

The impact of retail alliances on prices and product variety

European Commission Workshop
on retail alliances

Claire Chambolle

November 4, 2019

Purchasing alliances (Buying groups) between retailers, are widespread and unite retailers that operate either in the same country (national) or in different countries (international).

- ▶ Quite well perceived by competition authorities: the potential “countervailing power effect” (Galbraith, 1952), if at work, could lead to lower retail prices.
- ▶ Many concerns have been raised: the increasing risk for collusion among retailers, the risk of exclusion of small suppliers that may be a threat for product variety or innovation.

What control for buying alliances?

Despite these potential adverse effects, buying alliances are not subject to any approval by competition authorities but ongoing brainstorming.

I will present two recent working papers that contribute to this debate:

- ▶ “Buyer Alliances in Vertically Related Markets” written by Hugo Molina (INRA)

Price effects of a national buying alliances;

First empirical analysis of buying groups!

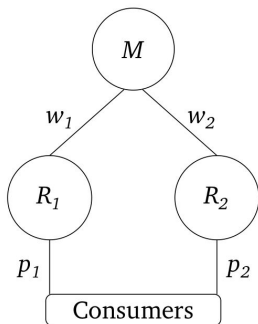
- ▶ “Buying Groups and Product Variety” written by Marie-Laure Allain, Rémi Avignon and Claire Chambolle (CREST and INRA).

Small supplier exclusionary effects and international buying alliances.

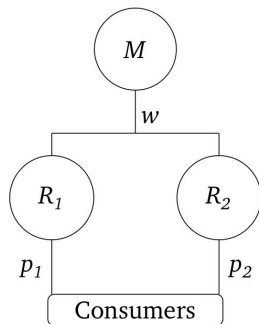
Effect of buying alliances on prices: Theory and Empirics

Hugo Molina

Figure 1: Vertical market structure



(a) Benchmark: No alliance



(b) Buyer alliance

Key Assumption: when bargaining with a supplier through the buying group, retailers obtain the same conditions (w) and either both agree or disagree (Common listing+ Common bargaining terms).

1. **Without buying group:** each R_i - M pair bargains secretly over a wholesale unit price w_i . Then each R_i sets its final price p_i to compete on the final market knowing only its own wholesale price w_i and not that of the rival w_j .
2. **With buying group:** The buying group bargains with M over a unique wholesale contract w . Then each R_i sets its final price p_i independently, that is competing on the final market but knowing both its own wholesale price and that of the rival w .

Bargaining properties

- ▶ Firms who bargain split the surplus of their relationship according to exogenous bargaining power parameter $0 < \alpha < 1$ (for the manufacturer) and $1 - \alpha$ (for a retailer).
- ▶ Without buying group, the manufacturer also has a status-quo profit. If M breaks with R_1 , he still obtains a profit from dealing with R_2 . This enhances the share of surplus M is able to capture.

What are the effects of creating a buying group on final prices?

Three effects interact:

1. **Status-quo effect** –Caprice & Rey (2015)–, with a buying group M loses its status-quo profit in the bargaining. M is weaker, w decreases, each p_i decreases.
2. **Non-discrimination effect** –O'Brien (2014)– , with a buying group, R_i is less eager to obtain a low w when he knows R_j has the same w : w increases and each p_i increases.
3. **Bargaining ability Effect**: The exogenous bargaining power parameter may itself be affected by the creation of the buying alliance. A decrease in α would lower w and final prices p_i .

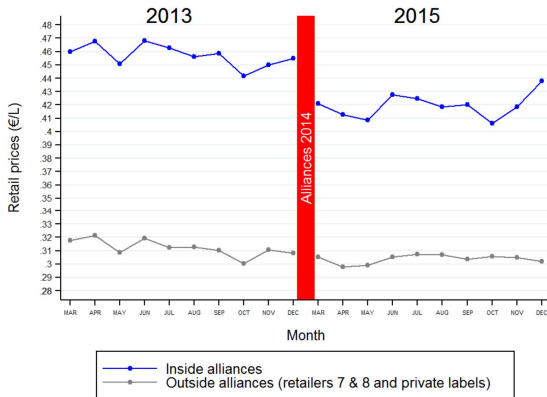
Empirical Analysis

Context

- In 2014, three buyer alliances have been formed in France:
 - ▶ Carrefour (22%) and Cora (3.5%);
 - ▶ Système U (10.5%) and Groupe Auchan (11%)
 - ▶ ITM Enterprises (14.5%) and Groupe Casino (12%).
- The scope covered by these alliances was limited to the wholesale price negotiations of products sold under national brands by large manufacturers, thereby excluding private labels (store brands), fresh products (e.g., fruit and vegetables), and products supplied by small and medium enterprises.

