowest cost avoider.

Problems with Coase:

- Empty core
- Positive transaction costs
- Myerson Satterthwaite - asymmetric information on both sides - cannot always get efficiency

(*) Putting transaction costs into the utility function.

- Does this lead to an empty core?