Theories of Harm from Resale Price Maintenance

Greg Shaffer

University of Rochester

FTC Hearings on Resale Price Maintenance
February 19, 2009
Introduction

- Resale price maintenance is a practice in which an upstream firm (manufacturer) restricts the price at which a downstream firm (retailer) can resell its product. It has been used by firms with market power and without market power, in markets where competition is vigorous, and in markets where competition is not so vigorous.

- RPM can take different forms. It can be a price floor (min RPM), a price ceiling (max RPM), or a fixed price (fixed-price RPM).
Resale price maintenance is a practice in which an upstream firm (manufacturer) restricts the price at which a downstream firm (retailer) can resell its product. It has been used by firms with market power and without market power, in markets where competition is vigorous, and in markets where competition is not so vigorous.

RPM can take different forms. It can be a price floor (min RPM), a price ceiling (max RPM), or a fixed price (fixed-price RPM).
RPM must be analyzed in the market context in which it occurs.

In the past, when it was legal, RPM was commonly observed on products such as aspirin, pens, pencils, toothpaste, fine china, soap, cigars, baby powder, deodorant, shaving cream, milk, electronic equipment, skiing equipment, hearing aids, refrigerators, and toasters.
Introduction

- My assignment
  - Discuss strategic theories of harm
  - Leave RPM cartel theories to others
  - Leave efficiency rationales to others
Strategic Theories of Harm
Mitigating the Effects of Bargaining/Oppportunism

Manufacturer

Retailer

Retailer
Suppose an upstream firm with market power sells to competing downstream firms who also have market power. In the absence of RPM, downstream final-goods prices may be below the joint-profit maximizing level for a variety of reasons (e.g., opportunism on the part of the upstream supplier and/or wholesale price concessions that may be obtained through the bargaining efforts of the downstream firms). Lower wholesale prices are partially passed through to final-goods consumers, resulting in lower retail prices and reduced industry profits.

With RPM, the upstream firm can increase industry profit by committing to an industry-wide retail price floor. This mitigates incentives for supplier opportunism and ensures that wholesale price concessions that may be obtained by downstream firms in the course of bargaining do not get passed through to final-goods consumers.
Suppose an upstream firm with market power sells to competing downstream firms who also have market power. In the absence of RPM, downstream final-goods prices may be below the joint-profit maximizing level for a variety of reasons (e.g., opportunism on the part of the upstream supplier and/or wholesale price concessions that may be obtained through the bargaining efforts of the downstream firms). Lower wholesale prices are partially passed through to final-goods consumers, resulting in lower retail prices and reduced industry profits.

With RPM, the upstream firm can increase industry profit by committing to an industry-wide retail price floor. This mitigates incentives for supplier opportunism and ensures that wholesale price concessions that may be obtained by downstream firms in the course of bargaining do not get passed through to final-goods consumers.
Mitigating the Effects of Bargaining/Opportunism

Min RPM breaks the link between wholesale price concessions obtained through bargaining/opportunism and lower final-goods prices.

Final-goods prices will be higher with RPM and the degree of harm (how much prices increase) will depend on the degree of substitution among retailers, the number of competing retailers, the incentives for opportunism, the bargaining powers of the retailers, and the competitive constraints imposed by interbrand competition from other firms.

Source: O’Brien and Shaffer (1992)
Mitigating the Effects of Bargaining/Opportunism

- Min RPM breaks the link between wholesale price concessions obtained through bargaining/opportunism and lower final-goods prices.

- Final-goods prices will be higher with RPM and the degree of harm (how much prices increase) will depend on the degree of substitution among retailers, the number of competing retailers, the incentives for opportunism, the bargaining powers of the retailers, and the competitive constraints imposed by interbrand competition from other firms.

- Source: O’Brien and Shaffer (1992)
Relaxing Competitive Constraints

![Diagram showing relationships between Manufacturer, Retailer, and Others]
Suppose an upstream firm has a cost advantage relative to rival upstream sellers who produce an identical product. Downstream competition is vigorous so that wholesale prices are passed along to final-goods consumers with little or no markup. In the absence of RPM, the low-cost firm is constrained to charge a wholesale price to retailers that is no larger than the marginal cost of the high-cost firms. Retailers pay less than they otherwise would but compete their gains away in the form of lower final-goods prices. Consumers benefit.

