

A Comparison of the Wholesale Structure and the Agency Structure in Differentiated Markets

KEYWORDS:

Agency; Wholesale; Vertical Relation; Product Differentiation; Retailers; Welfare; Resale Price Maintenance

BACKGROUND

In modern times, it is rare for individuals to purchase goods directly from the manufacturer. Instead, goods tend to pass through more elaborate supply and distribution chains, and the majority of transactions are completed with the involvement of other parties. The vertical relations which characterise these supply and distribution chains operate in various ways, which can have different effects on consumers. It is therefore important two questions: 1) why different markets may adopt different vertical structures, and 2) which structure benefits consumers.

While the wholesale structure remains the standard in the bricks-and-mortar environment, the agency structure is becoming increasingly prominent in online markets, with giant online retailers such as Amazon, Apple, eBay, Google and various booking websites adopting it. This indicates a shift in power at the supplier and retailer levels. Unlike the traditional views on vertical relations, where retailers are often considered to be perfectly competitive and possess little market power, these online retailers seem to have considerable network and negotiation power. Their preferred business format, the agency structure, thus seems to favour retailers.

Recent papers studying the agency structures are overwhelmingly inspired by the (in)famous e-Books case, involving agreements between Apple and five large book publishers in the US. Almost all motivated theoretical studies tend to examine the agency structure alongside other aspects, some of which relate closely to the e-Book market. Meanwhile, there is a lack of research providing systematic analysis of the agency structure per se, as well as detailed comparisons of the wholesale and agency structures, which constitutes the basis of understanding the changes in vertical relations.

METHODOLOGY

In a simple bilateral duopoly model with differentiated demand, we characterize the vertical relation, first by the wholesale structure and then by the agency structure. By comparing the two sets of equilibrium outcomes, we first assess welfare implications and then examine firms' preferences in relation to the choice of business format, to explain some aspects of the decision-making on business formats in vertically-related markets and the associated social effects.

KEY FINDINGS

- Imperfect competition at the retailer level is crucial in generating difference in equilibrium outcomes between the two structures.
- Symmetric equilibrium retail prices are lower, quantities demanded are higher and consumer surplus is higher under the agency structure than under the wholesale structure.

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- Industry profits and social surplus increase as supplier goods and retailer services become more differentiated, and they are maximised at the point of perfect differentiation at both levels of the vertically-related market characterized by the agency structure.
- Suppliers always prefer the wholesale structure whereas retailers prefer the agency structure for a wider range of differentiation parameters. The relative profitability of the alternative schemes for retailers is sensitive to the degree of differentiation at the supplier level; as long as it is not too low, retailers are better off under the agency structure.
- Whereas, under the wholesale structure, the high degrees of differentiation at one level of the market will generally benefit firms at that level and harm firms at the other level, under the agency structure the two parties' incentives are better aligned.

POLICY ISSUES

- While competition authorities in general believe that competition benefits consumers, we show that, although firms engaging in the agency structure may have incentives that are better aligned, they can offer not only cheaper prices but also final goods that are more differentiated, which benefit consumers. If the degrees of differentiation at both levels of the market are high enough, the agency structure is a more efficient business format.
- Sometimes, knowing which structure a market has chosen is per se useful, as a market's chosen structure can reveal interesting characteristics about itself and allows us to make conjectures on the power relations between suppliers and retailers. Our findings suggest, ceteris paribus, suppliers are in a relatively stronger position if the market operates under the wholesale structure, and retailers are in a relatively stronger position if the market operates under the agency structure. This in turn implies that the loss of social surplus would be large if the degrees of differentiation in the market are high but suppliers are in a relatively stronger position, as suppliers will choose the wholesale structure which maximises their own profits.

THE CCP

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