Individual Exemptions and the Strategic Threat Of Exit: The Case of Airline Joint Service Agreements

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Agenda

- Background -- Australia, Singapore, and the Qantas-British Airways (Q-BA) Joint Services Agreement (JSA)
- Bargaining theory approach to analysis of interaction between competition authority and firms
- Australia and the JSA
- Singapore and the JSA
- Conclusions

Qantas-British Airways JSA: Overview

- Dating from 1995 (with restatements)
- Coordination of airline services on the Kangaroo Route between Australia and Europe, through Singapore and Bangkok
  - Scheduling
  - Marketing
  - Sales
  - Prices
  - Customer Service
- Generally viewed as a “hard core” restriction
- But also viewed as yielding economic efficiencies

Australia (AU) and JSA: Overview

- 1974 Australian Trade Practices Act (TPA)
  - Original bargain
    - Prior to 1995 Qantas and BA applied to Australian Competition and Consumer Commission (ACCC) for JSA authorization under TPA
    - 1995 JSA authorization by ACCC for 5 years
  - Renewal bargain I
    - 1999 Q-BA authorization request for Restated JSA
    - 2000 Restated JSA authorization by ACCC for 3 years
      - Plus further interim authorization
  - Renewal bargain II
    - 2003 Q-BA reauthorization request for Restated JSA
    - 2005 Restated JSA authorization by ACCC for 5 years

Singapore (SG) and JSA: Overview

- 2004 Singapore Competition Act (CA)
  - Bargain
    - 2006 Qantas and BA applied to Competition Commission of Singapore (CSS) for decision exempting Restated JSA from prohibition under CA
    - 2007 CCS approved Restated JSA -- indefinitely exempted from CA prohibition
      - Subject to conditions

Bargaining Theory Approach: Rationale

- Variety of contexts in law & economics analyses for bargaining models
  - Bargaining between firms
  - Bargaining between nations, governmental entities
- This paper looks at the strategic interaction between competition authorities and firms
- Bargaining theory approach is reasonable because ...
  - there may be an opportunity to divide benefits of greater economic efficiencies between firms and consumers or national as a whole
  - government does not always “win”
  - firms can threaten to exit the market or jurisdiction of the competition authority

Bargaining Model Assumptions (1)

- Two parties: Competition Authority and coalition of firms
  - Coalition of firms with a potentially anticompetitive agreement is seeking exemption by Competition Authority
- Competition Authority wants to maximize total welfare for its jurisdiction
  - Model can be readily extended to include consumer surplus maximization by competition authority
- Coalition of firms want to maximize producer surplus for firms
  - Coalition activities may provide economic benefits through gains in efficiency
  - Coalition activities may reduce or transfer economic benefits through anti-competitive behavior

Bargaining Model Assumptions (2)

- There is a range of possible conditions on the agreements, not just “yes/no” approval from Authority
  - Restrictions on joint activities
  - Remedies
  - Time limits for duration of agreement
- Range of possible conditions yields Pareto-optimal tradeoff between objectives of two parties
- There is time “impatience” pressure for both parties to reach a bargain
  - Both wish to enjoy the possible economic benefits from the agreement

Bargaining Model Assumptions (3)

- But there may be “inside options”
  - Both parties may enjoy, perhaps diminished, benefits during the bargaining process
- And there may be “outside options”
  - Firms may choose to exit the market to gain producer surplus
  - Firms may even choose to exit the jurisdiction
  - Competition authorities may choose alternative arrangements, perhaps different firms, to provide welfare to their jurisdiction

