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Title: Resale Price Maintenance: A Review and Call for Research

Authors: Gregory T. Gundlach, Director, American Antitrust Institute and Coggin Distinguished Professor, University of North Florida (with Kenneth C. Manning, Professor and FirstBank Research Fellow and Joseph P. Cannon, Professor, Colorado State University).

Author Contact: Ggundlac@unf.edu

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Abstract

Resale price maintenance (RPM) is a channel pricing strategy that establishes the price below which a product cannot be resold. The Supreme Court's decision in *Leegin Creative Leather Products, Inc. v. PSKS, Inc.* (2007) overruled a nearly 100-year old rule against RPM agreements. Together with evolving changes in business, the decision has focused increased attention on this marketing practice and prompted calls for contemporary research on its use and effects. The authors organize historical understanding, review past empirical research, advance new perspectives and propositions for research, discuss marketing literature with potential to enhance future understanding of RPM, and offer an agenda for interested researchers.

"The sale is dead! Here's why TVs cost the same at every retailer now"
Digital Trends (Denison 2013)

Marketers employ various strategies to manage their distribution channels and affect the resale prices of their products. One long-standing, yet controversial, approach is *resale price maintenance* (RPM). RPM is an agreement between independent firms at different levels of the distribution channel that establishes the resale price below which sales of a product are not permitted (Sheffet and Scammon 1985; Ippolito 1991). Also known as *vertical price fixing*, RPM raises challenging questions for public policy and marketing management where its use "permits a manufacturer to limit the normal pricing behavior of its resellers" (Coughlan, Anderson, Stern and El-Ansary 2001, p. 285).

Despite being a long-standing channel pricing strategy, understanding of RPM has been guided primarily by disciplines outside of marketing. Marketing contributions include past assessments of RPM as a channel pricing strategy (Hollander 1955; Stern 1964), evaluations of legal rulings involving RPM (Lee 1959; Sheffet and Scammon 1985) and reviews of legislative changes involving RPM (Fabricant 1990; Fulop and March 1979). Scholarly understanding of RPM, however, has been primarily derived from conventional economics, where various conceptual perspectives have been identified to explain its use and effects.

A recent change in public policy has drawn attention to RPM. In *Leegin Creative Leather Products, Inc. v. PSKS, Inc.* (2007), the U.S. Supreme Court overruled a nearly 100-year *per se* (i.e., by itself) rule against RPM established in *Dr. Miles Medicine Co. v. John D. Park & Sons* (1911). Prior to *Leegin*, the rule had become subject to increasing exceptions that permitted RPM under specified circumstances (e.g., Colgate Doctrine). Following *Leegin*, RPM is judged applying the *rule of reason* – a less restrictive, yet more complex standard that requires a court to weigh all the circumstances of a case.

The *Leegin* decision has ignited interest in the public policy treatment and managerial practice of RPM. According to the *Wall Street Journal,* since *Leegin*, "retail-pricing norms have…changed

significantly" and "[i]n the wake of the decision, many manufacturers have instituted pricing minimums for advertising or sales" (Pereira 2008, p. A1). Various reports describe the increasing use of RPM post-*Leegin* (Denison 2013; Zimmerman 2012). These reports indicate RPM is being used for a wide range of product categories including video game equipment, video games, bassinets, strollers, maternity/baby gear, lighting, home improvement products, power tools, car parts, photographic equipment, handbags, appliances, TVs, and other electronic equipment (Pereira 2008, 2009). State Attorneys General also report many consumer inquiries concerning why "the brand I liked is priced exactly the same at every store" (Schuette 2013). The Supreme Court itself predicted their decision in *Leegin* could result in the application of RPM to as much as $300 billion in sales of U.S. consumer goods annually (Leegin, p. 926).

Changes in marketing practice have also triggered interest in RPM and created an increasingly complex context for RPM management and oversight. Growth in multi-channel distribution and Internet retailing have raised concerns about "showrooming" (Kalyanam and Tsay 2013) and prompted allegations that online retailers are free riding on brick-and-mortar retailers' investments in service, merchandising, and promotion – a key justification for RPM (Lao 2010). However, rather than discouraging cross-channel shopping and free riding through strategies like RPM, marketers are finding ways to embrace and profit from these trends (Gundlach, Manning, and Cannon 2011). The increasing availability of "big data" and advanced technologies (e.g., analytics, online search "bots," etc.) for analysis add complexity to managers' RPM related decisions. These data and analytical tools make it easier for manufacturers to manage uniform pricing strategies such as RPM, but at the same time facilitate the use of "dynamic" pricing strategies where prices are altered and customized across customers.

Observing these changes, and guided by the Supreme Court's finding that "empirical evidence on the topic is limited" (Leegin 2007, p. 894), stakeholders have called for research to

examine the present-day use and effects of RPM (Harbour 2009). Past studies provide evidence that RPM can be used in anticompetitive ways to lower economic efficiency through higher consumer prices (Overstreet 1983). However, other evidence supports the procompetitive use of RPM to enhance economic efficiency where, despite raising prices, its use encourages reseller promotion by safeguarding against free riding. A limited number of empirical studies, however, have tested these and other explanations for RPM, leaving many questions outstanding.

This state of affairs provides the impetus for the current paper. Our goal is to stimulate and guide contemporary study of RPM. Toward this end, in the following sections we: organize and summarize historical perspectives and past theoretical explanations for RPM; review extant empirical research and findings; advance new perspectives and propositions for future research; identify marketing literature that provides strong potential for RPM research; and discuss the public policy and marketing implications of future RPM research. Our work offers several contributions. First, to our knowledge, it is the first to offer guidance for research on RPM following *Leegin*. Second, given that the theoretical underpinnings and explanations for RPM reside largely in economics, we contribute to understanding in marketing by organizing and reviewing this literature. Third, contrary to past research, we adopt a comprehensive and multidisciplinary approach for studying RPM. Fourth, we develop testable research propositions drawing upon new perspectives and theory for advancing understanding RPM. Fifth, and finally, we describe marketing literature that raise significant questions for contemporary understanding of RPM, yet have been overlooked in prior research and public policy.

Historical Perspectives and Existing Explanations

Various conceptual perspectives and related theories have been applied over time to explain the use and effects of RPM. These are overviewed in this section.

Classical Economics

The earliest reported perspective for understanding RPM draws upon classical economics (Peritz 2003). Embodying the view that free markets regulate themselves, classical economics is founded on the laissez-faire principle of "freedom of contract." Guided by the "invisible hand," markets are viewed to evolve toward their natural equilibrium when participants freely contract with one another (Smith 1776). From this perspective, RPM that unreasonably restrains the freedom of resellers to price their goods inhibits a market from reaching its natural equilibrium. While providing the earliest reported perspective for understanding RPM, public policy and academic thought has evolved to emphasize other perspectives.

Neoclassical Economics

Neoclassical economics, and in particular price theory (as studied in industrial organization) offers the majority of insights for understanding RPM. Price theory explains the behavior of utility maximizing individuals and profit maximizing firms to derive conclusions about how actors in a market will behave if the price of a good or service is increased (Weintraub 2007). Following neoclassical economics, manufacturers have little use for RPM in settings involving perfect competition (i.e., competitors have inadequate power to set the price of a largely homogenous product). Thus, neoclassical explanations for RPM center on circumstances that deviate from perfect competition. In particular, these explanations focus on deviations (i.e., market failures) in the form of *market power* and *market externalities*.

Market power entails the ability to influence competition by profitably raising the price of a good above its marginal cost (Sullivan and Grimes 2006). Market power explanations (see Table 1) describe how RPM can decrease economic efficiency where it is used by multiple firms acting in

concert, or by an individual firm acting unilaterally, to create or exploit market power. Economic efficiency refers to a state of resource allocation where it is impossible to make any one individual better off without making at least one individual worse off (Sullivan and Grimes 2006). As shown in Table 1, market power explanations describe how economic efficiency is negatively impacted when RPM is used by firms to manipulate prices or to unreasonably exclude rival competitors from a market.

TABLE 1

NEOCLASSICAL ECONOMICS
MARKET POWER EXPLANATIONS FOR RPM

Description		Explanation
Fix, maintain or increase prices (decrease output)	*Reseller cartel (or tacit collusion)*	RPM provides a mechanism to uniformly fix resale prices, detect deviations in the form of resale price discounting by participating retailers, and administer price corrections and discipline to maintain a reseller price fixing conspiracy (Yamey 1954; Bowman 1955; Overstreet 1983; Grimes 2010).
	Manufacturer cartel (or tacit collusion)	RPM facilitates a manufacturer wholesale price fixing conspiracy through limiting the ability of resellers to pass wholesale price reductions on to consumers in the form of lower resale prices (Yamey 1954; Bowman 1955, Telser 1960; Overstreet 1983; Grimes 2010).
	Limit reseller bargaining power	RPM provides a mechanism that limits reseller incentives, driven by their size or resale price competition, to exercise their countervailing bargaining power and negotiate lower wholesale prices (Yamey 1954; Steiner 1997; Gilo 2003;; Grimes 2010)
Exclusion of rivals	*Exclusion of rival resellers*	RPM provides a mechanism through which a reseller or group of resellers can "exclude" rival resellers of a product from offering lower prices (Yamey 1954; Overstreet 1983).
	Exclusion of rival manufacturers	RPM provides a manufacturer or group of manufacturers the ability to grant resellers an attractive profit margin on sales of their product in return for the reseller's refusal to distribute products of rival manufacturers. (Yamey 1954; Telser 1960; Paldor 2010).

