Comments on
"CATs and DOGs"
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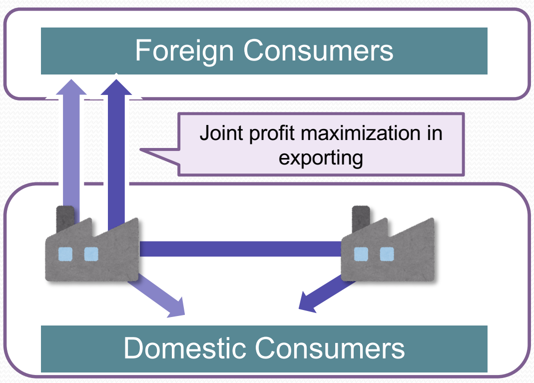
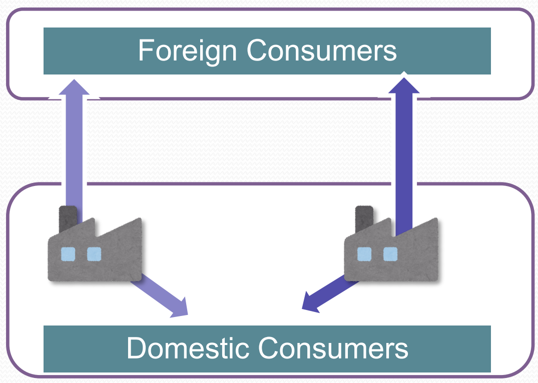
Frontiers in Research on Offshoring
August 2, 2019 @RIETI

Quick Summary (1)

Carry-Along Trade (CAT):
A manufacturing firm, which exports its own final goods, also exports final goods that are fabricated by other manufacturing firms.



Delivery of Own Goods (DOG) :
A manufacturing firm **directly** exports its own final goods.

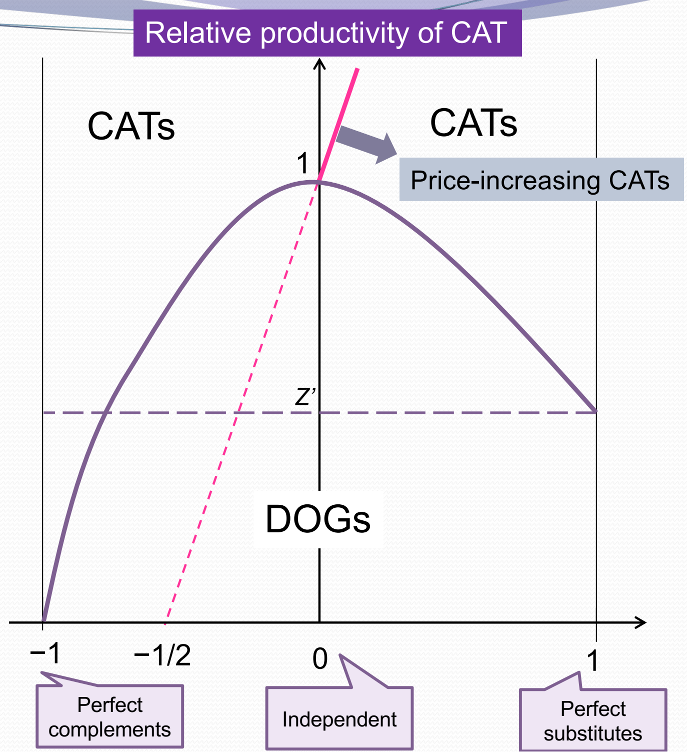


Quick Summary (2)

Carry-Along Trade (**CAT**):
A manufacturing firm, which exports its own final goods, also exports final goods that are fabricated by other manufacturing firms.

- The **CAT** firm acts as a multi-product monopolist. → Collusive effect

The trade cost of **CATs** is either lower or higher than that of **DOGs**.



Quick Summary (3)

- Providing a simple and a reasonable theoretical foundation to explain the emergence of **CATs**.
- Results are consistent with empirical evidences.
- Discussing welfare consequences of CATs.
- Extending the simple duopoly case to a more general oligopoly case with *N* firms.