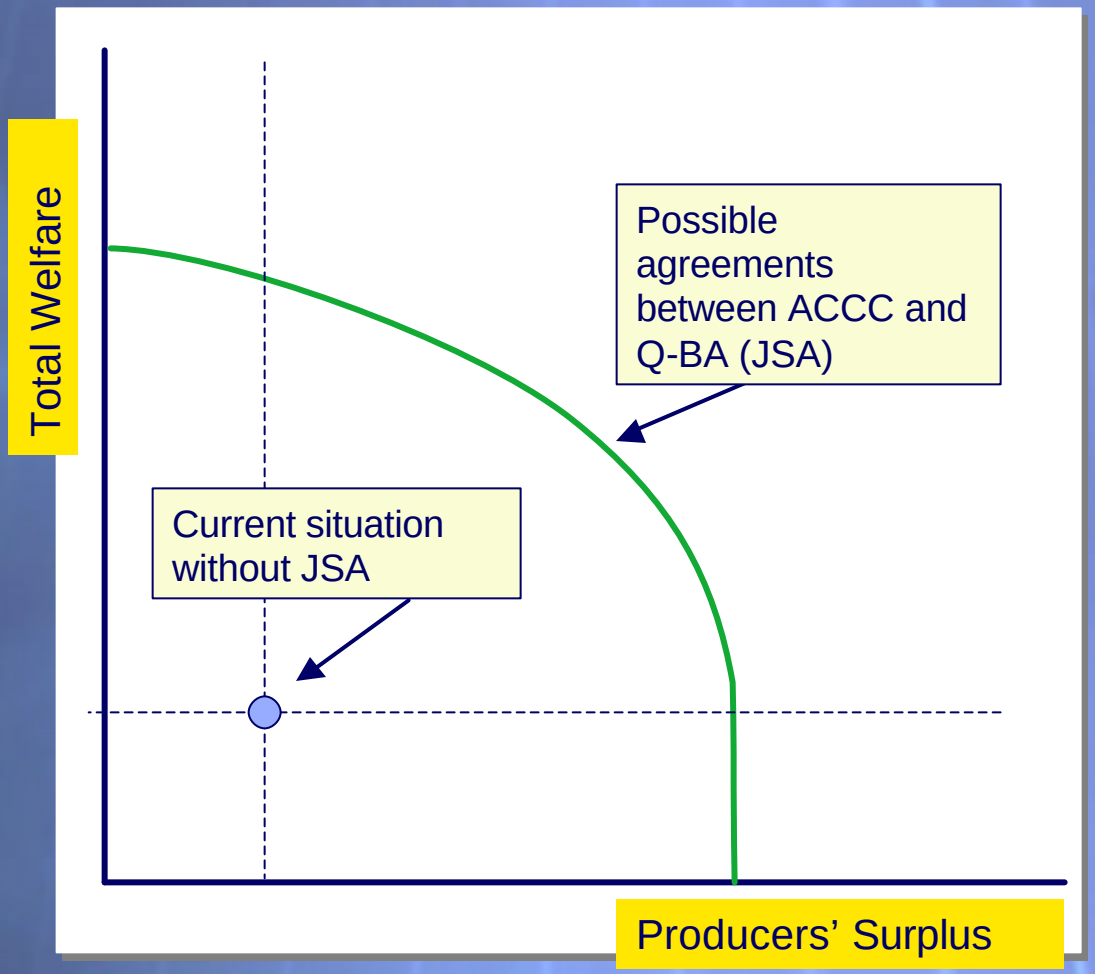
Scenarios

- Scenario 1: Prior approval for agreement
  - Competition law is already in place
  - Firms seek approval of possible anti-competitive agreement
- Scenario 2: Renewal of approval
  - Firms have approval to operate under agreement
  - Firms seek renewal of approval
- Scenario 3: Posterior approval to operate under existing agreement
  - Firms already operating under anti-competitive agreement in absence of competition law
  - Competition law is passed that prohibits such agreements subject to exemption

Scenario 1: Qantas-British Airlines JSA 1995

- Sought approval from the Australian Competition and Consumer Commission (ACCC) for Joint Services Agreement (JSA)
  - based on net economic benefit to Australia

Scenario 1: Australia -- JSA 1995 (1)



- Q-BA seek authorization for JSA
- Frontier shows Pareto-optimal possible agreements
- Both parties can gain by agreeing

Inside Option

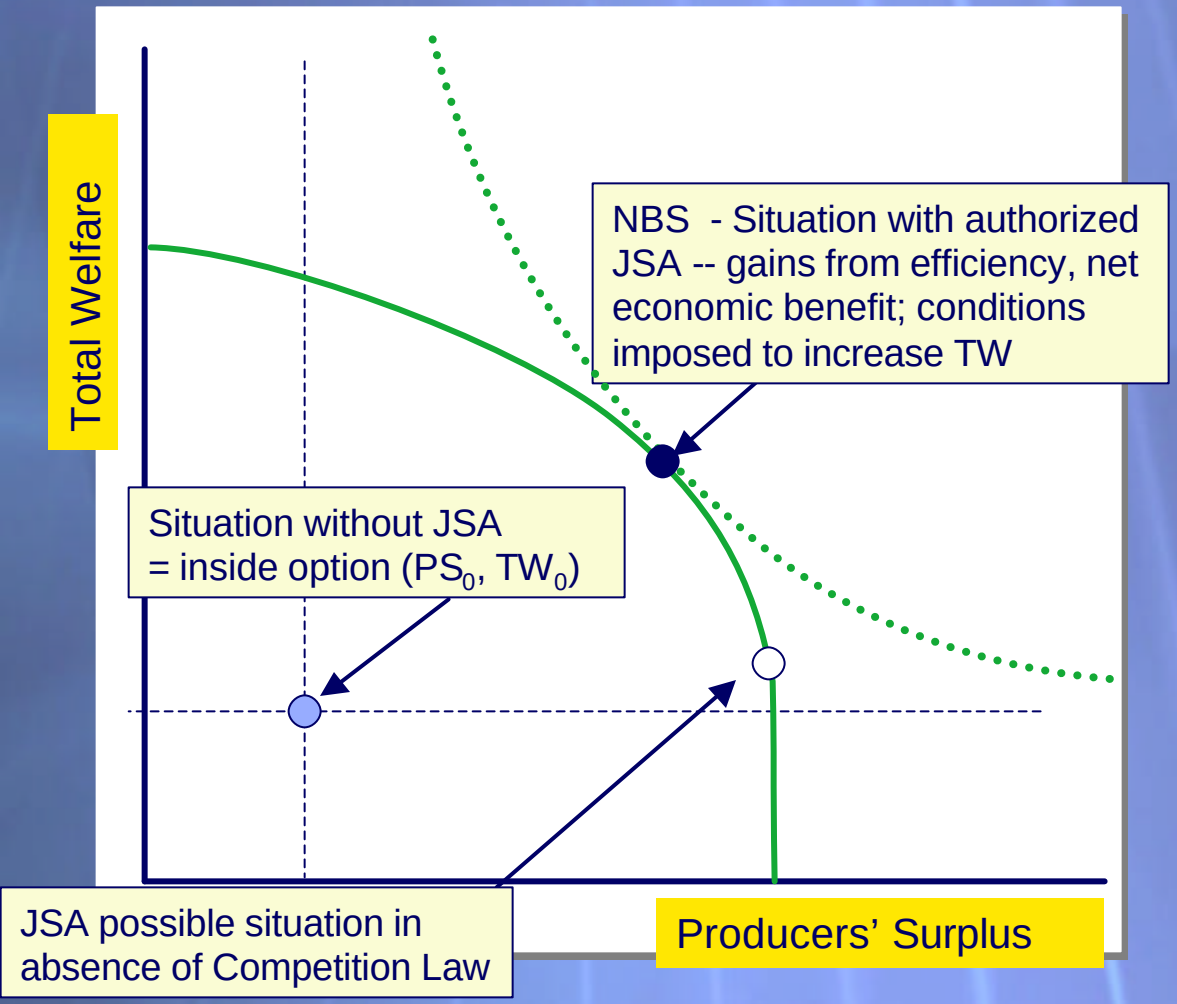
- Inside Option
  - Situation while bargaining is ongoing
  - Affects the Nash bargaining solution

- If TW_0 and PS_0 are the values for the inside option, then …
  - the Nash bargaining solution (NBS) is found by maximizing

    $(TW- TW_0)*(PS- PS_0)$

    along the Pareto frontier.