Externalities involve costs or benefits that affect an otherwise uninvolved party to an exchange (Buchanan and Stubblebine 1962). Market externality explanations describe how RPM is used by manufacturers to address externalities occurring in their reseller relationships with positive (see Table 2) and negative (see Table 3) consequences for economic efficiency. Explanations for RPM that describe its positive consequences for efficiency address how its use helps to reallocate these costs and benefits to parties that originate them, thereby increasing efficiency. Table 2 organizes these explanations around elements of the marketing mix. These include the use of RPM to address externalities that arise when manufacturers: (1) attempt to induce tangible and intangible forms of reseller promotion; (2) facilitate reseller demand for new products; (3) balance reseller density, ensure full-service reseller formats, and encourage adequate reseller inventory; and (4) deter unwanted reseller price competition and undesirable pricing strategies. The most frequently noted of these explanations involves the use of RPM to induce reseller promotion by ensuring that reseller margins are substantial enough to support their promotional efforts, and at the same time, reducing incentives for free riding by rival resellers. As detailed in Table 3, scholars have also described how the use of RPM to address externalities can decrease economic efficiency. These explanations include both general and specific (mainly promotion related) counterfactuals to the efficiency enhancing explanations.

TABLE 2

NEOCLASSICAL ECONOMICS
MARKET EXTERNALITY EXPLANATIONS FOR RPM (EFFICIENCY INCREASING)

Description		Explanation
Promotion-related externalities	*Reseller promotion*	RPM encourages reseller promotion services through compensating resellers for their promotional efforts and reducing incentives for free riding by rival resellers (Yamey 1954; Telser 1960).
	Intangible reseller promotion/ product certification	RPM encourages intangible forms of reseller promotion by "prestige" resellers (i.e., investments in their reputation) that certify the quality of a manufacturer's product by reducing incentives for reseller free riding and compensating resellers for their promotional efforts (Marvel and McCafferty 1984).
Product-related externalities	*New product*	RPM facilitates new product entry in a market by inducing resellers to risk the investment necessary to develop demand for a new product (Areeda and Hovenkamp 2006).
Place-related externalities	*Reseller density*	RPM assists manufacturers in creating a balance between higher retail margins that induce more resellers to carry their product, and higher resale prices that decrease consumer demand for their product (Gould and Preston 1965).
	Reseller format	RPM facilitates manufacturers' efforts to ensure the survival of full-service reseller formats jeopardized through the lower prices of discount reseller formats (Areeda and Hovenkamp 2006).
	Adequate reseller inventories	RPM encourages resellers to carry a stable supply of products through offsetting inventory holding costs from an oversupply of products in periods of low demand and an undersupply of products in periods of high demand (Marvel 1994).
	Reseller emphasis on price competition	RPM deters the tendency of resellers to focus on price (versus nonprice) competition (Winter 1993)
Price-related externalities	*Destructive or destabilizing reseller price competition*	RPM deters destructive and destabilizing resale price wars that endanger a manufacturer's product distribution system (Fulda 1954; Yamey 1954; 1966).
	Brand-denigrating or rationalizing price strategies	RPM deters resale price strategies that pose adverse consequences for a manufacturer's desired brand image (Zorn and Feldman 1937; Yamey 1966).
	Consumer confusing price strategies	RPM deters resale price strategies that confuse and mislead consumers (Yamey 1966).

TABLE 3

NEOCLASSICAL ECONOMICS
MARKET EXTERNALITY EXPLANATIONS FOR RPM (EFFICIENCY DECREASING)

Description		Explanation
Market related externalities generally	*Outcomes in lieu of RPM*	RPM results in inefficient incentives for intended outcomes where the outcomes could be obtained absent the use of RPM (Yamey 1966).
	Outcomes obtained through less restrictive means	RPM results in inefficient incentives for intended outcomes where the outcomes are obtainable through means that do not restrict resale price competition (Yamey 1966)
	Failure to encourage intended outcomes	RPM results in inefficient incentives for intended outcomes where resellers "pocket" the compensation received from RPM rather than apply it as intended (Yamey 1966; Grimes 2010).
	Proceeds used for other purposes	RPM results in inefficient incentives for intended outcomes where resellers use the proceeds obtained from RPM for other purposes (Yamey 1966).
	Instability over time	RPM results in inefficient incentives for intended outcomes where market forces create conditions that erode its effectiveness or lead to its eventual collapse (Yamey 1966).
	Deters or delays switching	RPM results in inefficient incentives for intended outcomes where it deters or delays manufacturers switching to a more efficient form of the desired outcome (Yamey 1954; Lee 1959; Telser 1960; Steiner 1997; Grimes 2010).
Promotion-related externalities	*Unwarranted, misleading, false, or deceptive promotion*	RPM results in unwarranted, misleading, false, or deceptive reseller promotion where the promotion practices adopted as a result of RPM "push" customers to unwittingly purchase goods even though other products may better fit their needs distorting the process of choice (Grimes 1992; 2010).
	Canceling, offsetting, neutralizing promotion	RPM results in canceling, offsetting or neutralizing promotion by other resellers where the use of RPM by one manufacturer motivates its similar use by other manufacturers (Yamey 1954; Grimes 2008; 2010).
	Excessive costs of promotion	RPM results in excessive costs of promotion where the costs of employing RPM (i.e., planning, implementation, monitoring, & enforcement) to encourage reseller promotion exceed alternative arrangements for encouraging reseller promotion (e.g., promotion allowances, advertising, other distribution restraints) (Grimes 2010).
	Excessive levels of promotion	RPM results in excessive reseller promotion where consumers that value reseller promotion (i.e., marginal consumers) are outnumbered by consumers that do not (i.e., inframarginal consumers) (Comanor 1985; Comanor and Kirkwood 1985).
	Inferior combination of price and information	RPM results in an inferior combination of price and information where its use diverts customers among manufacturers rather than encourages additional sales of a product (Overstreet and Fisher 1985).

Given their focus on economic efficiency, neoclassical explanations for RPM are extensively relied upon in public policy to inform understanding of the procompetitive (efficiency increasing) and anticompetitive (efficiency decreasing) consequences of RPM.

Organizational Economics

Organizational economics has also been applied to understand the nature and effects of RPM. This branch of economics involves the use of economic logic and methods to understand the existence, nature, design, and performance of organizations including their interfirm arrangements (Gibbons and Roberts 2012). Organization based explanations for RPM incorporate factors identified in transaction cost theory, agency theory, and property rights theory to describe how firms use RPM to profitably organize trading relationships.

Transaction cost theory describes a manufacturer's most profitable choice among alternative trading arrangements based on search, information, bargaining, monitoring, enforcement, and other costs associated with transactions (Williamson 2002). Transaction cost theory has been used to explain how RPM induces resellers to: (1) provide promotional support when manufacturers are unable to obtain such support through arm's length contracts (Klein and Murphy 1988); and (2) address market-based contracting problems that arise due to incompatibilities in manufacturer/retailer incentives for reseller promotion (Klein 2009).

Agency theory describes the most profitable contractual arrangement for avoiding problems (i.e., moral hazard and adverse selection) in the enlistment of one party (the principal) by another (the agent) to undertake actions on its behalf (Bergen, Dutta and Walker 1992). Moral hazard is the tendency of an agent to engage in risk taking where the costs that result to the principal will not be borne by the agent (Eisenhardt 1989). Agency theory explains that different distribution restrictions (RPM, exclusive territories, customer restrictions, etc.) can substitute for one another to solve moral hazard in some instances (Mathewson and Winter 1984), but not necessarily in others (Rey and Tirole 1986). Thus, the optimal choice of one restriction over another rests on specific analysis of the types and level of uncertainty present, and consideration of a reseller's degree of risk aversion (Rey and Tirole 1985).

Theories of property rights describe how the clear definition and assignment of rights to a resource can facilitate the resource's more profitable use (Demsetz 1967). Property rights theory explains that RPM clarifies and assigns rights to resellers in the consumer information they generate from their promotional efforts (Meese 2003). Assignment of clear rights to this information (via RPM) discourages free riding, and consequently, incentivizes resellers' to identify and pursue optimal promotional strategies. Thus, manufacturers are able to efficiently rely on resellers to promote their products (Meese 2003).

Theories of organizational economics have helped inform public policy involving RPM. On the one hand, they offer an explanation for RPM that is consistent with an organization's desire to efficiently organize its trading relationships in profitable ways. On the other hand, they do not rule out explanations for RPM that are privately efficient, but publically inefficient.

Interactive Decision Economics (i.e., Game Theory)

Interactive decision economics has also been used to enhance understanding of RPM. The economics of interactive decision making involves a branch of applied mathematics devised to formally understand and analyze strategic interaction (i.e., when the actions of one actor are dependent on the actions of other actors) (Tremblay and Tremblay 2012). In such settings, game theory offers insights as to how actors behave, as well an approach for portraying the outcomes of their interdependent actions considering factors and assumptions (i.e., the rules of the game).

Application of game theory to RPM focuses on market settings involving a limited number of firms (e.g., oligopoly settings). Extended to such settings, game theory models have been used to examine previously identified explanations that describe RPM's use to encourage reseller promotion (Mathewson and Winter 1984), facilitate collusion (Dobson and Waterson 2007; Jullien and Rey 2007), maintain wholesale prices (Dobson and Waterson 2007; O'Brien and Shaffer 1992), encourage adequate reseller inventories (Butz 1997), and overcome moral hazard (Romano 1994).

Game theory models also have been used to examine explanations that describe RPM's role in lessening interbrand competition (Rey and Verge 2010; Shaffer 1991) and rendering a retailer's choice of alternative products less profitable (Shaffer 1995). Although highly stylized in form, sensitive to assumptions, and at times offering indeterminate outcomes (Carlton 2006), these explanations have influenced public policy toward RPM.

