

The Effects of Vertical Restraints: An Evidence-Based Approach

Pros and Cons of Vertical Restraints
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Based on joint work with

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Some Simple Facts

- Vertical restraints are ubiquitous
- Vertical Restraints are controversial
- Policy towards VR is inconsistent and changeable
- Theory gives us little guidance

These facts make it especially important to assess the evidence

That is what I do in this talk

I present no new empirical work

Instead I analyze material from studies that have used data to evaluate VR

Plan of Talk

- Consider a manufacturer/retailer relationship
What are the manufacturer's choices?
- Motives for employing VR
Efficiency enhancing
Market–power enhancing
- The evidence
On the consequences of VR directly
On foreclosure and raising rivals' costs more generally

Manufacturer/Retailer Relationships

- Sell the product oneself (VI)
Employ an independent agent (VS)
- If VS, arm's length transactions in spot markets
Long-term contracting
- If contracting, include restrictions (VR) in contract
No VR
- Use exclusive distributors and/or retailers
Use common agents

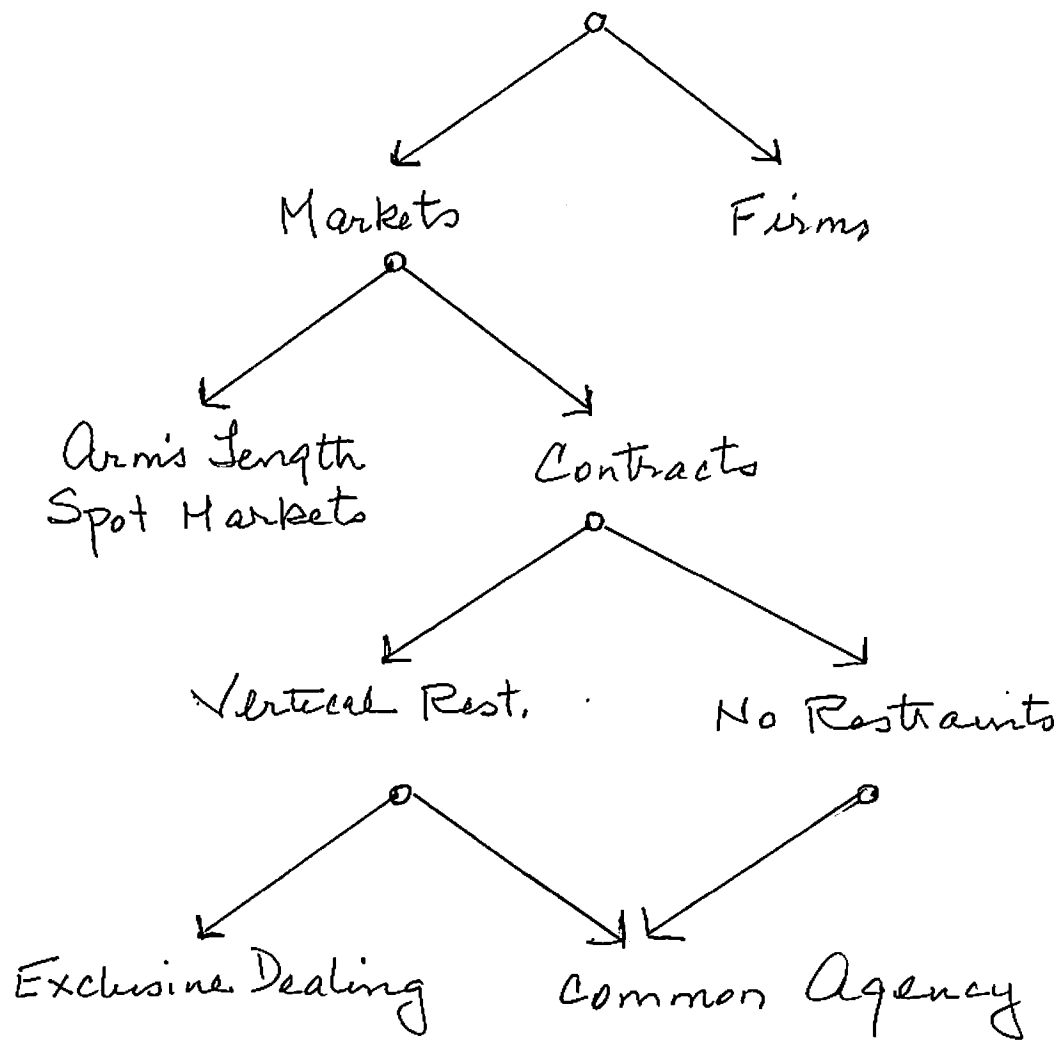


Figure 1: Manufacturer Retailer Interactions

Motives for Imposing VR

Efficiency Motives

Free Riding and Opportunism

- Protect manufacturer investments
- Dealer services at point of sale
- Dealer free riding on brand (vertical)
- Dealer free riding on other dealers' efforts (horizontal)

Motives for Imposing VR

Efficiency Motives (cont.)

Double marginalization

- Successive monopoly (oligopoly) markups

Motives for Imposing VR (cont.)

Anticompetitive Motives

Foreclosure and raising rivals' costs

- Discouraging entry
- Causing exit
- Disadvantaging unintegrated rivals more generally

Motives for Imposing VR

Anticompetitive Motives (cont.)

Cartels and Monopolization

- Facilitate dealer cartels
- Facilitate upstream collusion

The Empirical Literature

Assesses *outcomes*

(e.g., p , q , π , stock returns, growth, survival)

not *motives*

Usually includes a dummy variable for the presence/absence of a restraint

A Warning

The econometric standards in this literature are not high

- Problems with *endogeneity*

The choice of restraints is endogenous

Especially problematic in cross-sectional studies

- Often one restraint is analyzed in isolation
e.g., exclusive territories

But restraints can be substitutes or complements

Need to assess 'packages'