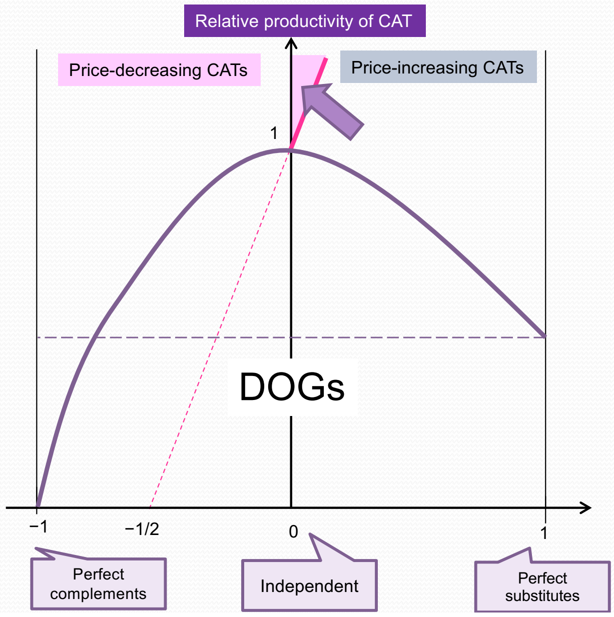
The paper sheds new light on the literature of CAT by considering a strategic interaction b/w firms and the internalization of demand linkage.

Comment 1: Mistakes in core expressions?

- **Prop. 5**: … quantities exported are higher in the **CAT** mode when products are complements and lower when products are substitutes.
- **Prop. 6:** … When products are substitutes, CAT prices are higher than **DOG** prices.
- **Cor. 3**: When products are substitutes, consumer surplus falls (through **CAT**).

These expressions are correct only if $z \leq 1$.

Export-enhancing, price-decreasing, and consumer benefitting **CAT** is possible even if goods are substitutes!



Comment 2: The real-world examples of CAT for substitutable goods?

- Typical **CAT-products** are based on demand-scope complementarity. (Bernard et al., 2018)
  - e.g. Exporters who produce roasted coffee sourced and exports coffee vending machines, sugar, milk, cookies, etc...
  - $\theta < 1$ in this model.
- Other examples include **CAT** to fill containers.
  - $\xi < 1$ in this model.
- Is there any example of **CAT** for substitutable goods? ($\theta > 1$)
  - CAT for a "tacit collusion"

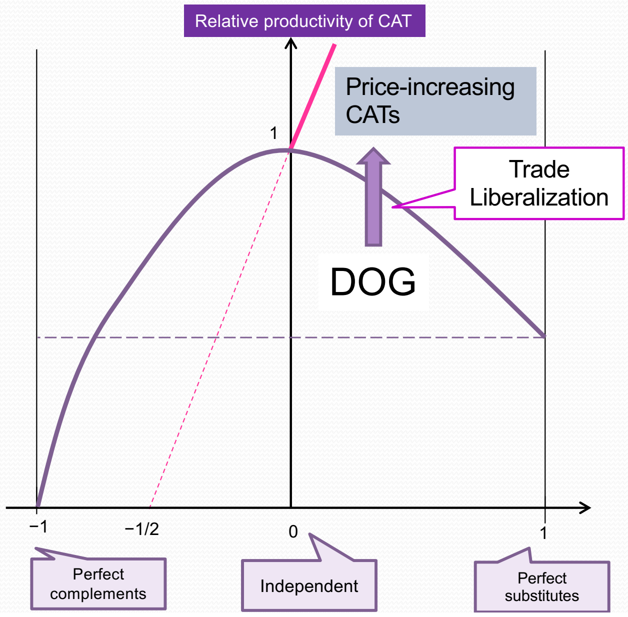
Providing examples of **CAT** for competing products would increase the real-world relevance of the paper.

Comment 3: Policy implications for governments?

- Trade liberalization (a decrease in t) can shift the equilibrium regime from **DOG** to **CAT**.
- If goods are substitutes, <u>the regime</u> shift may reduce exports, increase prices, and hurt consumers.
- If the negative effect of the regime shift dominates the direct, positive effect of liberalization, trade liberalization can be **welfare-reducing** for the importing countries.

Promoting **DOG** is important to ensure welfare-improving trade liberalization!