With RPM, the low-cost firm can increase its profit by setting a higher retail price and offering each downstream firm a lower wholesale price (than would be the case absent RPM). By offering a high enough markup, the low-cost firm can induce the downstream firms to purchase from it (despite the presence of rival upstream firms who are willing to sell to the downstream firms at cost). Industry profits are higher because final-goods prices are higher. Consumers are worse off.
Relaxing Competitive Constraints

- Suppose an upstream firm has a cost advantage relative to rival upstream sellers who produce an identical product. Downstream competition is vigorous so that wholesale prices are passed along to final-goods consumers with little or no markup. In the absence of RPM, the low-cost firm is constrained to charge a wholesale price to retailers that is no larger than the marginal cost of the high-cost firms. Retailers pay less then they otherwise would but compete their gains away in the form of lower final-goods prices. Consumers benefit.

- With RPM, the low-cost firm can increase its profit by setting a higher retail price and offering each downstream firm a lower wholesale price (than would be the case absent RPM). By offering a high enough markup, the low-cost firm can induce the downstream firms to purchase from it (despite the presence of rival upstream firms who are willing to sell to the downstream firms at cost). Industry profits are higher because final-goods prices are higher. Consumers are worse off.
Relaxing Competitive Constraints

- Min RPM relaxes the competitive constraint that rival upstream firms used to provide.
  - The large per-unit markup on the low-cost firm’s product more than offsets the additional sales that could be gained from undercutting.
  - The magnitude of the price increase that can be supported in equilibrium depends on retail substitution parameters and the number of competing retailers. One will observe contracts with nonlinear terms.
  - Variant of the story: a retail trade association or buying group negotiates a relatively low per-unit wholesale price with one or more upstream firms who all propose the same minimum price floor. Members are not required to buy from the preferred list of suppliers, but do so anyway, resulting in supracompetitive downstream prices.

- Source: Shaffer (1990a); Shaffer (1992)
Relaxing Competitive Constraints

- Min RPM relaxes the competitive constraint that rival upstream firms used to provide.
  - The large per-unit markup on the low-cost firm’s product more than offsets the additional sales that could be gained from undercutting.

- The magnitude of the price increase that can be supported in equilibrium depends on retail substitution parameters and the number of competing retailers. One will observe contracts with nonlinear terms.

- Variant of the story: a retail trade association or buying group negotiates a relatively low per-unit wholesale price with one or more upstream firms who all propose the same minimum price floor. Members are not required to buy from the preferred list of suppliers, but do so anyway, resulting in supracompetitive downstream prices.

- Source: Shaffer (1990a); Shaffer (1992)
Min RPM relaxes the competitive constraint that rival upstream firms used to provide.

The large per-unit markup on the low-cost firm’s product more than offsets the additional sales that could be gained from undercutting.

The magnitude of the price increase that can be supported in equilibrium depends on retail substitution parameters and the number of competing retailers. One will observe contracts with nonlinear terms.

Variant of the story: a retail trade association or buying group negotiates a relatively low per-unit wholesale price with one or more upstream firms who all propose the same minimum price floor. Members are not required to buy from the preferred list of suppliers, but do so anyway, resulting in supracompetitive downstream prices.

Source: Shaffer (1990a); Shaffer (1992)
Min RPM relaxes the competitive constraint that rival upstream firms used to provide.

The large per-unit markup on the low-cost firm’s product more than offsets the additional sales that could be gained from undercutting.

The magnitude of the price increase that can be supported in equilibrium depends on retail substitution parameters and the number of competing retailers. One will observe contracts with nonlinear terms.

Variant of the story: a retail trade association or buying group negotiates a relatively low per-unit wholesale price with one or more upstream firms who all propose the same minimum price floor. Members are not required to buy from the preferred list of suppliers, but do so anyway, resulting in supracompetitive downstream prices.