Scenario 1: Australia -- JSA 1995 (2)



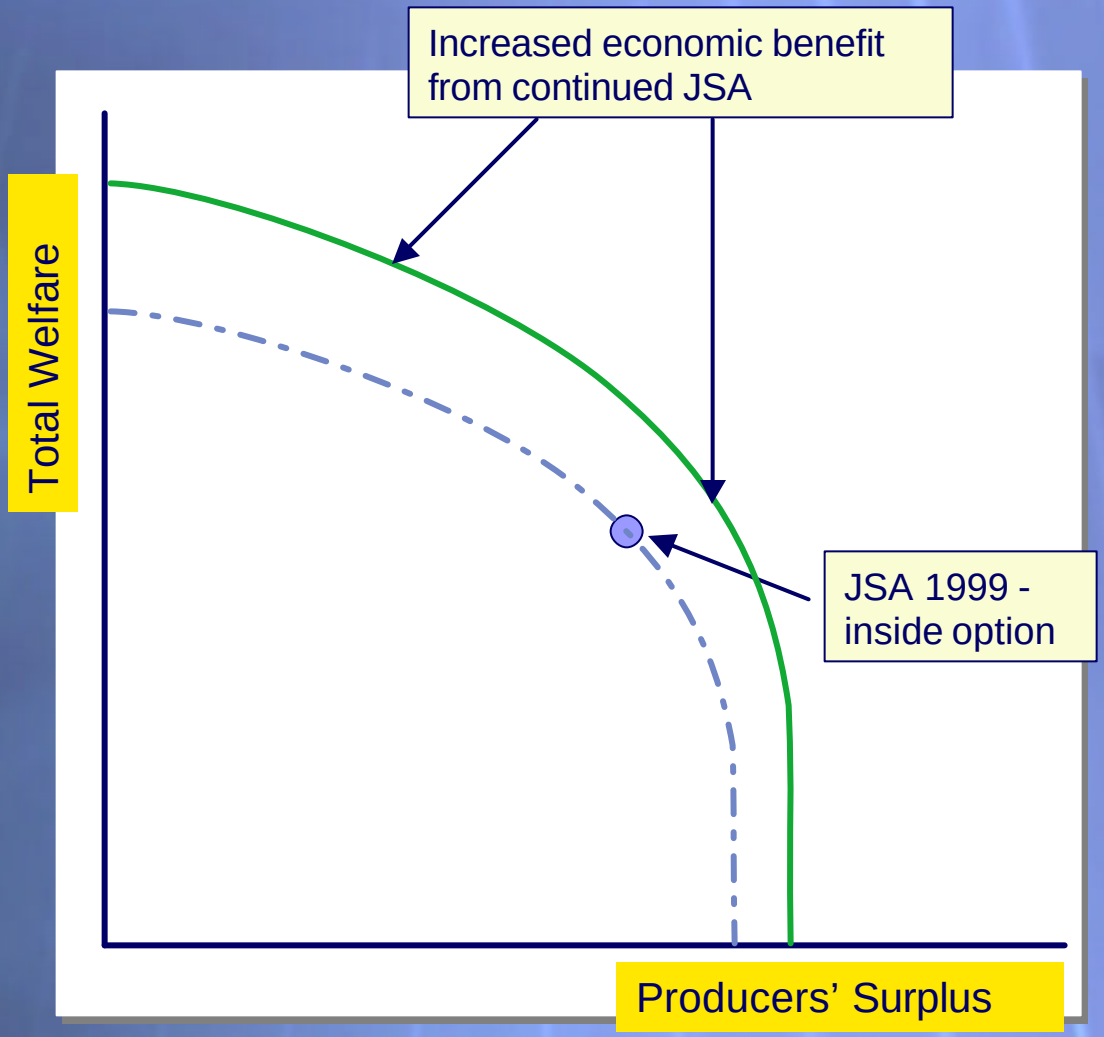
- Nash bargaining solution (NBS)
- Maximizes $(TW-TW_0)*(PS-PS_0)$
- JSA authorized
  - Net economic benefit
  - Gains to Q-BA
- Conditions
  - 5 year term
  - Other conditions

Comments

- Approval for the JSA 1995 agreement did not give Qantas-British Airways everything they asked for
- In particular, the approval was only for 5 years, until 2000.