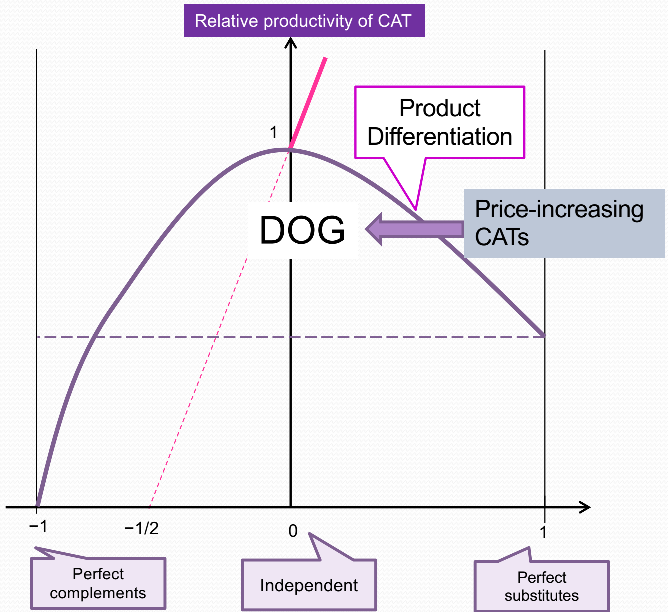
cf. Ishikawa, Morita and Mukunoki (2010, JIE)



Comment 4: Possible extension: Endogenous product differentiation

- Lower substitutability (a decrease in θ) can shift the equilibrium regime from **CAT** to **DOG**.
- Some papers have investigated endogenous determination of θ through firms' R&D activities.
  - Lin and Saggi (2002, EER), Bastos and Straume (2012, CJE), Brander and Spencer (2015, Research in Economics)
  - In these papers, more differentiation leads to less competition and higher profits.
- The regime shifts intensifies product-market competition in this model, which hurts firms.

It is interesting to examine how **CAT/DOG** choice affects firms' incentives to engage in product R&D to differentiate products.

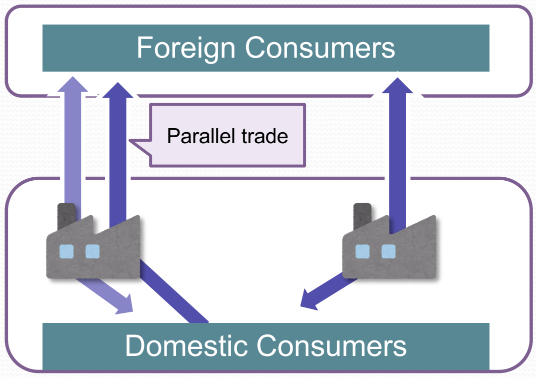


Comment 5: Parallel imported goods supplied by CAT?

- In this model, a firm cannot conduct **CAT** unless it agrees with another manufacturing firm.
  - We observe CAT if it increases the joint profit of the two firms.
- A firm can purchase the rival's product in the domestic market and exports it to the foreign market without the authorization of the original manufacturer (i.e., pallarel trade), if it makes the profits.
- The existing literature has not considered the case where rival manufacturing firms become "parallel traders".

It is interesting to consider parallel imports driven by **CAT**.

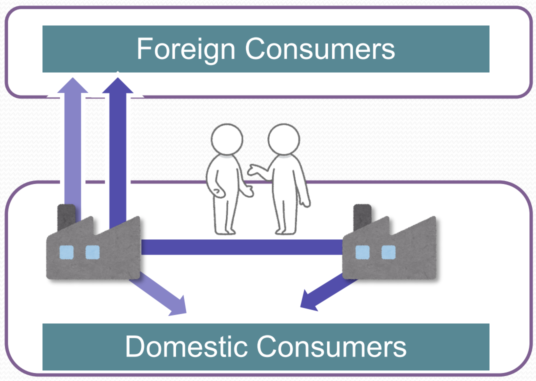
Parallel trade by CAT



Comment 6: Distribution of gains from CAT

- Negotiation process between the two manufacturers under **CAT** is not explicitly considered.
  - Just providing a sufficient condition.
- Considering a negotiation scheme, such as Nash bargaining, enables us to discuss the distribution of the gains from **CAT** between the two firms.
- For instance, trade liberalization may change the distribution because it changes the values of the two firms' outside options (i.e., the profits under **DOG**).

It is interesting to discuss how changes in model parameters affect the distribution of the gains from **CAT** under **CAT** regime.



Summary of Comments

1	**Re-check Propositions and Corollary** Even if goods are substitutes, there is a case where DOG→CAT increases trade, lowers prices, and benefits consumers.
2	**Should provide the real-world examples of CAT for competing products**
3	**Should discuss a possible consumer-hurting trade liberalization.**
4	**Endogenous product differentiation as a possible extension.**
5	**A possibility of parallel imports led by CAT.**
6	**Should discuss the distribution of the gains from CAT b/w firms.**