

Comment on Maurer and Haber, “Patent Trolls or Patent Elves”

William Summerhill
UCLA

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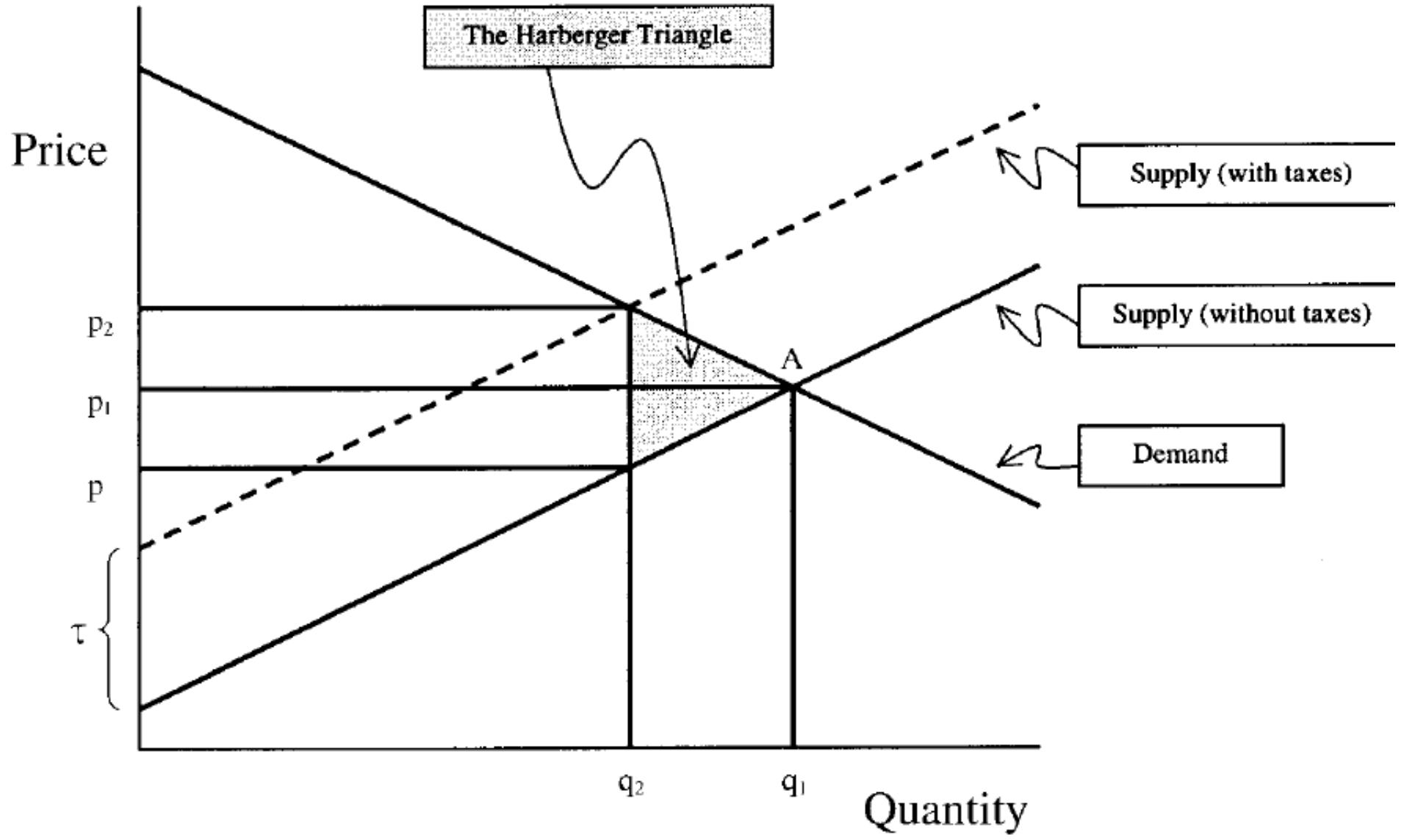
Assessing PAEs

- Maurer and Haber have two questions
- Are PAEs bad? (how bad could they be)?
 - $H(0)$: deadweight losses are low
- Are PAEs trolls?
 - $H(0)$: “they are not trolls”
 - A) they do not refrain from spending on R&D
 - B) they do not have high, risk-adjusted returns on assets

1. What was excess burden of PAEs?

- PAEs raise final product price, like a tax.
- This creates a transfer of income to PAE, other costs to producers, and an excess burden/“deadweight loss” in the product market (Dupuit, Jevons, Marshall, Hicks, Harberger)

The Harberger Triangle



Getting at the excess burden

- What do we want to know?
 - q_1 , q_2 , p_2 , p , and price elasticities of supply and demand
- What do M&H know?
 - The rectangle (p_2 , p , q)—“the transfer”
 - PAE revenues [public traded + litigation costs of producer]
- What do we still need? Nothing, if the goal is an upper bound estimate of the DW loss (Fogelian)
- Size of the “transfer” caused by PAE is **small** relative to high-tech manufacturing output
- Largest DW loss < Revenue transferred to PAE (CV, Marshallian CS, EV [normal goods-compensated])
- Now elasticities, etc., don't really matter no more

M&H finding

- M&H: if you get rid of all PAES, and thereby return the Harberger triangle to the society, you increase counterfactual GDP and counterfactual sector output. But the amount is trivial
- Even under the worst assumptions, PAEs cost very, very little
- If PAEs are a troll, it is not a strong one

My questions/comments, part 1

- Calculate (avg and marginal) social rates of return on the capital of the product sector from the gains of eliminating trolls
- Use sector value-added, not output, as denominator
- Is your product sector too inclusive? (PAEs might be relevant as a transfer cost only for some producers)

And further...

- For your presumed “occult” non-publicly traded PAEs, why add 4 of them? Why not scale up by an order of magnitude? Or $OM \times 2$? DW loss would still be small
- Get more anecdotal info or “RUMINT” on these non-traded PAEs, like you do for case of IV
- DW sensitive to values of the price elasticities of demand and supply (do the sensitivity table)
- To keep DW exaggerated use “Econ 101” linear schedules, not constant-elasticity
- Are there any published empirics on these markets?

Extension: what is the incidence of the “transfer”

- If you know the actual elasticities, then you can characterize the incidence of the “transfer”
- P. 5. “imperfect competition” “downward-sloping [firm] demand curves”
- Market structure. If product firms have pricing power, they already have extracted some of the consumer surplus.
- Welfare analysis a bit different in this world than in the tax diagram in the paper; price discrimination and efficiency
- Rents and their dissipation—deadweight costs can become much larger than the Harberger triangle

2. Do PAEs look like trolls?

- M&H: If a PAE spends money on acquiring or developing intellectual property, it is not a troll
- Also, returns to a troll PAE should be high, with low risk

M&H findings

- R&D spending more than 1/3 rev for PAEs
- Get returns to public PAE from filings and the market
- Make the returns across firms comparable
 - Modigliani risk adjusted returns
- PAEs seem to be the black hole of investing
- These do not have the have steady profits of trolls

Comments/suggestions

- Is ROA on PAE the right measure? $ROA < ROE$
- Substitute asset class returns (CRSP, DFA) for SP500 as benchmark (including “sigma R market” in the Modigliani risk adjustment)

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