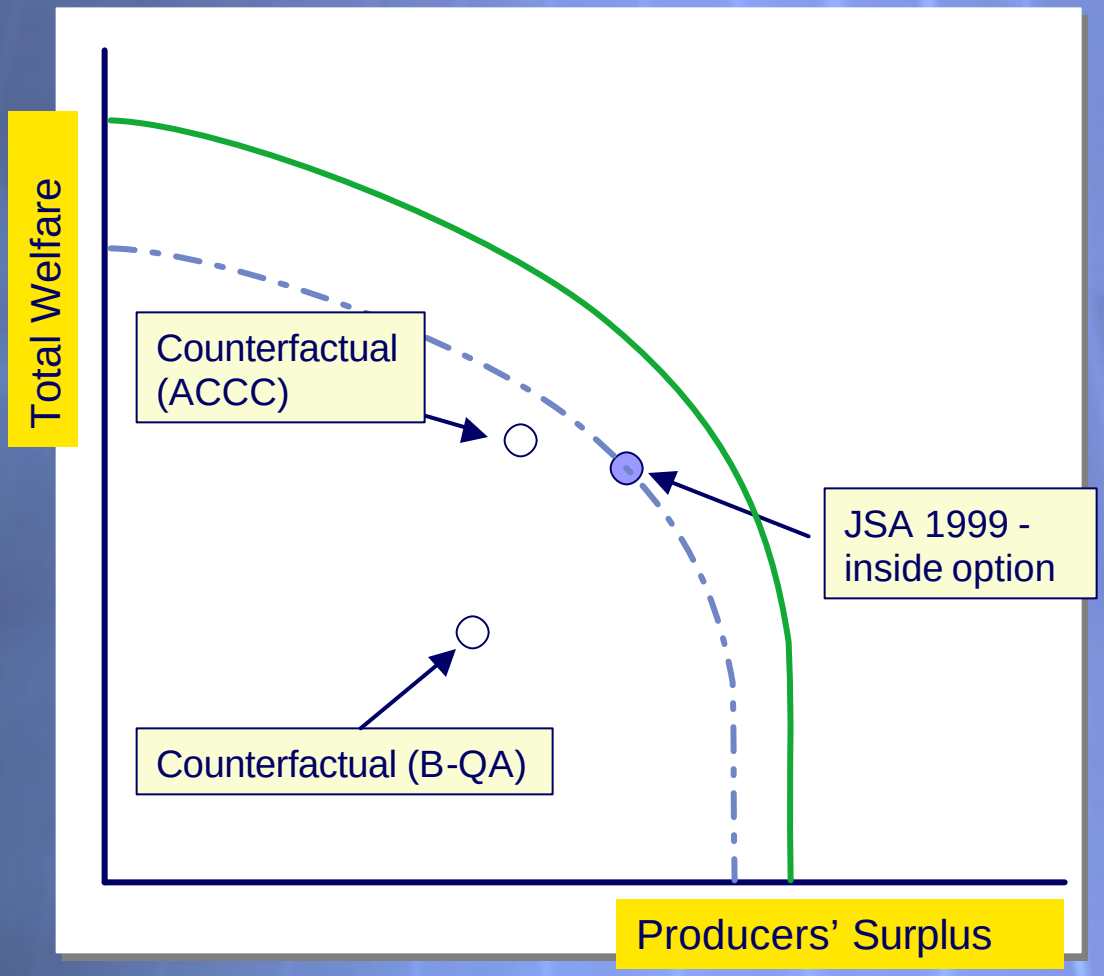
- In 1999, Q-BA applied for authorization for a restated JSA
  - Claimed that under continued authorization, even greater economic would occur
  - Also claimed that without authorization, there would be a negative economic impact

Scenario 2: Australia -- JSA 2000 (1)



- Q-BA apply in 1999 for renewed authorization of JSA
  - To start in 2000
- Claim of greater economic benefits reflected in new Pareto frontier

Scenario 2: Australia -- JSA 2000 (2)

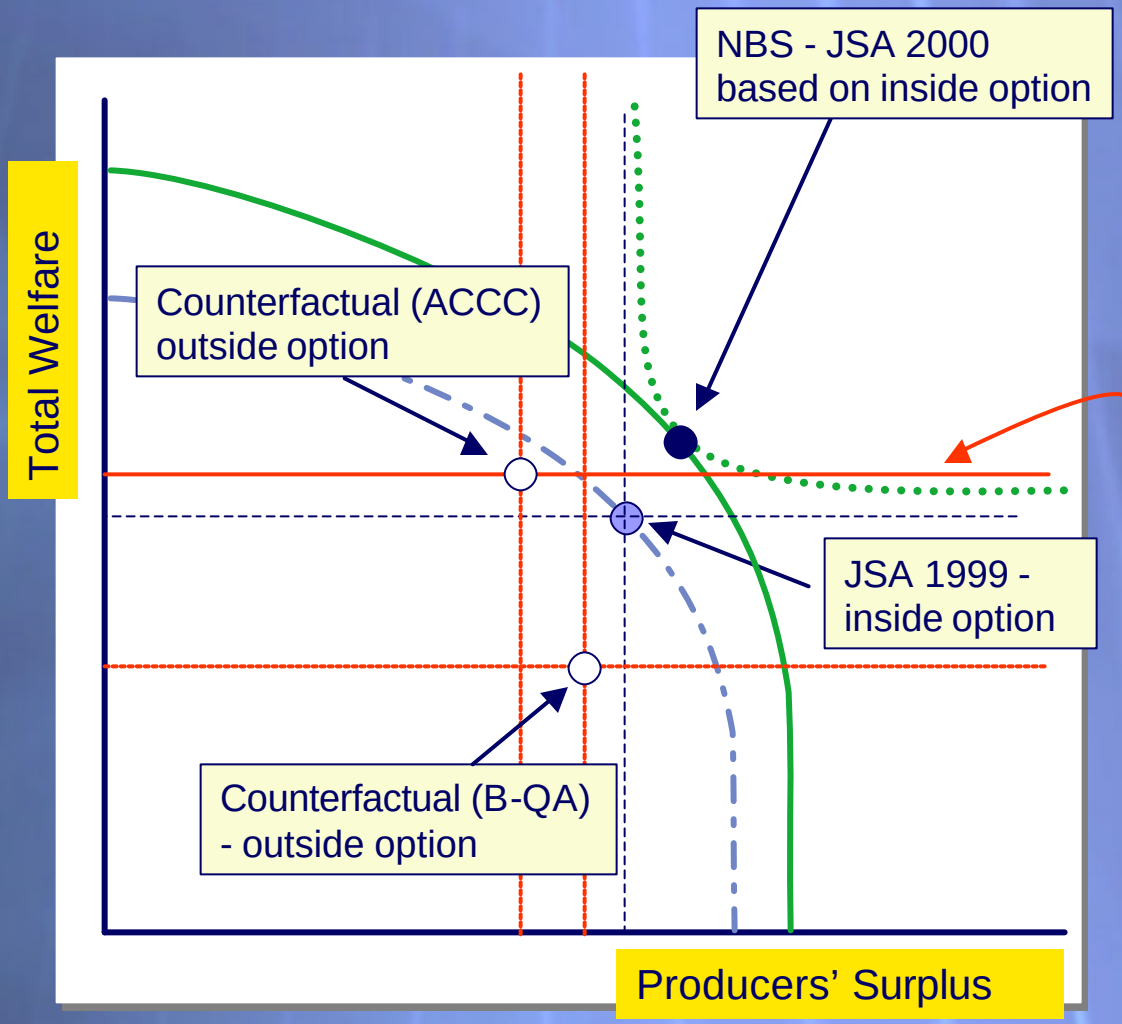


- Counterfactual = impact of termination of JSA = outside option
- Threat of (limited) exit from market
- But ACCC and B-QA disagree on extent of impact
  - B-QA: More limited schedules and destinations
  - ACCC: Not that much economic impact given market competition