Empirical Research and Findings to Date

In this section, past empirical study of RPM is overviewed. This research is organized into: natural experiments of the impacts of RPM on retail prices; case studies of the potential for RPM to encourage reseller promotion and discourage free riding; and case studies examining the link between RPM and collusion.[1] We summarize representative contributions to each category.

RPM and Reseller Prices

Almost a third of the past empirical studies utilize natural experiments and price surveys that compared the prices of goods sold in states where RPM was allowed by Fair Trade Laws with states where it was disallowed. Studies by the Federal Trade Commission (1929; 1945) along with academic and industry-sponsored research (Bowman 1955; Lewis 1939), generally (though not exclusively) found that higher consumer prices were present in states allowing RPM. More recent studies in France (Bonnet and Dubois 2010), Germany (Bonnet et al. 2013), and in the United States post-*Leegin* (Bailey and Leonard 2010; MacKay and Smith 2013) also report higher prices associated with RPM.

RPM and Reseller Promotion

[1] An extensive review of the literature identified 54 empirical studies examining RPM and dating back to 1929. (A complete list is available from the authors.)

Eleven case studies examined the more specific role of RPM in encouraging reseller promotion through compensating resellers for their promotional efforts and reducing incentives for free riding by rival resellers. Eight of these studies found evidence supporting this explanation. For example, McLaughlin (1979) examined the FTC's legal case against Adolph Coors and concluded the brewer's use of RPM encouraged distributors to offer a presale service that assured product quality. Three of the case studies failed to find evidence that RPM encouraged reseller promotion. For example, Mueller and Geithman's (1991) assessment of the legal case against Sealy failed to find evidence that RPM stimulated presale service.

Other studies of legal cases found evidence of a relationship between RPM and the product life cycle (PLC), with RPM increasing reseller promotional support for goods at the early stage of their PLC (McEachern and Romeo 1981) or with short PLCs (Boyd 1993). In addition, researchers have examined the potential for RPM to encourage intangible forms of reseller promotion by "prestige" resellers (i.e., investments in their reputation) that certify the high quality of a manufacturer's product. Oster's (1982) examination of the FTC case against Levi Strauss found weak evidence that RPM supported a quality image. Greening's study (1981) of the FTC case against Florsheim concluded that RPM helped the shoe manufacturer gain distribution from high quality retail outlets thereby signaling the brand's higher quality.

RPM and Collusion

Several case studies examined the prospect that RPM may be used to facilitate collusion on the part of manufacturers or resellers. A multi-firm case study of the California wine industry found no association between RPM and collusion among manufacturers or retailers (Fabricant 1990). Similarly, Ippolito and Overstreet's (1996) review of the legal case involving Corning Glass found no evidence of collusive actions on the part of dealers or manufacturers. In contrast, analysis of legal cases brought against General Electric (Bowman 1952; Telser 1960) and Coors (McLaughlin 1979)

suggested evidence of a manufacturer cartel. Finally, in a comprehensive study of RPM, Ippolito (1991) analyzed 206 public and private legal cases brought between 1976 and 1982. She found that 65 percent referenced free-riding or related applications of RPM, while only 13 percent complained of some form of cartel or collusion.

In summary, past empirical research has relied primarily on natural experiments to investigate the price effects of RPM or case studies of legal proceedings to assess specific economic explanations for RPM. There is also a dearth of research conducted post-*Leegin*.

New Perspectives and Propositions for Future Research

In this section, we shift to new perspectives and theory for guiding future research. Given marketing and public policy interest in behavioral and evolutionary economics, we extend insights from each to formulate questions and propositions for advancing understanding of RPM.

Behavioral Economics

Prompted by research questioning the key assumptions of neoclassical economics, behavioral economics offers potential to examine manager decision making concerning RPM. Drawing on rational choice theory (Simon 1955) and behavioral evidence from psychology and other fields, behavioral economics challenges the assumption that actors (including managers) behave in strictly rational ways. As such, it identifies systematic deviations from rational decision making that arise from individuals' motivations, emotions, and (limited) cognitive resources. Behavioral economics presumes that managers exercise "bounded rationality" when making decisions (Simon 1972); thus, challenging "rational-use" based explanations of behavior. Such a view of manager decision making informs contemporary theories of marketing management and consumer behavior (Dickson 1992; Ho, Lim, and Camerer 2006).

Applied to RPM, behavioral economics brings to the forefront managers' beliefs about the positive and negative effects of reseller price variation and the costs and benefits associated with restricting reseller prices. In developing research propositions about these beliefs and aligned behaviors, we extend Tor and Rinner's (2010) insights regarding the connections between RPM and several behavioral economics principles. Overall, we provide a starting point for addressing the broad research question:

RQ1: How does recognition of the "bounded rationality" of managerial decision making offer new insights for understanding the use and effects of RPM?

Effects of bias. Manufacturers' decisions to impose a uniform price floor via RPM are often driven by competing resellers' reports of the adverse impacts of their rivals' temporary price discounts and strategic price reductions. These price reductions and discounts can stimulate competitor concerns about lost sales revenue, free riding, price wars, and other issues.

Contrary to rational expectations, behavioral economics suggests that reseller perceptions of the effects of temporary price discounts and more permanent price reductions may be biased (Tor and Rinner 2010). Past research has shown retailers' tendencies to overestimate consumer price sensitivity, and as such, overestimate retail price elasticity (Little and Shapiro 1980; Urbany, Dickson, and Key 1990). Accordingly, resellers are keenly focused on their competitors' prices (Urbany and Dickson 1991). In their large-scale study of retail pricing, Shankar and Bolton (1999) conclude that retailers' pricing decisions are largely shaped by the actions of competitors. These two forces: over-estimation of consumer price sensitivity and a focus on competitors' prices can result in hyper-sensitivity toward competitive price cutting and upwardly biased perceptions of price elasticity. Accordingly, these forces are likely to influence resellers' perceptions of their rivals' price cuts.

P1: The stronger a reseller's beliefs that consumers are highly responsive to price changes, the greater the likelihood the reseller will: (a) overestimate the effects of

price discounts and reductions on themselves, competitors, and consumers; and (b) be strongly in favor or opposed to RPM.

Contrary to rational expectations, resellers are also more likely to act upon their biased estimates of the effects of discounts and price reductions when communicating with manufacturers about RPM. When manufacturers implement channel systems that reduce resellers' price-related rivalry (e.g., exclusive territories, RPM, minimum advertised pricing policies), non-normative reseller pricing (involving discounts and price reductions) may still occur. Israeli, Anderson, and Coughlan (2011) find, for example, significant levels of deviations from manufacturers' minimum advertised pricing policies. Resellers who follow pricing norms and policies may complain to manufacturers about competitors' deviations in the form of price discounts and reductions (Cahn 2012). Where this occurs, given reseller tendencies to overestimate the effects of competitors' price reductions (P1), reseller communications with manufacturers are likely to amplify the harmful effects of these departures.

P2: The stronger a reseller's beliefs that consumers are highly responsive to price changes, the greater the likelihood the reseller will overstate: (a) the adverse effects of rivals' price discounts and reductions; and (b) their favor or opposition to RPM.

Effects of anchoring. To make sound decisions regarding RPM, manufacturers may need to adjust for the abovementioned biases in perceptions and communications to form accurate judgments about the occurrence and effects of reseller discounts and price reductions. However, anchoring effects (i.e., a biased focus on initially acquired information), may undermine these adjustment processes (Tversky and Kahneman 1974). This cognitive bias of anchoring on initial information during decision making has been found across a variety of managerial contexts (Sebenius and Whyte 1997). In the context of addressing reseller concerns about price reductions and discounts, managers may anchor on initially acquired complaints and conclude that these

concerns are more common or more impactful than is actually the case (Tor and Rinner 2010). Even when reseller biases are recognized, manufacturers may still anchor on reseller reports of the adverse effects of price reductions and discounts and under-adjust for their bias when forming judgments of the effects of price reductions within the channel (Tor and Rinner 2010).

P3: When considering the use of RPM, the greater the degree to which manufacturers anchor on reseller complaints regarding price reductions and discounts, the less they will adjust for resellers' biases in forming their own beliefs regarding the frequency and effects of price discounts and reductions.

Effects of ambiguity aversion. In addition to RPM, manufacturers have options (e.g., selective distribution, exclusive territories, customer restrictions) for addressing concerns about reseller price discounts and reductions. However, to the extent that managers place weight on directly controlling price, RPM is likely to be preferred (Tor and Rinner 2010). Decision theory explains that when considering alternatives, individuals prefer options that dominate all other alternatives on salient attributes, but where no such alternative is available, preferences turn to the option that is superior with respect to a single heavily weighted attribute (Tversky, Sattath and Slovic 1988). Furthermore, individuals prefer solutions that possess characteristics most directly compatible with their desired outcome (Fischer and Hawkins 1993). Thus, given RPM's characteristics, when directly controlling price is the most salient concern, RPM is likely to be chosen over other alternatives. RPM possesses characteristics that are more directly compatible for stopping price reductions than other solutions. This direct effect, as well as managers' desire to avoid ambiguity, is expected to result in a preference for RPM over other options for addressing reseller price discounts and reductions (Tor and Rinner 2010).

P4: The greater the weight that manufacturers place on controlling reseller prices, the greater the likelihood that RPM will be preferred over other (price/channel management) alternatives.