Source: Shaffer (1990a); Shaffer (1992)
Markup Manipulation to Raise Rivals’ Prices

Diagram:

- Manufacturer
  - Others
  - Retailer
  - Retailer

- Others
  - Retailer
Suppose an upstream firm with market power sells to competing downstream firms who also have market power. The downstream firms also sell competing products. In the absence of RPM, downstream firms will choose their retail prices to maximize the profits from their product lines. Typically, the profit-maximizing markup on each good will depend not only on demand elasticities (own and cross-price) but also on the markups of the other products in the product line.

With RPM, the upstream firm with market power can increase its profit by requiring that retailers set a higher retail price on its product even though at the same time it lowers the wholesale price it charges to retailers. Both actions serve to guarantee retailers a larger markup on the upstream firm’s product, and the retailers respond by raising the retail prices of the competing products in their product line. All final-goods prices increase and as a result consumers are worse off.
Suppose an upstream firm with market power sells to competing downstream firms who also have market power. The downstream firms also sell competing products. In the absence of RPM, downstream firms will choose their retail prices to maximize the profits from their product lines. Typically, the profit-maximizing markup on each good will depend not only on demand elasticities (own and cross-price) but also on the markups of the other products in the product line.

With RPM, the upstream firm with market power can increase its profit by requiring that retailers set a higher retail price on its product even though at the same time it lowers the wholesale price it charges to retailers. Both actions serve to guarantee retailers a larger markup on the upstream firm’s product, and the retailers respond by raising the retail prices of the competing products in their product line. All final-goods prices increase and as a result consumers are worse off.
Markup Manipulation to Raise Rivals’ Prices

- Min RPM creates incentives for retailers to raise the final-goods prices of competing products in their product line.

  - The magnitude of the price increases that can be supported in equilibrium depends on retail substitution parameters and the number of competing retailers. The upstream firm with RPM extracts the induced increase in joint profits via the nonlinear terms in its contracts.

Source: Shaffer (1989); Shaffer (1990b)
Min RPM creates incentives for retailers to raise the final-goods prices of competing products in their product line.

The magnitude of the price increases that can be supported in equilibrium depends on retail substitution parameters and the number of competing retailers. The upstream firm with RPM extracts the induced increase in joint profits via the nonlinear terms in its contracts.

Source: Shaffer (1989); Shaffer (1990b)
Suppose the upstream market is perfectly competitive and the downstream market consists of a small number of competing firms that have some market power. In the absence of RPM, downstream firms choose prices to maximize their profits and in equilibrium their prices will exceed their marginal costs but fall short of monopoly levels.

With RPM, one or more downstream firms may want to commit to purchase from a firm that enforces a price floor (min RPM). Firms that are not thus committed purchase their goods at cost and choose their (unconstrained) final-goods prices. All prices can be higher in equilibrium as a result of the committed downstream firms’ actions.
Min RPM allows committed firms to act as “Stackelberg” leaders, with non-committed firms acting as “Stackelberg” followers.

Consumers are worse off. The magnitude of the price increases depends on retail substitution parameters and the number of competing downstream firms. We might expect to see up to \( n - 1 \) downstream firms selling under RPM in this setting, but never universal coverage.

Price increases are largest when about half the firms sell under RPM.

Shaffer (1991); Foros, Kind, and Shaffer (2007)
Conclusion
In Summary

RPM can have anticompetitive effects.

- In the mitigating the effects of bargaining power/opportunism, relaxing competitive constraints, and markup manipulation to raise rivals’ prices stories, RPM leads to higher final-goods prices because it severs the usual link between wholesale prices and final-goods prices, allowing an upstream firm to use both as strategic instruments to increase its profit.

- In the price-leader/facilitating practice story, RPM leads to higher final-goods prices because it serves as a commitment device.
What to Look For

- Narrow down the applicable theories
  - industry setting
  - internal documents
  - pricing data: have prices gone up
  - what has happened to sales in the product category
  - how sophisticated are the contracts
  - are contracts observable/unobservable
What to Look For

- Strength of competitive effects
  - substitution between products
  - substitution between retailers
  - number of downstream firms

- Could effects have been achieved through less restrictive means
What to Look For

- Strength of competitive effects
  - substitution between products
  - substitution between retailers
  - number of downstream firms

- Could effects have been achieved through less restrictive means