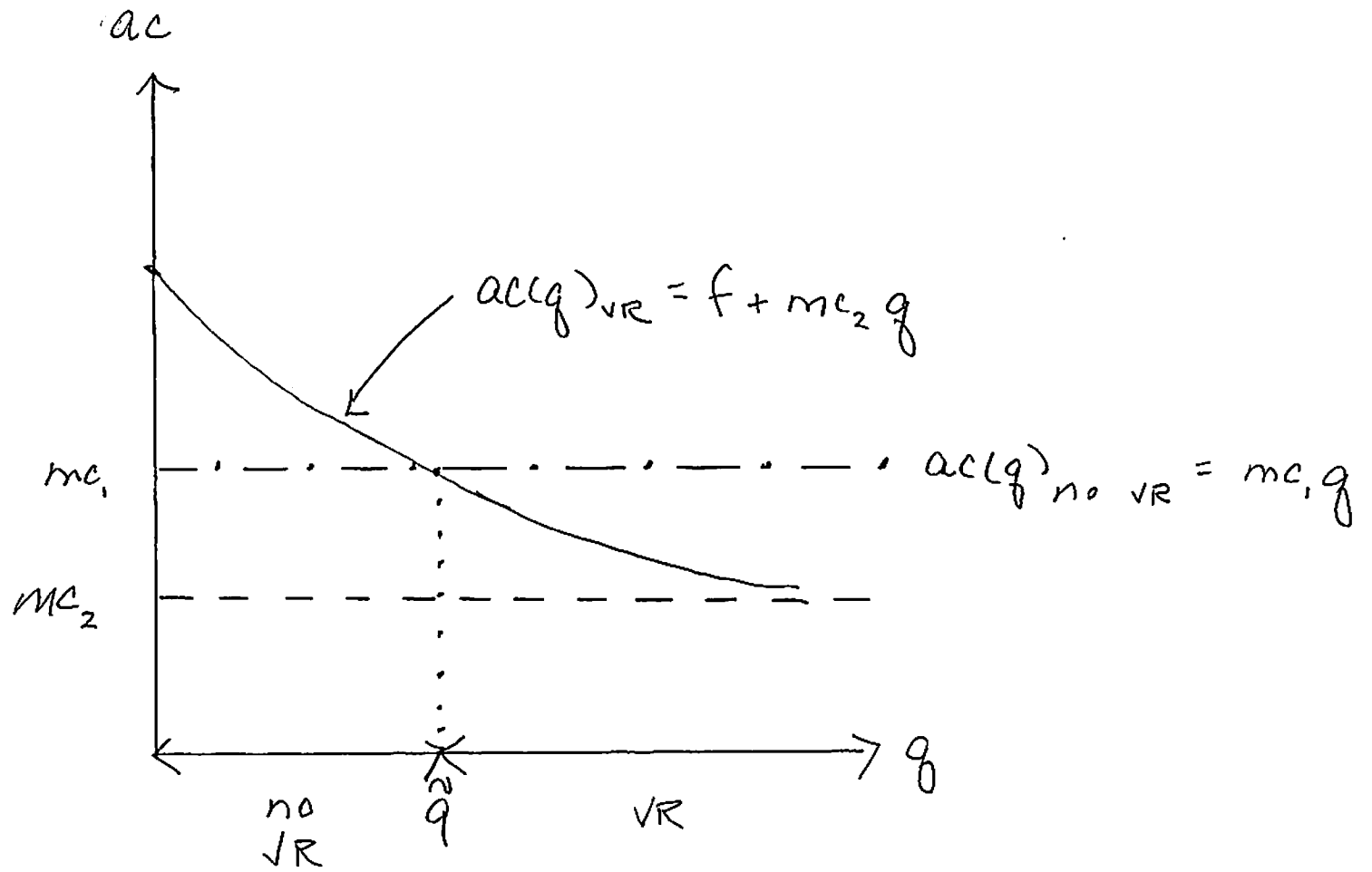


Figure 2: VR versus size

Our approach

Look at the body of evidence

If conclusions from many studies are consistent and strong confidence is increased

We are looking for robust relationships

Not fragile findings that change with model specification and/or estimation technique

The Evidence

Voluntary Agreements

Written into contracts by contracting parties

Should be good for the parties

What about consumers?

Table 1: Empirical Assessment of Effects of Voluntary Vertical Restraints

Author	Year	Industry	Variable (Y)	Effect (Y)	Effect (W)
Exclusive Dealing					
Slade	2000	Beer Retailing	Price (P_R)	+	-
Asker	2004	Beer Dist	Cost	-	+
Sass	2005	Beer Dist	Price(P_W)	+	+
			Consumption	+	
Exclusive Territories					
Jordan and Jaffee	1987	Beer Dist	Price (P_W)	+	-
Sass and Saurman	1993	Beer Dist	Price (P_R)	+	+
			Consumption	+	
Sass and Saurman	1996	Beer Dist	Consumption	+	+
Azoulay and Shane	2001	Several	Survival	+	+
Brenkers and Verboven	2006	Auto Distribution	Price (P_R)	+	-
Tying					
Hanssen	2000	Movie Dist	Consumption	+	+
RPM					
Gilligan	1986	Many	Stock Returns	Mixed	Ambiguous
Ippolito and Overstreet	1996	Glassware	Consumption	+	+
			Stock Returns	+	

Source: Lafontaine and Slade (2008).

Table 2: Empirical Assessment of Effects of Voluntary Vertical Restraints (cont.)

Author	Year	Industry	Variable (Y)	Effect (Y)	Effect (W)
Other Restrictions					
Sourcing restrictions ^a					
Barron, Taylor, and Umbeck	2004	Gasoline	Price (P_R)	-	+
Limited distribution ^b					
Cooper	2006	Contact Lenses	Price (P_R)	No effect	No effect

^a Sourcing restrictions are limitations on downstream input purchases.

^b Limited distribution is a constraint on the type of seller.

Source: Lafontaine and Slade (2008).

The Evidence (cont.)