Outside Option

- Outside option is opportunity to unilaterally…
  - break off bargaining
  - take up a better alternative offer or activity
- Focus of outside option is on what could be gained, not on what other party would lose
- Outside options (or threats) limit the range of possible bargaining outcomes
  - They do not affect bargaining power
- Counterfactual may be viewed as defining the value of the outside option
  - ACCC's outside option is not to grant an exemption to anti-trust provisions
  - Q-BA JSA's outside option is to leave the market

Scenario 2: Australia -- JSA 2000 (3)



- Counterfactual = outside option
- JSA's outside option (as drawn) is not a viable threat
- ACCC assessment of counterfactual appears to provide a credible outside option for the ACCC (to deny authorization)
- In this example, the NBS is better for the ACCC than its threat

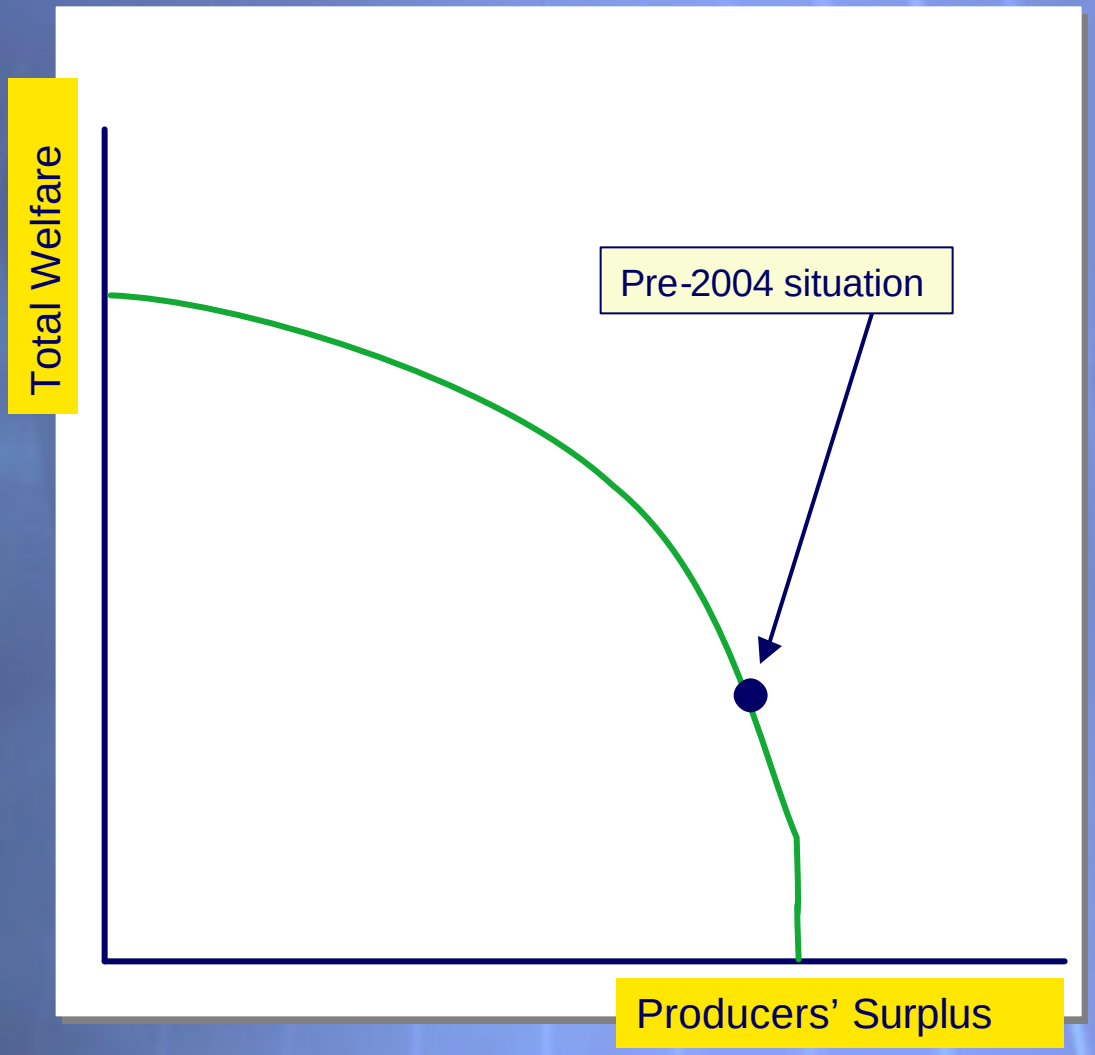
Comments

- ACCC and JSA also disagreed on extent of new benefits from continued authorization of JSA.
  - This would be reflected in alternative positions of new frontier relative to previous frontier
  - Not discussed here
- JSA applied again in 2003 for authorization to continue
  - Scenario II analysis continues to apply; results are similar to 2000 situation
  - Authorization was granted by ACCC in 2005

Scenario 3: Singapore -- Pre-2004

- No Competition Law in effect in Singapore
- Qantas and British Airways operate under their JSA through Singapore as a hub
- Efficiencies from the JSA provide both producer surplus and total welfare to Singapore
- We can postulate a Pareto frontier for trade-offs between total welfare and producer surplus, but...
  - Pre-2004 situation is NOT result of bargain in SG
  - JSA operates based on its economic preferences subject to ...

