

# Loyalty Rebates

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# No One Theory

Are products in bundle

substitutes (branded and generic tape)

complements (engines and avionics)

used in fixed proportions (nail cartridge and nail)

one-way essential (windows and media player)

ex ante complements & ex post substitutes (Aspen)

neither (different blood tests, medical devices)

positive correlation in value or negative correlation

Is demand

exogenous and inelastic (dialysis fluids)

variable (lawn mower engines)

Do full-line rivals exist

**MOTIVATIONS AND EFFECTS OF BUNDLING DIFFER ACROSS THESE CASES**

**NOT LOST IN THE DESERT. CAN USE SAME TOOLS TO ANALYZE EFFECT ON COMPETITION**

# Ten Propositions

**#1 Hard to Justify Negative Prices**

**#2 Loyalty Discounts Can Create No-Cost Predation**

**#3 Exclusionary Bundling Test is Practical Detection Device**

**#4 Lump-Sum Rebates are Less Competitive**

**#5 Loyalty Rebates Make Pricing Opaque**

**#6 A's Price to Customer Shouldn't Depend on Who Else Customer Buys From**

**#7 Beware Bogus Bundle Discount Justifications**

**#8 Yes Virginia, Bundling Can Leverage (and Protect) Market Power**

**#9 Chicago School Story is Correct Under Strong Assumptions But Misses Interesting Cases**

**#10 Can Capture Procompetitive Aspects of Bundling without Exclusion**

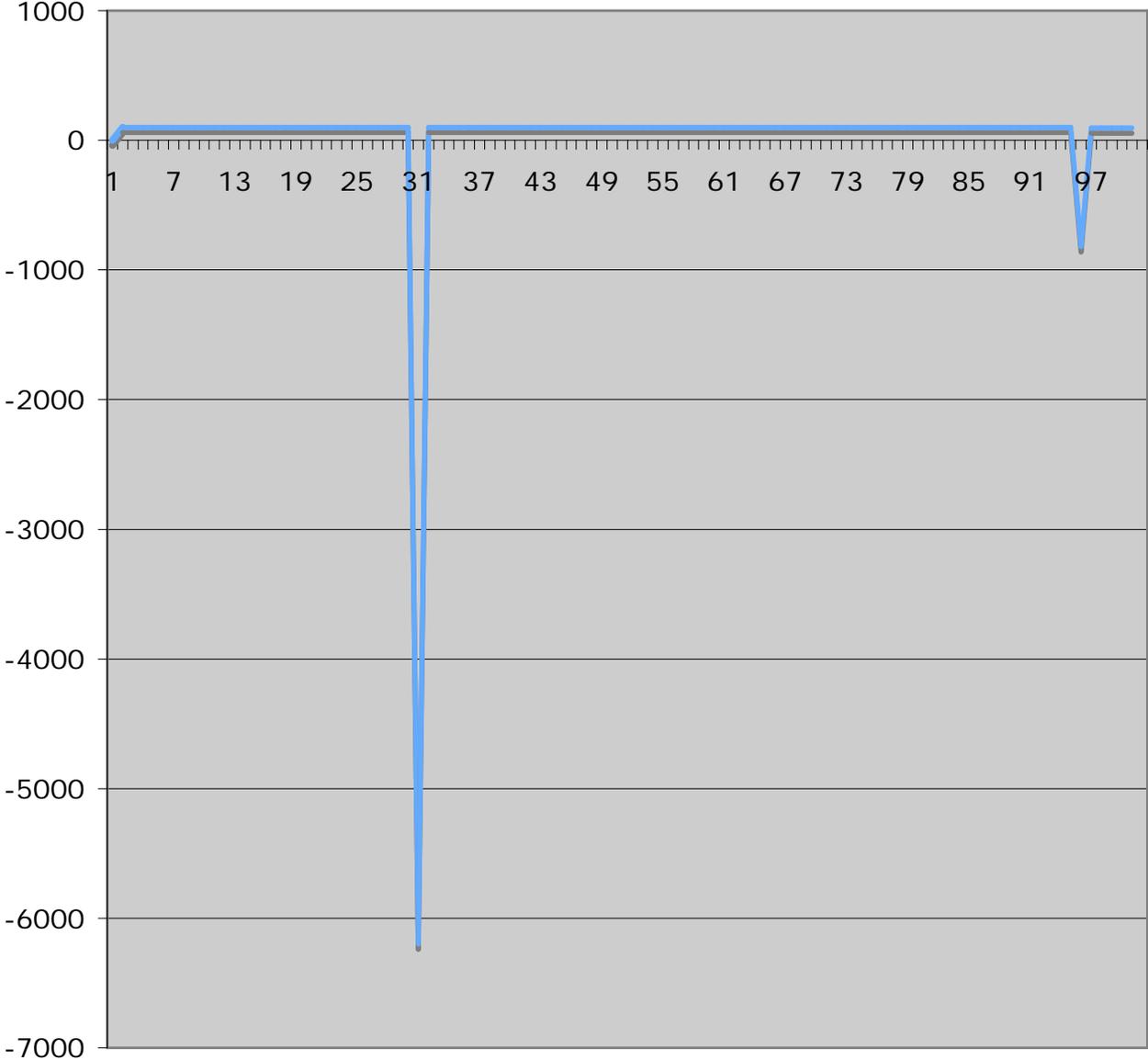
**You are free to accept these propositions individually. They are not bundled**