Effects of loss aversion. Having established RPM, manufacturers are likely to expend greater effort to address reseller discounts and price reductions than rational explanations would predict. In psychological terms, deviations from RPM may be viewed by managers as a negative departure from the status quo and framed as losses (Tor and Rinner 2010). This potential is bolstered by research that finds deviations from established pricing patterns are often viewed as violating distribution system norms (Israeli, Anderson, and Coughlan 2011). While strictly rational individuals calculate outcomes based on expected harms and benefits, prospect theory suggests that individuals, including managers, make decisions based on the potential values of losses and gains (Kahneman and Tversky 1979). Given the shape of the value function, the prospects of losses are more psychologically impactful than the prospects of gains, leading to significant efforts to avoid losses (Tversky and Kahneman 1991). Applied to RPM, loss aversion suggests that managers will expend disproportionate effort to limit reseller price reductions then might otherwise be expected given the actual harm (Tor and Rinner 2010).

P5: The greater the degree to which manufacturers frame reseller price reductions and decreases as losses, the greater their efforts to prevent such reseller behavior.

Finally, managers are likely to find it more difficult to depart from RPM than may be rationally expected. In economic terms, RPM affects both manufacturers' and resellers. Resellers can become dependent on the higher margins associated with RPM, leading to a departure from its use being viewed as a significant loss (Yamey 1966). Framing the departure from RPM as a loss, resellers are likely to lobby against a change in the status quo. Manufacturers may also be biased toward the status quo given that RPM requires investments, and potentially sunk costs, in monitoring systems

and enforcement efforts (Samuelson and Zeckhauser 1988). To the extent these effects are operative RPM may be retained by manufacturers beyond circumstances that would otherwise warrant their rational termination.

P6: The greater the degree to which manufacturers' frame departures from RPM as losses, the stronger their resistance to terminating RPM.

Evolutionary Economics

Following growing interest in innovation and growth in public policy and marketing, evolutionary economics provides further perspective for understanding RPM (Coviello and Joseph 2012; Kerber and Vezzoso 2004). Extending principles from population ecology that describe how populations of organisms vary and adapt to their environment over time (Hawley 1968), evolutionary economics explains how economic systems vary and transform over time (Grant 2010). The perspective has been used to explain how competition stimulates innovation and leads to growth in systems of different organizational forms (Romanelli and Tushman 1994), competitive strategies (Lambkin and Day 1989), business routines (Arakji and Lang 2010; Nelson and Winter 1982) and inter-firm practices (Brennan 2006).

Evolutionary economics draws on the Darwinian principles of variation, selection and retention (Aldrich et. al 2008; Metcalfe 2005). *Variation* characterizes the state and processes that define variety within a system of phenomena. *Selection* refers to the processes through which phenomena are determined to best fit environmental contingencies in the system. *Retention* concerns the processes and outcomes that result where phenomena that better fit environmental contingencies survive and propagate and grow in the system. According to Lambkin and Day (1989, p. 9), "the theory predicts that the species [i.e., phenomena] best 'fitted' to the contingencies of the environment will survive and prosper and their less fit rivals will fail and disappear because of their inability to secure adequate resources." The variation-selection-retention process is continuous and

iterative, offering a dynamic view of how economic systems vary and are transformed overtime through competition, innovation and growth.

Adopting the lens of evolutionary economics, we offer research propositions following from the general research question:

RQ2: How does evolutionary economics, and its core processes of variation, selection, and retention, offer new insight for understanding the effects of RPM on competition, innovation, and growth?

Variation. Applied to the current context, variation refers to the variety in manufacturer channel-pricing strategies and in reseller pricing practices. Variation in channel-pricing strategies results when producers employ unique strategies to coordinate their marketing efforts with resellers. Variation in resale pricing practices results when resellers offer manufacturers' products using unique pricing approaches and prices. Both channel-pricing strategies and resale pricing practices are subject to competition, innovation and growth. The introduction of RPM in a product-market is expected to significantly alter this variation.

The use of RPM establishes a resale price below which sales of a manufacturer's product are not permitted. Thus, introduction of RPM by one or more manufacturers alters the distribution of resale prices found in a product-market. Specifically, by restricting reseller prices to a level above that established by the practice, RPM decreases the variance of prices, increases the mean level of prices, and positively skews the distribution of prices.

P7: The introduction of RPM: a) decreases variance of prices, b) increases mean price level, and c) generates a more positively skewed distribution of prices in a product-market.

The use of RPM may also alter the variety of reseller pricing strategies and tactics found within a product-market. Resellers often use various low price strategies (e.g., high/low pricing,

EDLP, etc.) and tactics (temporary price reductions, markdowns, leader pricing, coupons etc.) to attract price sensitive consumers and stimulate sales (Blattberg and Neslin 1990). Considerable competition and innovation surround these strategies and tactics. In combination with supporting nonprice elements (e.g., promotion, merchandising, customer service, etc.), pricing strategies and tactics define a reseller's retail format. Given the restraining effects of RPM on resellers' prices, resellers' low price strategies and tactics may be indirectly affected. Thus, the introduction of RPM by one or more manufacturers in a product-market is expected to decrease the occurrence of low price strategies and tactics, and have a negative impact on the presence of retail formats that incorporate these strategies and tactics.

P8: Introduction of RPM decreases the presence of low price retail: (a) strategies and tactics; and (b) store formats in a product-market.

Selection. Applied to RPM, selection refers to the processes through which RPM is determined to fit (not fit) existing environmental contingencies in a product-market and thus be retained. The manner through which this occurs parallels Darwin's view of natural selection as "survival of the fittest" (Spencer 1864). In ecological terms, the "fittest" strategies (those exhibiting superior alignment with contingencies) are predicted to survive while less fit strategies are predicted to fail. Innovation and growth occurs when, as the result of competition, a strategy that aligns with existing contingencies survives and is adopted by others in a product-market.

Important contingencies that determine fit include market, technological, and competitive forces within the demand, supply, and supporting resource environments of a product-market (Lambkin and Day 1989). Thus, RPM's survival depends on whether its use as a channel-pricing strategy fits with important contingencies that exist within a given product-market. For example, the extent to which RPM aligns with important demand, supply, and resource based contingencies in a

product-market determines RPM's likelihood of surviving competition from other channel-pricing strategies.

P9: RPM will more likely (less likely) survive, if its use and effects align (misalign) with (a) demand, (b) supply and (c) resource based contingencies.

Marketing literature and practice suggest more specific demand, supply, and resource conditions that favor alignment of RPM with product-market contingencies. For example, early stages of the PLC are characterized by demand-related contingencies favorable to RPM. During the introduction and growth stages, consumers typically require more information about the nature and use of a new product. In addition, early adopters of new products generally conduct more research and actively seek information before making a purchase (Feick and Price 1987). Relative to supply-related contingencies, certain consumers are less price sensitive and willing to pay higher prices when products they want are highly differentiated through features and services they value (Levitt 1980). Thus, premium (high augmentation) products that command high prices are likely to be more conducive to RPM in comparison to economy (low augmentation) products offered at low prices.

P10: RPM is more likely to survive in product-markets characterized by:

(a) consumers who: (i) have a strong need for product information; (ii) are relatively price insensitive; (iii) place significant value on highly augmented product offerings; and

(b) resellers that: (i) provide premium (high augmentation) products; and (ii) price their offerings at relatively high levels.

Retention. In ecological terms, retention includes the processes through which phenomena that survive competition for the fittest propagate and grow in a system. Extended to RPM, retention concerns how RPM that survives competition with other channel-pricing strategies becomes widely adopted in a product-market and the effects of this adoption.

Where RPM is selected, its widespread adoption depends on many factors. Rogers (2003) identifies several characteristics (i.e., relative advantage, compatibility, complexity, trialability, observability) that influence and innovation's adoption. Applied to RPM, relative advantage refers to the benefits RPM offers compared to alternative manufacturer channel pricing strategies. Compatibility relates to the extent of change required by a manufacturer and resellers to adopt RPM. For example, does it fit with a retailers' overall pricing strategy. Complexity concerns the level of difficulty RPM entails for these organizations in adopting RPM. Trialability reflects the ease of experimenting with RPM prior to adopting it. Observability is the degree that RPM as a channel-pricing strategy is visible to others. These factors, and therefore retention of RPM, will vary across product-markets.

P11: The extent RPM is adopted by manufacturers in a product-market is affected by its: (a) relative advantage; (b) compatibility; (c) complexity; (d) trialability; and (e) observability.

Where RPM is adopted widely in a product-market, its use poses implications for price competition and price-related innovation. Widespread adoption of RPM means fewer resellers will be able to offer prices below levels established by RPM. Thus, a smaller number of resellers will be in a position to experiment and innovate with low price strategies and tactics. To the extent this occurs, price competition and innovation involving lower price-oriented strategies and tactics will decrease. However, a greater number of resellers will be able to offer prices above the limits established by RPM and innovate/experiment with high price strategies and tactics (e.g., skimming, premium pricing without discounting). Thus, price competition and innovation involving prices and pricing practices above levels established by RPM will increase.

P12: Widespread adoption of RPM in a product-market will increase (decrease) competition and innovation surrounding high price (low price) strategies and tactics.

Marketing Literatures for Future Research

In this section, we draw attention to marketing literatures with potential to further understanding of RPM. We highlight these literatures and develop questions for future research.