Scenario 3: Singapore Pre-2004

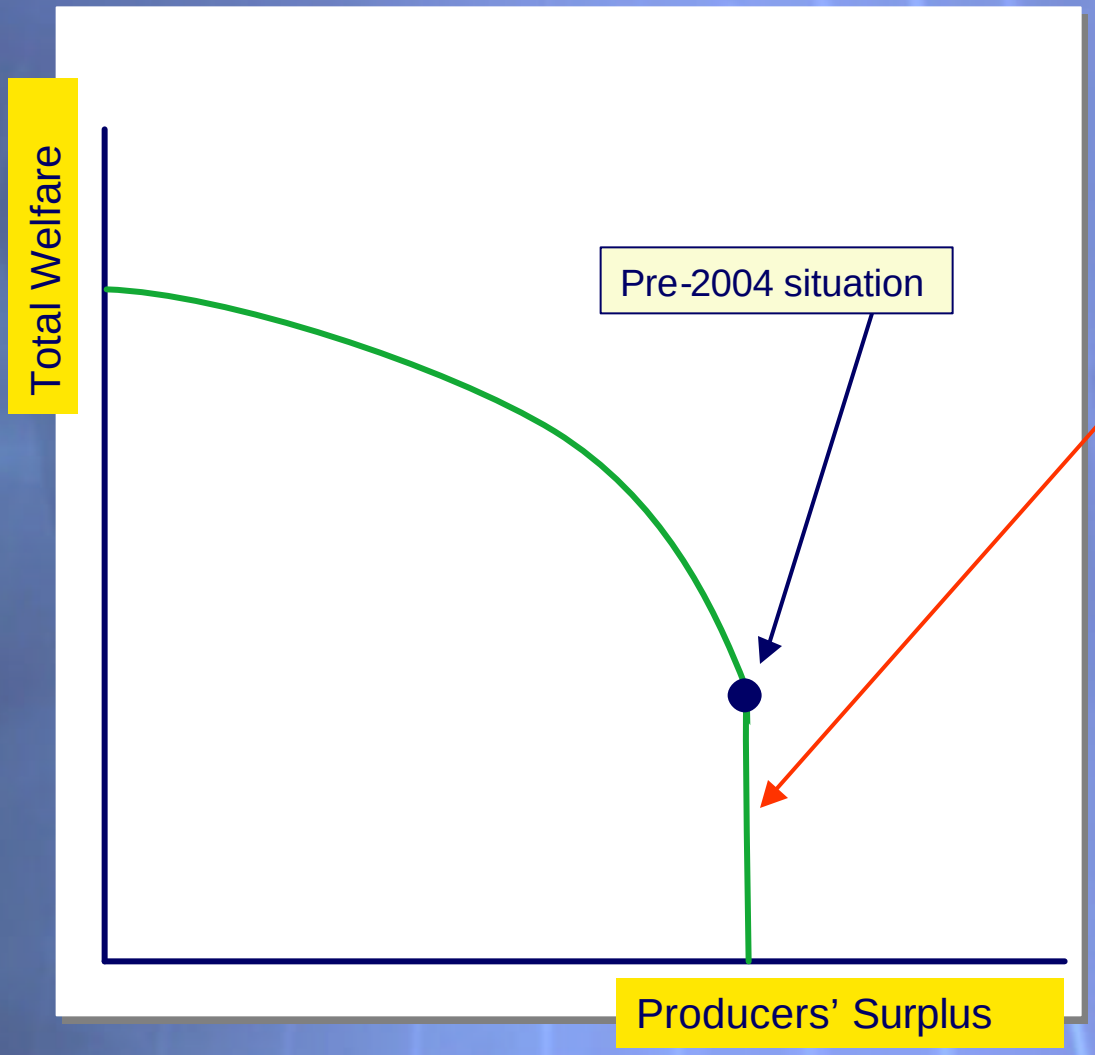


- JSA has hub in Singapore
- Operates in environment with no Singapore competition law in effect

Singapore and JSA

- No anti-competition restrictions in Singapore before 2004
- So why does JSA not choose to have more producer surplus?
- Because it is bound by conditions of Australian approval for JSA
  - May limit scope of anti-competitive activities in Singapore

Scenario3: Singapore Pre-2004 (adjusted)