# #1 Hard to Justify Negative Prices

We see negative prices as a result of discounts that go back to unit one.

Issue arises both with single product and multi-product rebates

### Price of Incremental Unit



**Customer will always buy at least 31 units.**

**If customer gets up to 85 units, then will go up to 95 units.**

**Rival may sell 1--4 units or 16 to 69 units.**

**Rival will be excluded if buyer doesn't want to split market 50:50 and below 5% is too small to consider.**

**One solution is to have discounts be on incremental volume.**

**Not anti-consumer. Discounts can be bigger.**

## #2 Loyalty Discounts Can Create No-Cost Predation

The way it works is that price of A is inflated if you don't buy B.

Normal monopoly price of A is 100

Get A at 100 if also buy B at 20

But if don't buy my B, then have to pay 120 for A.

Thus effective cost of B is zero (or below cost).

Point is that no one actually pays 120. This is a threat that, if credible, need not be employed.

**Unlike regular predation, where firm actually has to sell product at below cost, here incumbent only has to offer discount from unused a la carte price of A**

Since it is less costly to employ (no recoupment required), greater risk to competition and no benefit to consumers along the way

**Table 1:**

	Offer 1 price	Offer 2 price	Discount	Savings
Product A1	\$3,539,728	\$2,970,601	16%	\$ 569,126
Product A2	\$ 824,906	\$ 609,405	26%	\$ 215,501
Product A3	\$1,450,233	\$ 704,143	51%	\$ 746,090
Competitive B product	\$1,401,611	\$1,344,987	4%	\$ 56,625
Total	\$7,216,478	\$5,629,136		\$1,587,342

*Table 2:*

	Offer 1 price	Offer 2 price	Savings
Products 1--3	\$5,814,867		
Competitive Product	\$1,401,611		
Total	\$7,216,478	\$5,629,136	\$1,587,342

Rival would have to charge  $-\$185,731$   
to be competitive

### #3 Exclusionary Bundling Test is Practical Detection Device

Firm with market power in A also sells good B and faces competition in B.

**Firm prices A-B bundle such that *incremental* price of A-B over A alone is less than cost of B.**

Result: Equally efficient rivals selling only B are foreclosed

Horizontal parallel to vertical price squeeze<sub>10</sub>

# Exclusionary Bundling

Incumbent would seem to be losing money by selling bundle over A alone. (Price of A alone may be artificially high.)

No need to look at cost of rival. No hypothetical equally efficient rival.

Easy for incumbent to know if its prices satisfy this test or not. Could use variable cost and average cost as safe harbor and danger zone.

Did price of A go up or did price of A-B bundle go down.

## #4 Lump-Sum Rebates are Less Competitive

This is especially important in case where products in bundle are substitutes

Incumbent firm has market power in good A

B is a substitute.

Think of A as Scotch tape and B as generic tape or A as Keflin and B as Kefzol (two cephalosporins).

# SmithKline vs. Lilly

- ◉ Cephalosporin market.
- ◉ Lilly had market power in A1, A2, A3, and A4. Faced competition in B.

A1. Keflin (\$34mm)

A2. Keflex (\$14mm)

A3. Loridine (<\$1mm)

A4. Kafocin (<\$1mm)

B. Kefzol (\$8mm)      Ancef (\$10mm)

# Option 1

Reduce price of Kefzol to compete with Ancef

Problem (from Lilly perspective) is that this increases substitution of Kefzol for Keflin (biggest money maker)

Consumers win on two counts: lower Kefzol price and more use of Kefzol

# Option 2

Give overall rebate if buy Kefzol

Reward is rebate on Keflin. Applying all discounts to competitive product implied 20% discount on Kefzol.

