

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

KEYWORDS:

Agency; Wholesale; Retailing; Supply Chain; Vertical Relation; Differentiation; Resale Price Maintenance; Online Markets

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 both positive and negative effects on consumers. It is therefore important for us to understand what these effects are and, moreover, how they are influenced by the structure choice of a particular industry.

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 examine firms' preferences in relation to business format, how the relative degree of market power affects firms' preferences, and whether this explains the popularity of one structure in certain markets.

KEY FINDINGS

- Imperfect competition at the retailer level is crucial in generating difference in equilibrium outcomes between the two structures.
- Symmetric equilibrium price is higher under the wholesale structure and equilibrium demand is higher under the agency structure.

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- 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, consumers can still benefit from lower prices compared to those under the wholesale structure, ceteris paribus.
- The rise of the agency structure implies that retailers are in a strong position, since suppliers would stick to the wholesale structure if they possess relatively higher market power.
- As the degree of differentiation at the supplier level increases, retailer profits increase given the condition that the agency structure is in place, but this condition would become more difficult to satisfy. This further indicates the considerable network and bargaining power of some online retailers.
- If the degrees of differentiation at both levels of the market are high enough, the agency structure seems to be a more efficient business format.

THE CCP

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