Market Structure and Marketing Organization

In leveraging neoclassical and organizational economics, extant explanations for RPM assume interorganizational relationships characterized by arm's length exchange and hierarchical organization. According to marketing scholars, however, there has been "a clear evolution away from arm's length transactions and traditional, hierarchical and bureaucratic forms of organization" toward new forms of business organization and exchange (Webster 1992, p. 10). Marketing literature on *markets* (Thorelli 1986), *exchange and exchange systems* (Ardnt 1979), *marketing organization* (Achrol and Kotler 1999), and the *function of marketing* (Day 2011; Webster 1992), document these new organizational forms and market settings. Driven by factors arising from the evolution of information technology, the characteristics of these new organizational forms and markets differ from those conceived of in economics and that serve as the foundation for understanding RPM. These include flexible forms of business organization and complex interfirm systems of exchange where behavior is more often guided by norms arising from the social structures that firms are embedded within than safeguards deployed in response to the occurrence of externalities and predictions of opportunism (Heide 1994). Although within these new organizational forms competition for a role in a particular system occurs, the emphasis of competition and competitive advantage shifts to competition between systems (Achrol and Kotler 1999). As reflected in the research questions in Table 4, investigation of these new forms of business and marketing organization, the cooperative and long-term behavior of firms within them, and the nature of competition that result, has potential to enhance understanding of RPM.

TABLE 4

RESEARCH QUESTIONS ABOUT RPM STIMULATED BY MARKETING LITERATURES

Marketing Structure and Marketing Organization
RQ3: How do more flexible forms of business organization impact the use of RPM?
RQ4: How does competition between vertical marketing systems influence the use of RPM?
RQ5: How does the form of governance, particularly the use of relational norms effect the effectiveness of RPM?
Multi-channel Competition, Marketing and Shopping
RQ6: How does consumer cross-channel shopping behavior and multi-channel marketing influence the use of RPM and its effectiveness in controlling free riding?
RQ7: How do strategies aimed at harmonizing multiple channels influence the use of RPM?
RQ8: Do more uniform reseller prices resulting from RPM lead to more (less) inter-retailer cannibalization?
Interorganizational Relationships and Channel Power
RQ9: How does the balance of power (producer-reseller) impact the use of RPM?
RQ10: How does RPM compare to and combine with alternative mechanisms and strategies for controlling channel member pricing and promotion behavior?
RQ11: What factors affect the use and effectiveness of RPM and control mechanisms?
Trade Promotion Strategy and Practice
RQ12: How do shifts in marketing budgets away from advertising and consumer promotion to trade promotion and the factors that have caused these shifts impact the use of RPM?
RQ13: Does resellers' growing promotional independence from manufacturers affect the use and effectiveness of RPM as a mechanism for controlling reseller pricing and promotion?
Marketing Research Using "Big Data" and Analytics
RQ14: How will lower cost and timelier methods to monitor and control reseller prices influence the use of RPM?
RQ15: How will RPM influence the application and effectiveness of reseller's offering customized prices?
RQ16: Will the increasing availability of reseller price data and methodologies for its analysis decrease the use of RPM through enabling manufacturers to more effectively manage price variations across customers?
Consumer Perceptions of Marketing Strategies
RQ17: When and under what conditions does store prestige effectively signal or certify product and brand quality to consumers?
RQ18: How does RPM affect the relationship between discount reseller pricing strategies and manufacturer's desired brand image?

Multi-channel Competition, Marketing and Shopping

Multi-channel research investigates the use of more than one channel of distribution by marketers and consumers. This includes research on *multi-channel competition* and *competitive interaction*

(Miller, Reardon, and McCorkle 1999); *multi-channel marketing* (Rangaswamy and Van Bruggen 2005), *distribution* (Nunes and Cespedes 2003; Dutta, Bergen, Heide, and John 1995), *retailing* (Zhang et al. 2010), and *customer management* (Neslin and Shankar 2009); as well as *multi-channel shopping* (Kumar and Venkatesan 2005; Zhang et al 2010). Multi-channel research shows promise for enhancing understanding of RPM given it examines the requisite consumer shopping behavior, channel structure, and form of competitive rivalry that underlies a key justification for RPM – to deter free riding that discourages reseller promotion.

Explanations for RPM from neoclassical economics describe that its use deters cross-channel shopping that can lead to free riding. Recent findings from multi-channel research explain how advances in information technology, and in particular the Internet, have led to competitive settings, channel structures, and consumer behavior conducive to free riding (Gundlach, Manning, and Cannon 2011). However, rather than strategies to deter cross-channel shopping and therefore free riding, an increasing number of manufacturers are harmonizing distribution channels to match the consumer cross-channel shopping, rewarding each channel member for its contribution to a purchase (Nunes and Cespedes 2003). Research in this area also suggests that deleterious inter-retailer cannibalization is more likely to occur when manufacturers implement strategies (like RPM) that homogenize prices and promote similar nonprice strategies across channels (Miller, Reardon, and McCorkle 1999). Thus, answering research questions relative to multi-channel practices may update understanding of the occurrence of free riding, managerial practices to address it, and the effects of strategies like RPM on exchange efficiency (see Table 4).

Interorganizational Relationships and Channel Power

Interorganizational and channel research investigates the approaches and mechanisms for influencing and managing channel partners. In addition to application of transaction cost and agency theories from organizational economics to understand *interorganization design and governance*

(Rindfleisch and Heide 1997; Bergen, Dutta and Walker 1992), this research examines *buyer-seller relationships* (Morgan and Hunt 1994), *interorganizational power and influence* (Frazier 1983), *channel control* (Celly and Frazier 1996), and *interfirm management* (Cannon, Achrol and Gundlach 2000). As developed in neoclassical and organizational economics, RPM is used to manage channel partner (i.e., reseller) behavior; consequently research in this area has the potential to enhance understanding of RPM.

Considerable research explores the role of power and influence in channels of distribution (Frazier 1983). This research examines how manufacturers and retailers possess and use power to achieve channel objectives. Various studies demonstrate, for example, that the structure of power held by members of a distribution channel affect both the strategies utilized and outcomes achieved (Gundlach and Cadotte 1994). Marketing scholars are also studying how manufacturers work with powerful retailers (Dukes, Geylani, and Srinivasan 2009). As such, this research has potential to inform understanding of market power-based explanations for RPM (see Table 1).

Marketing channel scholars have also studied a wide range of mechanisms and strategies for influencing and governing behavior in channels of distribution that go beyond the use of power. For example, Celly and Frazier (1996) compare outcome-based versus behavioral-based controls in channels. Gilliland (2003) developed a taxonomy of channel incentives that outlines the variety of incentives available to manufacturers seeking to influence reseller behavior. Researchers have also identified new sources of influence. For example, Hughes and Ahearne (2010) demonstrate that a manufacturer's brand has the power to motivate a distributor's sales force, gaining their attention and effort. Other research shows how various governance mechanisms operate in isolation and in combination (Cannon, Achrol and Gundlach 2000) and where they are effective (Kumar, Heide and Wathne 2011).

This research adds to understanding of RPM in several ways. First, these studies identify additional alternatives to RPM – some of which may be as effective, while less restrictive of competition than RPM. Second, this research highlights the effectiveness of mechanisms under specific circumstances, and thereby offers potential for a contingency-based understanding of RPM. Third, by investigating a range of outcomes, this research provides a basis for enhancing understanding of the effectiveness of RPM in controlling reseller behavior in comparison to alternatives. See Table 4 for research questions connecting this literature to the study of RPM.

Trade Promotion Strategy and Practice

Trade promotion research investigates manufacturers' use of incentives directed toward members of the distribution channel to induce their patronage and support (Blattberg and Neslin 1990). For example, a reseller may receive an allowance to include a manufacturer's products in its regular advertising. Relative to advertising and consumer-directed promotion, trade promotion expenditures have steadily grown to over half of a manufacturers' promotion budget (Gómez, Rao, and McLauglin 2007). Research on "pass-through" also shows that trade deals and promotional allowances often end up enhancing reseller profits rather than resulting in promotion of manufacturers' products (Kumar, Rajiv, and Jeuland 2001). Other trends include resellers' increasingly promoting store brands (Geyskens, Gielens and Gijsbrechts 2010) and consumers delaying brand choices until they are in the store (Stilley, Inman and Wakefield 2010).

Trade promotion research yields important insights for understanding RPM. Increasing reliance on trade promotion suggests that RPM may increase over time. However, the failure of many retailers to use trade promotion funds to promote manufacturers' products challenges some of RPM's efficiency enhancing explanations (see Table 2). Potential research questions linking the study of trade promotion with understanding of RPM are included in Table 4.

Marketing Research Using "Big Data" and Analytics

Considerable research in marketing examines the methodologies employed to collect and analyze data relevant to marketing. This includes *market research* intended to understand the behavior of consumers and *marketing research* designed to provide information on topics relevant to marketing. Widespread use of the terms "big data" and "analytics" has been triggered by the rise of computer-mediated environments (Hoffman and Novak 1996) and more recent advances in technology that have increased the volume, velocity, availability, and variety of data (McAfee and Brynjolfsson 2012). Definitions of big data and clarification of the uniqueness of the concept vary (Weinberg, Davis, and Berger 2013). It is clear, however, that there are many new sources of data, firms are finding ways to integrate multiple databases to get more detailed information, and data can be accessed and analyzed more quickly than ever before (Weinberg, Davis, and Berger 2013). The existence of new data and emerging analytical capabilities offers marketing managers new insights and practices (Day 2011; Yadav and Pavlou 2014).

The availability of new data and analytical capabilities has implications for RPM. First, it has the potential to facilitate enforcement of RPM. Until recently, reliable and timely data on reseller prices has been difficult to obtain. The positive effects of more efficient and effective reseller monitoring systems on RPM are yet unknown. Second, the availability of real-time data may allow firms to immediately assess a customer's price sensitivity and serve up customized prices. However, the effectiveness of such forms of technology-enhanced price segmentation may be undermined by RPM. Finally, the plunging cost of data is likely to favor firms that constantly experiment and adapt (Day 2011). Such experimentation may be restricted by RPM, and in turn, negatively impact reseller and producer learning and innovation. As data and analytics advance, there is a need to understand its implications for RPM. We identify some potential research questions in this regard in Table 4.

