Discussion of Argenton and Willems (2008) Exclusivity as (in)efficient insurance

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Model description

- Develop a multi-stage yet static game-theoretic model with a monopolist incumbent generator, possible entrant generator, and a main buyer [and a small fringe buyer], assuming incumbent and entrant engage in Bertrand competition to set prices
- Both generators are risk-neutral, while the main buyer is riskaverse
- The entrant's production costs are the only source of uncertainty
- Analyse the trade off between risk-sharing benefits of contracts and their detrimental effect on entry
- Specifically, consider how incumbent's use of "exclusivity contracts" (fixed price contracts with set breach price), or alternatively financial contracts (i.e. non-breachable CFDs) – both forms of "insurance" for buyers; with and without competitively-priced financial contracts being offered by

Key results

- Find no justification for exclusivity contracts since financial contracts achieve the same insurance benefits without inefficiently deterring entry, though they are better than no contracts at all and entry deterrence can be efficient if the main buyer is sufficiently risk-averse (since the insurance benefits then outweigh the costs of entry deterrence)
- <u>Absent</u> financial investors offering competitive insurance, the incumbent can set the exclusivity contract to maximise profits by directly extracting the consumer surplus from insurance, and forcing the entrant to offer a low entry price (deterring entry)
- If financial investors offer competitive financial contracts, the incumbent loses its monopoly in insurance, allowing the risk-averse buyer to insure without deterring entry
- However, financial investors will <u>not</u> offer contracts if the incumbent can offer exclusivity contracts, since the incumbent sets its contract to extract rents from the investor who signed the financial contract by ensuring no entry occurs and making sure spot price is high (rather than from the entrant by forcing her to price low on entry)
- If the incumbent <u>cannot</u> offer an exclusivity contract then financial investors will

Implications

- Another useful illustration of how contracts in electricity markets can be both good and bad – offering useful insurance while possibly inefficiently deterring entry
- Also provides an example of how market power can be expressed in terms of depressed rather than increased spot prices, with price increases occurring in insurance markets → complicates detection and intervention by regulators
- Also tells an interesting institutional story:
 - Presence of exclusivity contracts crowds out development of financial contracts (though they may remain hard to achieve for other reasons too) → entry deterrence is in insurance markets as well as product markets
 - This is true even if financial contracts should happen to exist before exclusivity contracts are agreed

Possible extensions

- How might the results change if the incumbent and main buyer were integrated (with or without oligopoly/oligopsony (see below), and with or without investment effects (see below))?
- What if financial contracts offered by investors are not competitively priced (and simultaneously offered (by the incumbent(s)) with exclusivity contracts)?
- How might the option to resell power acquired under exclusivity contracts affect the conclusions?
- [How would the story change with oligopolistic incumbents? →
 would this induce sufficient competition in insurance markets to
 leave surplus with the buyer and not crowd out financial market
 development, as well as lessen entry deterrence? Or might it leave
 both investors and incumbents unwilling to offer insurance, to the
 detriment of buyers (even if entry deterrence is less)?]
- [Can we speculate on how the results change with a multi-period model allowing for the impact of contracts on investment → do the welfare gains from entry deterrence in terms of (possibly) better supporting efficient investment reverse the adverse impacts of exclusivity contracts?]