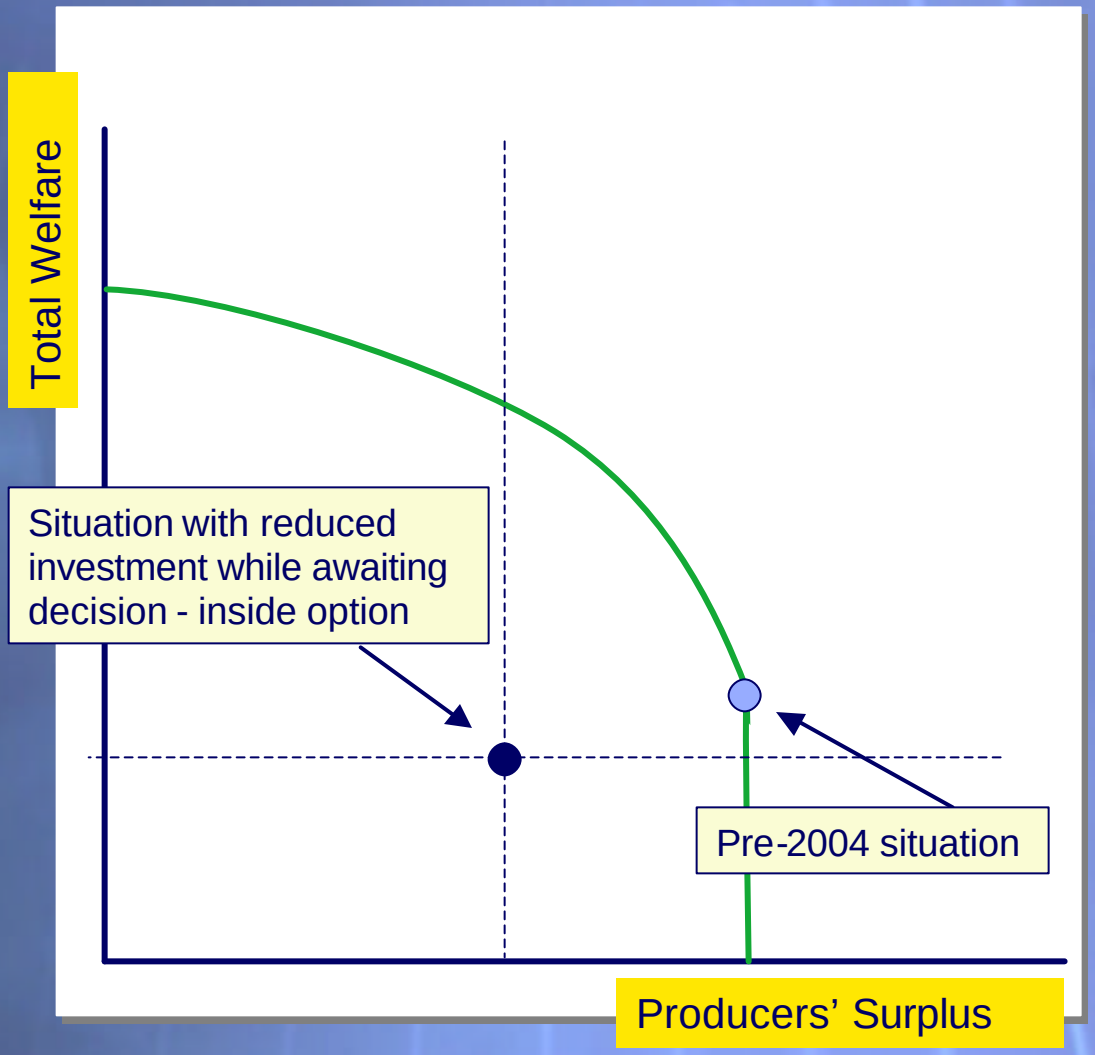


- Singapore frontier adjusted for effect of JSA authorization by ACCC
- Most restrictive jurisdiction (Australia) is binding

Singapore Competition Act

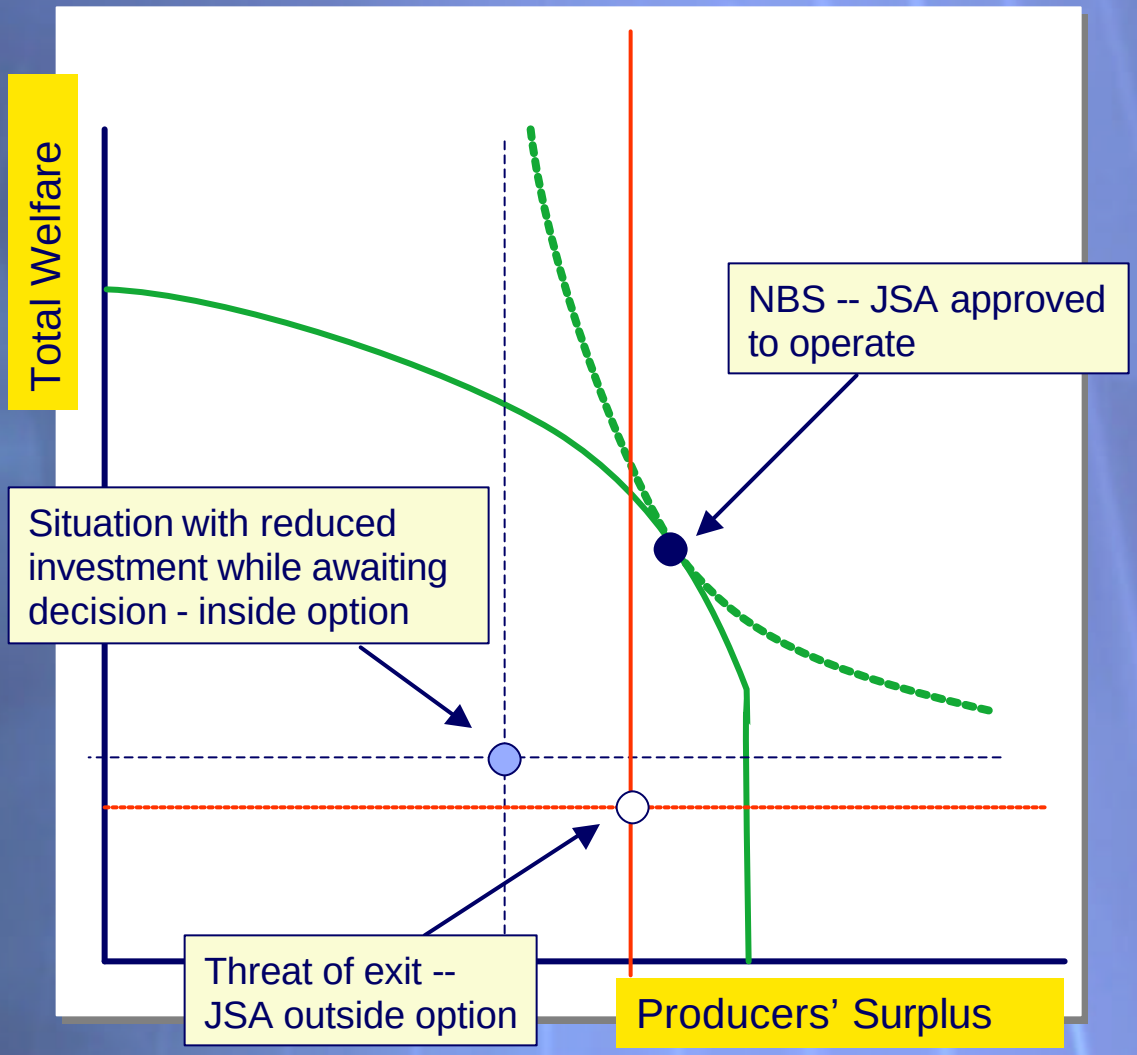
- Passed in 2004
- JSA is *prima facie* violation of anti-competitive restrictions
- Q-BA seek decision from the Competition Commission of Singapore (CCS) on whether JSA infringes the Act
- Outcome uncertain, so ....
  - JSA reduces some investment and maintenance in Singapore
  - Operates at lower producer surplus while decision is pending