Consumer Perceptions and Marketing Strategies

Finally, considerable consumer research examines perceptions of the inter-relationships between *product pricing* (Völckner and Hofmann 2007) and *store positioning* (Rao and Monroe 1989), and *brand quality* (Champion, Hunt, and Hunt 2010; Dodds, Monroe, and Grewal 1991); each of these concepts are integral to neoclassical economic explanations for RPM (see Tables 2 and 3). Thus they offer potential to enhance understanding of RPM.

One explanation for RPM describe its use to establish resale price levels for products that signal and certify the quality and "prestige" of resellers that carry the products (Marvel and McCafferty 1984). The relationship of price and quality has been the focus of considerable research (Rao and Monroe 1989). A meta-analysis of these studies identifies moderators of this relationship including that higher priced products show a relatively strong positive relationship between price and perceived quality (Völckner and Hofmann 2007). However, the relationship is inversely moderated by product familiarity; consumers who are more familiar with a product perceive a weaker association between price and quality. These results suggest that in some instances (when RPM enhances brand familiarity by generating retailer support) RPM may undermine perceptions that higher prices mean higher quality. Extant consumer research also offers mixed support for the idea that prestige retailers "certify" a brand's quality (Rao and Monroe 1989). Other studies find limited or modest empirical evidence that store image transfers to brands (Champion, Hunt, and Hunt 2010).

Another explanation for RPM is that price uniformity deters reseller price strategies (i.e., discounts) that pose adverse consequences for a manufacturer's brand image (Yamey 1966). Consumer research has found mixed results for the relationship of discount prices and brand image. Grewal et al. (1998) found no relationship between level of discount and perceived brand quality. However, Mela, Gupta, and Jedidi (1998) found that discounting and price promotions decreased brand differentiation. Srinivasan et al. (2004) also report that price promotions benefit

manufacturers over resellers because their frequency conditions consumers to expect discounted prices regardless of brand image or quality.

Collectively, these studies illustrate the potential of consumer research to enhance understanding of RPM for building brand quality. (See Table 4 for research questions.)

Toward a Research Agenda

Future research on RPM may take several directions. In this section we offer an agenda for interested researchers.

Descriptive Studies of RPM Practices

A key direction for future research concerns the use of RPM in practice. Despite anecdotal reports of changes to pricing norms (following *Leegin*) and increasing use of RPM, little empirical evidence details these trends. Post-*Leegin,* the risk remains that RPM could be found to violate the antitrust laws. Moreover, as a marketing strategy, the decision to employ RPM involves management consideration of not only its benefits, but also its costs. Future research should document managers' cost/benefit considerations as they plan, implement, monitor and enforce RPM. Thus, future research should include studies that describe and document contemporary practice of RPM.

Empirical Tests of Explanations

The different economic perspectives, theories and explanations developed to inform understanding of RPM require further empirical testing (see Tables 1-3). Our review of past research identified numerous studies, but little contemporary research on RPM. We found this past research to have examined relatively few of the extant explanations for RPM. Future research should include empirical tests of the historical explanations for the use and effects of RPM as well as the new perspectives and propositions offered herein.

Expansion of Data and Methods for Research

Future research on RPM should be expanded to include additional sources of data and other methodological approaches. In our review, we found that past research relied mainly upon data from legal cases and highly inferential methodologies. Although serving to advance understanding of RPM, these data and methodologies are limited in their capacity to yield rigorous and generalizable tests of conceptual frameworks and theory. Future research should consider other forms of data (e.g., self-report, observational, archival, etc.); different types of data collection methodologies (e.g., survey research, controlled experiments, behavioral simulation, etc.); and a wider array of research designs (cross-sectional, longitudinal, etc.). Although each has benefits and limitations, in combination their use should lead to more rigorous testing of the different perspectives, theories and explanations for RPM. Future descriptive studies would also benefit from a broader range of data, methodologies and designs.

Thinking Beyond RPM

Finally, future research should include focus on RPM broadly. This includes viewing RPM as but one part of a firm's overall marketing and distribution strategy. From this perspective RPM should be understood in terms of its use with other marketing and distribution strategies. Interesting questions concern the use of RPM in combination with other marketing mix strategies and relative to alternative distribution strategies. Research should also consider RPM in the context of the emerging systems (i.e., network) perspective and relational culture that increasingly pervades many organizations.

Conclusion

RPM is a channel pricing strategy that affects the resale price of a manufacturer's product. Despite its marketing status, understanding of RPM comes largely from economics where it has received little recent empirical attention. A recent decision of the Supreme Court together with changes in marketing practice and consumer behavior have increased interest in RPM and prompted calls for contemporary research of the practice. Answering these calls, the current article adopts a cross-disciplinary perspective to update understanding of RPM and provide directions for future research.

References

Achrol, Ravi S. and Philip Kotler (1999), "Marketing in the Network Economy," *Journal of Marketing*, 63 (Special Issue), 146-163.

Aldrich, Howard E., Geoffrey M. Hodgson, David L. Hull, Thorbjørn Knudsen, Joel Mokyr, Viktor J. Vanberg (2008) "In defence of generalized Darwinism," *Journal of Evolutionary Economics*, 18 (5), 577-596.

Arakji, Reina Y. and Karl R. Lang (2010), "Adoption and Diffusion of Business Practice Innovations: An Evolutionary Analysis," *International Journal of Electronic Commerce*, 15, 1 (Fall), 145-168.

Areeda, Phillip E. and Herbert Hovenkamp (2004), Antitrust Law, New York, NY: Aspen Publishers, Inc.

Arndt, Johan (1979), "Toward a concept of domesticated markets." *Journal of Marketing*, 43(4), 69-75.

Bailey, Elizabeth M. and Gregory K. Leonard, (2010), "Minimum Resale Price Maintenance: Some Empirical Evidence from Maryland," *The B.E. Journal of Economic Analysis & Policy,* 10(1):1-6.

Bergen, Mark, Shantanu Dutta, and Orville C. Walker Jr. (1992), "Agency Relationships in Marketing: A Review of the Implications and Applications of Agency and Related Theories," *Journal of Marketing,* 56 (July), 1-24.

Blattberg, Robert C. and Scott A. Neslin, (1990), *Sales Promotions: Concepts, Methods and Strategies*, Englewood Cliffs, New Jersey: Prentice Hall.

Bonnet, Celine and Dubois Pierre (2010) "Inference on Vertical Contracts between Manufacturers and Retailers Allowing for Non Linear Pricing and Resale Price Maintenance," *Rand Journal of Economics*, 41, 1 (Spring), 139-164.

Bonnet, Celine, Pierre Dubois, Sofia B. Villas Boas, and Daniel Klapper (2013) "Empirical Evidence on the Role of Nonlinear Wholesale Pricing and Vertical Restratins on Cost Pass-Through," *Review of Economics & Statistics,95*, 2 (May), 500-515.

Bowman, Jr. Ward S. (1952) "Resale Price Maintenance -- a Monopoly Problem," Journal of Business, 25, (July) 141-155.

Bowman Jr., Ward. (1955) "The Prerequisites and Effects of Resale Price Maintenance," *The University of Chicago Law Review,* 22 (Summer), 825-873.

Boyd, David W. (1993) "The Choice between Resale Price Maintenance and Exclusive Territories: Evidence from Litigation," *Review of Industrial Organization*, volume 8, #6,

Brennan, Ross (2006), "Evolutionary economics and the markets-as-networks approach," *Industrial Marketing Management*, 35, October, 829-838.

Buchanan, James and W.C. Stubblebine (1962), "Externality," *Economica*, 29 (November), 371-384.

Butz, David A. (1997). "Vertical Price Controls with Uncertain Demand," *Journal of Law and Economics,* 40 (October), 433-460.

Cannon, Joseph P. Ravi S. Achrol and Gregory T. Gundlach (2000), "Contracts, Norms and Plural Form Governance," *Journal of the Academy of Marketing Science,* 28 (2), 180-194.

Cahn, David L. (2012), "Can I Stop Bargain Basement Pricing of My Branded Products?" Whiteford, Taylor, Preston LLP [Accessed at: http://www.wtplaw.com/documents/2012/05/can-i-stop-bargain-basement-pricing-of-my-branded-products]

Carlton, Dennis W. (2006), "The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization," *George Washington Law Review*, 12(1) 47-63

Celly, Kirti Sawhney and Gary L. Frazier (1996), "Outcome-Based and Behavior-Based Coordination Efforts in Channel Relationships," *Journal of Marketing Research,* 33 (May), 200-210.

Champion, Jennifer Clifton, James B. Hunt, and Tammy G. Hunt. (2010) *American Journal of Business Research*, 3, (1), 17-33.

Comanor, William S. (1985), "Vertical Price-Fixing, Vertical Market Restrictions, and the New Antitrust Policy," *Harvard Law Review,* 98 (March), 983-1002.

Comanor, William S. and John B. Kirkwood (1985), "Resale Price Maintenance and Antitrust Policy," *Contemporary Economic Policy*, 3 (March), 9-16.

Coughlan, Anne T., Erin Anderson, Louis W. Stern and Adel I. El-Ansary (2001), *Marketing Channels*, Upper Saddle, NJ: Prentice Hall.

Coviello, Nicole E. and Richard M. Joseph. "Creating Major Innovations With Customers: Insights from Small and Young Technology firms." *Journal of Marketing* 76 (6) 87-104.

Day, George S. (2011), "Closing the Marketing Capabilities Gap," *Journal of Marketing*, 75 (July), 183-195.

Demsetz, Harold (1967), "Toward A Theory of Property Rights," *The American Economic Review,* 57 (2), 347-359.