Ancef's lower price doesn't offset rebate

Now incremental price of Kefzol remains high

Thus much less incentive to substitute Kefzol for Keflin

As if Lilly says: We will give you 100 units of Kefzol for free provided you agree not to use anymore than that<sub>15</sub>

# LePage's

If 3M matches/beats LePage's on price of generic tape, more people will substitute generic for Scotch<sup>®</sup> tape.

How to beat LePage's without lowering price?

Give 3% discount across the board

Rebate savings offset higher price. But high price of generic doesn't threaten Scotch<sup>®</sup>

Rebate is paid as lump-sum fee so it isn't passed on to consumers of generic tape

## #5 Loyalty Rebates Make Pricing Opaque

Easy to tell that \$2.93 is cheaper than \$2.97

Is 3% off A & B if you buy B a good deal or not?

All depends on your estimated demand for A.

If buy less A than anticipated (and/or) more B, then rebate wasn't as good a deal.

Rival in B needs to forecast how much A customer will buy in order to offer competitive price. This isn't rival's business.

Recall how hard it was to read chart with negative prices. Shouldn't require an MBA to figure out lowest price.<sup>17</sup>

## #6 Firm A's Price to Customer Shouldn't Depend on Who Else Customer Buys From

Price might depend on how much customer buys in total

Price might depend on how much more customer buys compared to last year

Buy why should customer pay higher price based on what customer does with other vendors, holding sales with this firm constant? This is case of raising rivals' costs.

Effect may be the same via total volume discounts. But in growing market, this will create room for rivals.

## #7 Beware Bogus Bundle Discount Justifications

Often said that justification for bundling is that customers like bundles. Okay. But if that is correct, then bundle should be sold at a premium, not a discount.

Cases where A and B are used in fixed proportion. If so, then no possibility of price discrimination.

Price discrimination works best when goods in bundle have negative correlation in value (Opera tickets and Wrestling tickets). Hard to find examples of bundles with negative correlation. All bundles seen in antitrust cases have positive correlation.

# #8 Yes Virginia, Bundling Can Leverage (& Protect) Market Power

Demand for A is  $Q = 10 - P$ . Cost is zero. Thus monopoly price is 5.

Monopoly profit is  $5 \times 5 = 25$ .

B is competitive. Cost is 1. Price is 1. Demand for B is one unit.

Chicago School: Don't sell A&B at 6. Better to sell A alone at 5.

New School: If buy my B, price of A is 4. If don't buy my B, price of A is 6.

Customer loses at least 8 by not buying B. (Pays an extra 2 on 4 units)

Thus willing to pay up to 9 on B in order to get A discount.

A discount only costs the firm 1 as  $4 \times 6 = 24$ , versus  $5 \times 5 = 25$ .

Thus monopolist is up 7+

Explanation: Monopoly is inefficient. Monopolist agrees to be less bad on A if customer does a favor and buys overpriced B.

# Protect Market Power

Bundle discounts make it hard for single-product rivals to compete

One discount protects two flanks

A is 10, B is 10, A-B is 16

Single product rival has to price below 6 in either A or B

But incumbent gets 8 -- Consumers pay 8

Reason not to apply test of whether overall bundle is above cost

# #9 Chicago School Story is Correct Under Strong Assumptions But Misses Interesting Cases

Even if one monopoly profit, that profit may be larger under price discrimination than if no loyalty discounts. Consumers lose.

May choose to exclude because of dynamic considerations. Not a one-shot game.

It is generally possible and profitable to leverage monopoly into competitive market.

Bundle discounts can protect incumbent with dual market power from entry into either market.

Bundling and tying provide the potential for *no-cost* foreclosure. The effect is the same as predatory pricing, but it may be done at no cost to the firm

## #10 Can Capture Procompetitive Aspects of Bundling Without Exclusion

Bundles versus bundles is generally more competitive than items versus items.

Bundles solve double markup problem

Thus bundlers also have advantage over mono-line rivals

**Get competitive gain without exclusion**

J&J rule: When calculating share for bundle discount, only look at universe of full-line rivals. Thus 80% rule is 80% of sales from J&J and US Surgical. No penalty for buying from small rivals.

# Conclusions

- ⊙ US Courts have intuited their way to sensible policy.
- ⊙ Exclusionary bundling test offers more formal approach.
- ⊙ Chicago School distracted attention away from potential harm of bundling.
- ⊙ Bundling creates opportunity for harm to competition, leverage of market power, and loss to consumers
- ⊙ More potential issues with multi-product discounts than single product one.
- ⊙ Employ carve outs for mono-line players and incremental rather than unit one discounts.
- ⊙ Theories of bundling/loyalty discounts ready for prime time