Scenario 3: Singapore -- Competition Act (1)



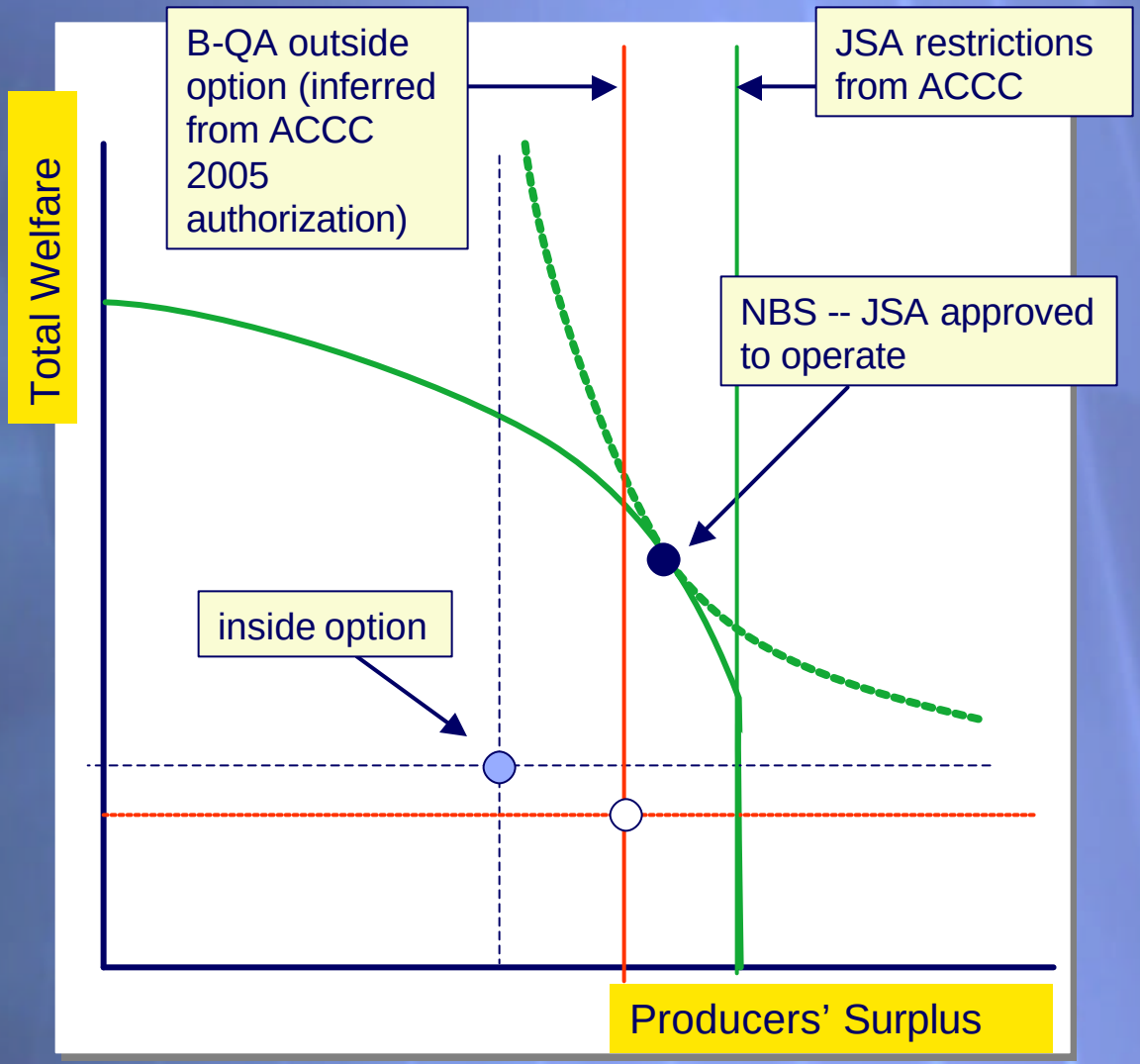
- Operating at pre-2004 point requires ongoing investment and maintenance
- With no guarantee of exemption to anti-competitive provisions, JSA operates at less than its long-term optimum

Scenario 3: Singapore -- Competition Act (2)



- Outside option for JSA involves moving its hub operations from Singapore to Bangkok, a jurisdiction without a competition law
- In this example, the exit threat is viewed as viable
- However, it does not affect the bargaining solution

Scenario 3: Singapore -- Competition Act (3)



- Note that CCS has limited scope for bargaining
  - Viable outside option by JSA inferred from ACCC 2005 authorization
  - But CCS 2007 decision suggests *not* viable threat of exit
- CCS cannot choose to be more liberal than ACCC
  - Existing limitations from ACCC

Conclusions (1)

- Individual exemption authorization and decisions are bargains between firms requesting them and competition authorities granting them, each focusing on their own objectives
  - Objective of competition authority is total welfare (or, perhaps, consumer surplus)
  - Objective of firms is producer surplus
- Bargain is not just whether to grant the exemption but under what conditions to grant the exemption
  - Yields a tradeoff between the objectives of the two parties over which to bargain

Conclusions (2)

- Nash bargaining solution (NBS) analysis indicates for bargain
  - Relevance of inside option
  - Relevance or irrelevance of threat of exit based on outside option
- Bargains with international effects between firms and one competition authority can impose restriction on bargain between these firms and another competition authority

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Thank you.