Denison, Caleb (2013), "The Sale is Dead! Here's Why TVs Cost the Same at Every Retailer Now," [Available at http://www.digitaltrends.com/home-theater/the-sale-is-dead-this-is-why-tvs-cost-the-same-at-every-retailer-now/]

Peter R. Dickson (1992), "Toward a General Theory of Competitive Rationality," *Journal of Marketing*, 56 (January), 69-83.

Dobson, Paul W. and Michael Waterson (2007), "The Competition Effects of Industry-wide Vertical Price Fixing in Bilateral Oligopoly," *International Journal of Industrial Organization*, 5 (October), 935-962.

Dodds, William B., Kent B. Monroe, and Dhruv Grewal (1991), "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations," *Journal of Marketing Research*, 28 (August), 307-319.

Dr. Miles Medicine Co. v. John D. Park & Sons (1911), 220 U.S. 373.

Dukes, Anthony J., Tansev Geylani, and Kannan Srinivasan (2009), "Strategic Assortment Reduction by a Dominant Retailer," Marketing Science, 28 (March), 309-318.

Dutta, Shantanu, Mark Bergen, Jan B. Heide, and George John (1995), "Understanding Dual Distribution: The Case of Reps and House Accounts," *Journal of Law, Economics and Organization*, 11 (April), 189-204.

Eisenhardt, Kathleen M. (1989), "Agency theory: An Assessment and Review," *Academy of Management Review,* 14 (January), 57-74.

Fabricant, A. Ross (1990), "Special Retail Services and Resale Price Maintenance: the California Wine Industry," *Journal of Retailing*, 66 (1), 101-118.

Federal Trade Commission (1929), *Report on Resale Price Maintenance*, submitted to the Speaker of the House of Representatives, January 30, 1929.

Federal Trade Commission (1945), *Report of the Federal Trade Commission on Resale Price Maintenance*, submitted to Congress, December 13, 1945.

Feick, Lawrence F. and Linda L. Price (1987), "The Market Maven: A Diffuser of Marketplace Information," *Journal of Marketing*, 51 (January), 83-97.

Fischer, Gregory W. and Scott A. Hawkins (1993), "Strategy Compatibility, Scale Compatibility, and the Prominence Effect," *Journal of Experimental Psychology: Human Perception and Performance*, 19 (June), 580-597.

Frazier, Gary L. (1983), "On the Measurement of Interfirm Power in Channels of Distribution," *Journal of Marketing Research*, 20 (May), 158-166.

Fulda, Carl H. (1954), "Resale Price Maintenance," *The University of Chicago Law Review*, 21 (Winter), 175-211.

Fulop, Christina and Tim March (1979) "The Effects of the Abolition of Resale Price Maintenance in Two Trades," *European Journal of Marketing*, 13 (7), 223-236

Geyskens, Inge, Katrijn Gielens and Els Gijsbrechts (2010), "Proliferating Private-Label Portfolios: How Introducing Economy and Premium Private Labels Influences Brand Choice," *Journal of Marketing*, 47 (October), 791-807.

Gibbons, Robert and John Roberts (2012), *The Handbook of Organizational Economics,* Princeton, NJ: Princeton University Press.

Gilliland, David I. (2003), "Toward a business-to-business channel incentives classification scheme," *Industrial Marketing Management*, 32, 55-67.

Gilo, David (2003), "Retail Competition Percolating Through to Suppliers and the Use of Vertical Integration, Tying, and Vertical Restraints to Stop it," *Yale Journal on Regulation*, 20 (Winter), 25-75.

Gómez, Miguel I., Vithala R. Rao, and Edward W. McLaughlin (2007), "Empirical Analysis of Budget and Allocation of Trade Promotions in the U.S. Supermarket Industry," *Journal of Marketing Research,* 44 (August), 410-424.

Gould, J. R. and L. E. Preston. (1965), "Resale Price Maintenance and Retail Outlets," *Economica* New Series, 32 (August), 302-312.

Grant, Robert M. (2010), *Contemporary Strategy Analysis: Text and Cases*, John Wiley & Sons.

Greening, Timothy (1981) "Analysis of the Impact of the Florsheim Shoe Case," in *Impact Evaluations of F.T.C. Vertical Restraints Cases*, compiled by R.N. Lafferty, R.H. Lande, and J. Kirkwood, Washington D.C.: Federal Trade Commission.

Grewal, Dhruv, R. Krishnan, Julie Baker, and Norm Borin (1998), "The Effect of Store Name, Brand Name, and Price Discounts on Consumers' Evaluations and Purchase Intentions," *Journal of Retailing*, 74 (3), 331-352.

Grimes, Warren S. (1992), "Spiff, Polish, and Consumer Demand Quality: Vertical Price Restraints Revisited," *California Law Review,* 80 (July), 815-855.

Grimes, Warren S. (2008), "The Path Forward After Leegin: Seeking Consensus Reform of the Antitrust Law of Vertical Restraints," *Antitrust Law Journal*, 75 (2), 467-504.

Grimes, Warren S. (2010), "A Dynamic Analysis of Resale Price Maintenance: Inefficient Brand Promotion, Higher Margins, Distorted Choices, and Retarded Retailer Innovation," *Antitrust Bulletin*, 55 (Spring), 101-149.

Gundlach, Gregory T. and Ernest R. Cadotte (1994), Exchange Interdependence and Interfirm Interaction: Research in a Simulated Channel Setting, *Journal of Marketing Research*, 31 (November), 516-532.

Gundlach, Gregory T., Kenneth C. Manning and Joseph P. Cannon (2011), "Resale Price Maintenance and Free Riding: Insights from Multi-Channel Research," *Academy of Marketing Science Review*, 1 (March), 18-31.

Harbour, Pamela Jones (2009), Testimony before the Subcommittee on Courts and Competition Policy, House of Representatives, Judiciary Committee, [available at www.ftc.gov/speeches/harbour/090428rpmtesti.pdf].

Hawley, A. H. (1968), "Human Ecology," in *International Encyclopedia of the Social Sciences,* D. L. Sills, ed. New York: Macmillan Publishing Company, 328-337.

Heide, Jan B. (1994), "Interorganizational Governance in Marketing Channels," *Journal of Marketing*, 58 (January), 71-85.

Ho, Teck H., Noah Lim, and Colin F. Camerer (2006), "Modeling the Psychology of Consumer and Firm Behavior with Behavioral Economics," *Journal of Marketing Research*, 43 (August), 307-331.

Hoffman, Donna L. and Thomas P. Novak (1996), "Marketing in Hypermedia Competer-Mediated Environments: Conceptual Foundations," *Journal of Marketing*,

Hollander, Stanley C. (1955), "The 'One-Price' System, Fact or Fiction?," *Journal of Retailing*, 31, 127-44.

Hughes, Douglas E. and Michael Ahearne (2010), "Energizing the Reseller's Sales Force: The Power of Brand Identification," *Journal of Marketing*, 74 (July), 81-96.

Ippolito, Pauline M. (1991), "Resale Price Maintenance: Empirical Evidence from Litigation," *Journal of Law and Economics*, 34 (October), 263-294.

Ippolito, Pauline M. and Thomas R. Overstreet, Jr. (1996) "Resale Price Maintenance: An Economic Assessment of the Federal Trade Commission's Case Against Corning Glass Works," *Journal of Law & Economics,* 39 (1), 285-328.

Israeli, Ayelet, Eric T. Anderson, and Anne T. Coughlan (2011), "Determinants of MAP Violations," Kellogg School of Management working paper.

Jullien, Bruno and Patrick Rey (2007), Resale Price Maintenance and Collusion, *The RAND Journal of Economics*, 38 (December), 983-1001.

Kahneman, Daniel and Amos Tversky (1979), "Prospect Theory: An Analysis of Decision under Risk," *Econometrica,* 47 (March), 263-292.

Kalyanam, Kirthi and Andy A. Tsay (2013), Free Riding and Conflict in Hybrid Shopping Environments: Implications for Retailers, Manufacturers, and Regulators," *The Antitrust Bulletin*, 58 (Spring), 19-68.

Kerber, Wolfgang, and Simonetta Vezzoso (2004) "EU competition policy, vertical restraints, and innovation: an analysis from an evolutionary perspective," Working Paper No. 2004, 14, Marburger volkswirtschaftliche Beiträge.

Klein, Benjamin (2009), "Competitive Resale Price Maintenance in the Absence of Free Riding," *Antitrust Law Journal*, 76 (2), 431-481.

Klein, Benjamin and Kevin M. Murphy (1988), "Vertical Restraints as Contract Enforcement Mechanisms," *Journal of Law and Economics,* 31 (October), 265-297.

Kumar, Alok, Jan B. Heide and Kenneth H. Wathne (2011) "Performance Implications of Mismatched Governance Regimes Across External and Internal Relationships," *Journal of Marketing,* 75 (2), 1-17.

Kumar, Nanda, Surendra Rajiv, and Abel Jeuland (2001), "Effectiveness of Trade Promotions: Analyzing the Determinants of Retail Pass Through," *Marketing Science*, 20 (Fall), 382-404.

Kumar, V. and Rajkumar Venkatesan (2005), "Who are the Multichannel Shoppers and How Do They Perform?: Correlates of Multichannel Shopping Behavior," *Journal of Interactive Marketing,* 19 (Spring), 44-62.

Lambkin, Mary, and George S. Day (1989). "Evolutionary Processes in Competitive Markets: Beyond the Product Life Cycle," *Journal of Marketing*, 53 (July), 4-20.

Lao, Marina (2010), "Resale Price Maintenance: the Internet Phenomenon and 'Free Rider' Issues," *Antitrust Bulletin,* 55 (Summer), 473-512.