Publicly Mandated Restraints

Some government agencies *require* that firms adopt restraints

Should be bad for the upstream firms
They could have done it themselves

What about retailers?
What about consumers?

Table 3: Empirical Assessment of Effects of Mandated Vertical Restraints

Author	Year	Industry	Variable (Y)	Effect (Y)	Effect (W)
Exclusive Territories					
Smith II	1982	Auto Distribution	# of Dealerships	-	Ambiguous
Culbertson and Bradford	1991	Beer Distribution	Price (P_R)	+	-
Tying					
Hass–Wilson	1987	Contact Lenses	Price (P_R)	+	-
RPM					
Ornstein and Hanssens	1987	Spirits	Price (P_R)	+	-
			License Values	+	
			Consumption	-	
Termination Restrictions					
Smith II	1982	Auto Distribution	# of Dealerships	+	Ambiguous
Brickley, et. al.	1991	Several	Stock Returns	-	-
Dealer Licensing					
Smith II	1982	Auto Distribution	Price (P_R)	+	-
			Consumption	-	
			# of Dealerships	-	

Source: Lafontaine and Slade (2008).

It appears that firms' and consumers' interests are aligned

Why worry?

These studies don't assess the most worrisome motives and/or markets

Will look at foreclosure and raising rivals' costs more generally

Consider studies of vertical integration

Table 4: Assessment of Foreclosure and Raising Rivals Costs

Author	Year	Industry	Data/Technique	Variable Examined	Finding
Foreclosure					
Allen	1971	Cement & concrete	Descriptive	Acquisitions	Foreclosure
Reiffen & Kleit	1990	Railroads & terminals	Descriptive	Access to railroad terminals	No foreclosure
Rosengren & Meehan	1994	Challenged mergers	Event study	Returns, unintegrated downstream rivals	No foreclosure
Waterman & Weiss	1996	Cable TV programming & distribution	Cross sectional regressions	Program offerings	Foreclosure
Snyder	1996	Crude oil & refining	Event study	Returns, integrated rivals	Foreclosure
Hastings & Gilbert	2005	Gasoline refining & sales	Difference in difference	Wholesale price to unintegrated rivals	Foreclosure

Table 5: Assessment of Foreclosure and Raising Rivals Costs (cont.)

Foreclosure and efficiency					
Mullin & Mullin	1997	Iron ore & steel	Event study	Returns, downstream consumers	No foreclosure Efficiency gains
Ford & Jackson	1997	Cable TV programming & distribution	Cross sectional IV regressions	Subscription price	Foreclosure No welfare change
Chipty	2001	Cable TV programming & distribution	Cross sectional IV regressions	Program offerings price, & subscriptions	Foreclosure Efficiency gains
Hortacsu & Syverson	2007a	Cement & concrete	Panel Difference in difference Probit	Concrete price Concrete production Plant survival	No foreclosure Efficiency gains

Source: Lafontaine and Slade (2007).

Table 6: Empirical Assessment of Divorcement

Author	Year	Industry	Data/Technique	Variable Examined	Effect of Divorcement
Barron, & Umbeck	1984	Gasoline refining & sales	Difference in difference	Retail price Station hours	Price higher Hours shorter
Slade	1998	Beer brewing & sales	Difference in difference	Retail price	Price higher
Vita	2000	Gasoline refining & sales	Panel	Retail price	Price higher
Blass & Carlton	2001	Gasoline refining & sales	Cross section	Retail cost	Cost higher
Hastings	2004	Gasoline refining & sales	Difference in difference	Retail price	No difference between CC & CD

Source: Lafontaine and Slade (2007).

Conclusions

- There is a need for much more empirical work on VR
The number of empirical studies is small
especially in relation to the theoretical work
- Nevertheless, the evidence is consistent
Voluntarily adopted VR do not hurt consumers
Those imposed from outside do
- There is some evidence of foreclosure
The harmful effects are often outweighed by benefits

Conclusions (cont.)

- The burden of proof should lie with the authorities that allege harm
Not with the firms that adopt VR
- There should be clear safe harbors