Empirical analysis on the French bottled water market

- ▶ Strong national brands
- ▶ 80% of bottled water is sold in supermarkets.
- ▶ Kantar WorldPanel from March to December 2013 (pre-alliances) and March to December 2015 (post-alliances).



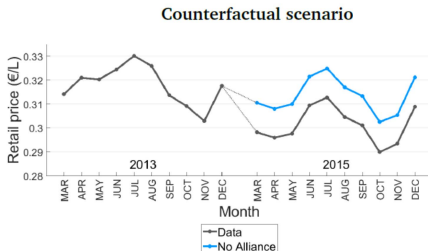
Simple DID analysis

- ▶ Using private labels + national brands at retailers not included in the alliances as control group, the retail price effect from the alliances is estimated as (-5.8%) and using private label only (-7.32%).

Structural model of demand and supply.

- ▶ **Demand-side** : model of consumers choice of bottles of water in supermarket chains and determine the predicted market share for each chain-brand.
- ▶ **Supply-side** : model of bilateral oligopoly.

As compared to no alliance the estimated drop in prices is -7.10% .



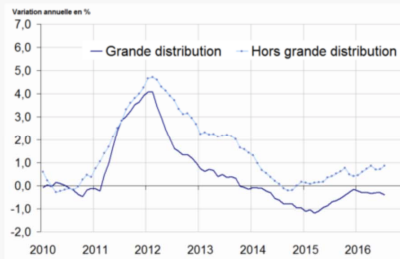
- ▶ It decreases the price cost margin of NB manufacturers inside their scope by 57.32% and outside their scope by 44.42%.
- ▶ Retail prices only decrease by 0.51% if the bargaining power parameter is "unchanged" because the non discrimination effect compensates the joint listing decision effect.
- ▶ In the pre-alliances period, retailers that formed an alliance extracted on average 62.5% of bilateral surplus with suppliers and almost 80% in the post-alliances period.

Conclusions

- ▶ First empirical analysis of national buying groups on retail prices.
- ▶ Evidence of a countervailing power effect and switch in the balance of power in the vertical chain to the detriments of suppliers.
- ▶ Large part of the effect comes from the change in "bargaining power parameter".
- ▶ Price war started in 2012 in France (!!)

The price war

Graphique1 – Évolution des indices des prix des produits de grande consommation dans la grande distribution



Champ : France métropolitaine

Source : Insee - indices des prix à la consommation

Effect of buying alliances on product variety

Allain, Avignon and Chambolle

- ▶ The three purchasing agreements signed in France in 2014 led the French Competition Authority to publish a report on buying groups in 2015.
 - ▶ Limited anticompetitive effects, because their scope is restricted to national brand products → no effects on small suppliers more likely to be in a situation of dependence.
- ▶ In 2018, a wave of **international** purchasing agreements involving French retailers started.
 - ▶ (i) "Horizon" composed of Auchan, Casino, Metro, Schiever and Dia;
 - ▶ (ii) Carrefour and Tesco.

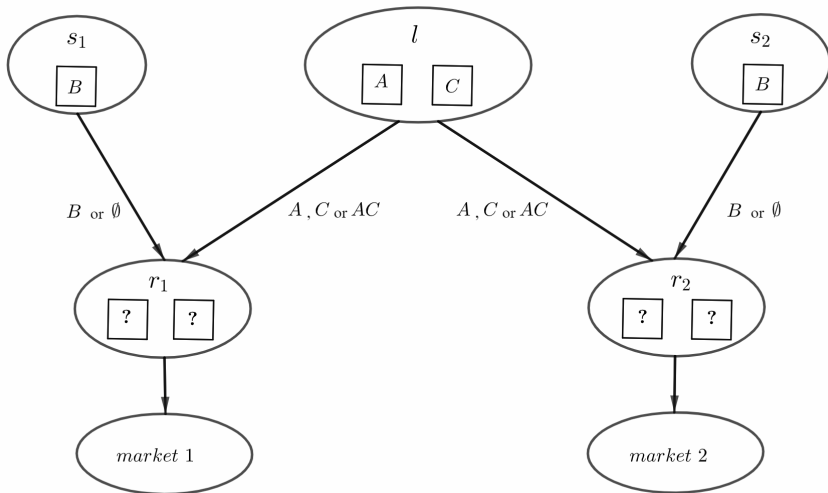
They cover a wider scope of brands (national brand goods and store-brands). The retailers argue that this may give opportunities of international development to the suppliers of private labels.

Effect of buying group on product variety

Research Questions

- ▶ What is the effect of a buying group on product variety?
 - ▶ When retailer's shelves are capacity constrained Inderst and Shaffer (2007) have shown that a cross border merger (international buying group) led to an inefficiency in the variety of products
 - Homogenisation of the offer when consumers' tastes differ across countries.
- ▶ Is limiting the coverage of buying groups to national brands an efficient policy to protect small suppliers?

A Sketch of the Model



Listing strategies

Listing strategies are defined as follows:

- ▶ *No buying group*: Each retailer negotiates independently which product to list.
 - Any listing of two products is possible.
- ▶ *Partial coverage buying group*: Retailers make a joint listing decision on large supplier's products but an independent decision on small suppliers' products.
 - Asymmetric listing of two products are not available.
- ▶ *Full coverage buying group*: Retailers make a joint listing decision over the whole product line.
 - There is a unique listing of products on the two markets (same characteristic, same supplier).
 - When B is listed, a unique small supplier serve the two markets and support fixed exporting cost E .

Timing

For each of the considered buying strategies, suppliers and retailers act as follows:

The Game

- ▶ Stage 1: Suppliers offer take-it-or-leave-it slotting fees for being listed.
Ex: Large supplier offer S_1^{AC} to have A and C listed in market 1. Each retailer r_i (or buying group) selects at most **two** among the three available products.
- ▶ Stage 2: Each retailer r_i engages in a bilateral negotiation with supplier(s) of the two products listed. Negotiation are simultaneous, contracts are secrets and consist of a fixed fee F .

Heterogeneity of product profitability (preferences or production cost)

- ▶ On market 1: $A \succ B \succ C$
- ▶ On market 2: $C \succ B \succ A$

Results

Without buying group:

- ▶ Each retailer always selects the efficient assortment in its country (AB) in market 1 and (BC) in market 2. This assortment generates the highest industry profit and consumer surplus.

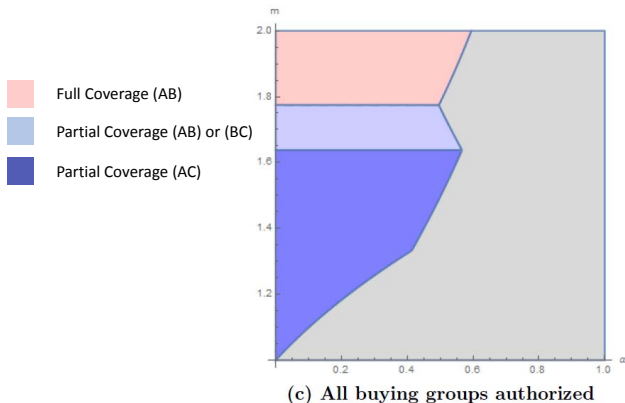
With partial buying group:

- ▶ (AB) or (BC) may be selected in the two countries → inefficiency on one market.
- ▶ (AC) may also be selected in the two countries: full exclusion of S, → inefficiency on the two markets.

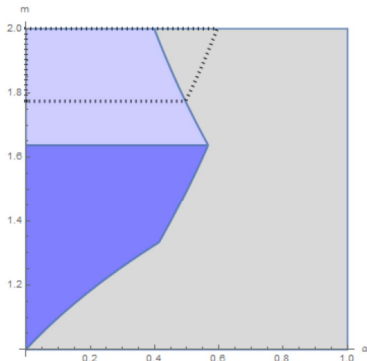
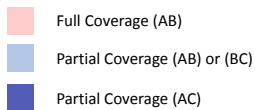
With full buying group:

- ▶ (AB) or (BC) may be selected in the two countries → inefficiency on one market+ partial exclusion of S
- ▶ AC may also be selected in the two countries: full exclusion, → inefficiency on the two markets.
- ▶ Additional inefficiency fixed exportation cost E .

Profitability of buying groups



Limiting the scope to partial buying groups



(a) Only partial buying group

Conclusions

- ▶ Retailers manage through buying groups to obtain a larger share of a smaller total industry profit.
- ▶ A buying group always generates inefficiencies in terms of variety of products offered either on one or the two markets.
- ▶ Buying group may generate partial or full exclusion of small suppliers.
- ▶ Small suppliers cannot be better off under full coverage buying group (no exportation opportunity).
- ▶ Limiting the scope of buying groups does not prevent full exclusion of small suppliers.
- ▶ This analysis entirely focuses on the assortment choice and assumes away any price effects or efficiency gains.

THANK YOU!