Lee, Stewart Munro (1959), "Problems of Resale Price Maintenance," *Journal of Marketing*, 23 (January), 274-282.

Leegin Creative Leather Products, Inc. v. PSKS, Inc. (2007), 551 U.S. 877.

Levitt, Theodore (1980), "Marketing Succcess Through Differentiation of Anything," Harvard Business Review, 58 (January-February), 83-91.

Lewis, C.W. (1939) "Economic Effects of Price Maintenance in Knoxville, Tennessee," *Journal of Marketing*, 139.

Little, John D.C. and Jeremy F. Shapiro (1980), "A Theory for Pricing Nonfeatured Products in Supermarkets," *The Journal of Business*, 53 (July), S199-S209.

MacKay, Alexander and David Aron Smith (2013), "The Empirical Effects of Minimum Resale Price Maintenance on Prices and Output," Working Paper, April 29, 2013, Department of Economics, University of Chicago.

Marvel, Howard P. (1994), "The Resale Price Maintenance Controversy: Beyond the Conventional Wisdom," *Antitrust Law* Journal, 63 (Fall), 59-92.

Marvel, Howard P. and Stephen McCafferty (1984), "Resale Price Maintenance and Quality Certification," *The RAND Journal of Economics,* 15 (Autumn), 346-359.

Mathewson, G. Frank and Ralph A. Winter (1984), "An Economic Theory of Vertical Restraints," *The RAND Journal of Economics*, 15 (Spring), 27-38.

McAfee, Andrew and Erik Brynjolfsson (2012), "Big Data: The Management Revolution," *Harvard Business Review*, October, 60-69.

McEachern, William A. and Anthony Romeo (1981) "Vertical Restraints in the Audio Components Industry: An Economic Analysis of FTC Intervention," in *Impact Evaluations of F.T.C. Vertical Restraints Cases*, R. H. Lande and Ronald N. Lafferty, eds. Washington DC: Federal Trade Commission, 200-269.

McLaughlin, Andrew (1979), "An Economic Analysis of Resale Price Maintenance," Ph.D. Dissertation, UCLA.

Meese, Alan J. (2003), "Property Rights and Intrabrand Restraints" *Cornell Law Review*, 89, 553-620.

Mela, Carl, Sunil Gupta, and Kamel Jedidi (1998), "Assessing long-term promotional influences on market structure," *International Journal of Research in Marketing*, 15 (May), 89-107.

Metcalfe, J. Stanley (2005), "Evolutionary concepts in relation to evolutionary economics," in *The Evolutionary Foundations of Economics*, Kurt Dopfer ed., Cambridge: Cambridge University Press, 391-430.

Miller, Chip E., James Reardon, and Dennis E. McCorkle (1999), "The Effects of Competition on Retail Structure: An Examination of Intratype, Intertype and Intercategory Competition," *Journal of Marketing,* 63 (October), 107-108.

Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.

Mueller, W. and F. Geithman (1991), "An Empirical Test of the Free Rider and Market Power Hypotheses," *Review of Economics and Statistics,* 73, 301-308.

Nelson, Richard R., and G. Sidney Winter (1982) An Evolutionary Theory of Economic Change, Cambridge: Belknap.

Neslin, Scott A. and Vankatesh Shankar (2009), "Key Issues in Multichannel Customer Management: Current Knowledge and Future Directions," *Journal of Interactive Marketing,* 23 (February), 70-81.

Nunes, Paul F. and Frank V. Cespedes (2003), "The Customer Has Escaped." *Harvard Business Review,* 81 (November), 106-115.

O'Brien, Daniel, P. and Greg Shaffer (1992),"Vertical Control with Bilateral Contracts," *The RAND Journal of Economics*, 23 (Autumn), 299-308.

Oster, Sharon (1982) "The FTC vs. Levi Strauss: An Analysis of the Economic Issues," in *Impact Evaluations of F.T.C. Vertical Restraints Cases*, compiled by R.N. Lafferty, R.H. Lande, and J. Kirkwood.

Overstreet, Thomas R. (1983), "Resale Price Maintenance: Economic Theories and Empirical Evidence," Bureau of Economics Staff Report, Federal Trade Commission, Washington, DC.

Overstreet, Thomas R. and A. A. Fisher (1985), "Resale Price Maintenance and Distribution Efficiencies: Some Evidence from the Past," *Contemporary Policy Issues,* 3 (Spring), 807-828.

Paldor, Ittai (2010), "RPM as an exclusionary practice," *Antitrust Bulletin*, 55 (Summer), 309-347.

Pereira, Joseph (2008), "Price-Fixing Makes Comeback After Supreme Court Ruling," *Wall Street Journal*, August 18, A1.

Pereira, Joseph (2009), "State Law Targets "Minimum Pricing," *Wall Street Journal*, April 28, D1.

Rangaswamy, Arvind and Garrit H. VanBruggen (2005), "Opportunities and Challanges in Multichannel Marketing: An Introduction to the Special Issue," *Journal of Interactive Marketing,* 19 (Spring), 5-11.

Rao, Akshay R. and Kent B. Monroe (1989), "The Effect of Price, Brand Name, and Store Name on Buyers' Perceptions of Product Quality: An Integrative Review," *Journal of Marketing Research*, 26 (August), 351-357.

Rey, Patrick and Jean Tirole (1985), "Vertical Restraints from a Principal-Agent Viewpoint," working paper #395, Department of Economics, Massachusetts Institute of Technology.

Rey, Patrick and Jean Tirole (1986), "The Logic of Vertical Restraints," *The American Economic Review,* 76 (December), 921-939.

Rey, Patrick and Thibaud Verge (2010), "Resale Price Maintenance and Interlocking Relationships," *The Journal of Industrial Economics*, 58 (December), 928-961.

Rindfleisch, Aric and Jan B. Heide (1997), "Transaction Cost Analysis: Past, Present, and Future Applications," *Journal of Marketing*, 61 (October), 30-54.

Rogers, Everett M. (2003), *Diffusion of Innovations*. New York, NY: Free Press.

Romanelli, Elaine and Michael L. Tushman, (1994) "Organizational Transformation as Punctuated Equilibrium: An Empirical Test," *Academy of Management Journal*, 37 (5) 1141–66.

Romano, Richard E. (1994), "Double Moral Hazard and Resale Price Maintenance," *The Rand Journal of Economics,* 25(3), 455-466.

Samuelson, William and Richard Zeckhauser (1988), "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty,* 1 (March), 7-59.

Schuette, Bill (2013), "Hey! Why Isn't That Price Fixing? The Real Story of Manufacturer's Suggested Retail Prices," State of Michigan, Attorney General Bill Schuette [Available at http://www.michigan.gov/ag/0,4534,7-164-17337_20942-44650--,00.html].

Sebenius, James K., and Glen Whyte (1997), "The Effect of Multiple Anchors on Anchoring Individual and Group Judgment," *Organizational Behavior and Human Decision Processes,* 69, (January), 75-85.

Shaffer, Greg (1991), "Slotting Allowances and Resale Price Maintenance: A Comparison of Facilitating Practices," *The Rand Journal of Economics*, 22, 120-135.

Shaffer, Greg (1995), "Rendering Alternative Offerings Less Profitable withResale Price Maintenance," *Journal of Economics & Management Strategy*, 3, 639-662.

Shankar, Venkatesh and Ruth Bolton (1999), "Dimensions and Determinants of Retailer Pricing Strategy and Tactics," MSI Working Paper Series, Report No. 99-101, Boston.

Sheffet, Mary Jane and Debra L. Scammon (1985), "Resale Price Maintenance: Is It Safe to Suggest Retail Prices?," *Journal of Marketing*, 49 (Fall), 82-92.

Simon, Herbert A. (1955), "A Behavioral Model of Rational Choice," *The Quarterly Journal of Economics*, 69 (February), 99-118.

Simon, Herbert A. (1972), "Theories of Bounded Rationality," in *Decisions and Organizations*, C. B. McGuire and Roy Radner, eds. Amsterdam: North-Holland Publishing Company.

Smith, Adam (1776), *An Inquiry into the Nature and Causes of the Wealth of Nations*, London: W. Strahan.

Srinivasan, Shuba, Koen Pauwels, Dominique M. Hanssens, and Marnik G. Dekimpe (2004), "Do Promotions Benefit Manufacturers, Retailers, or Both?" *Marketing Science*, 50 (5), 617-629.

Steiner, Robert L. (1997), "How Manufacturers Deal With the Price-Cutting Retailer: When Are Vertical Restraints Efficient?," *Antitrust Law Journal*, 65 (2), 407-448.

Stern, Louis W. (1964), "Approaches to Achieving Retail Price Stability," *Business Horizons*, 7, 78-80.

Stilley, Karen M., J. Jeffrey Inman, and Kirk L. Wakefield (2010), "Spending on the Fly: Mental Budgets, Promotions, and Spending Behavior," *Journal of Marketing*, 74 (May), 34-47.

Spencer, Herbert (1864), *The Principles of Biology*, London: Williams and Norgate.

Sullivan, Lawrence A. and Warren S. Grimes (2006), *The Law of Antitrust: An Integrated Handbook*, St. Paul, MN: Thomson-West.

Telser, Lester G. (1960), "Why Should Manufacturers Want Fair Trade?," *Journal of Law and Economics,* 3 (October), 86-105.

Thorelli, Hans B. (1986), "Networks: Between Markets and Hierarchies," *Strategic Management Journal*, 7 (January/February), 37-51.

Tor, Avishalom and William J. Rinner (2010), "Behavioral Antitrust: A New Approach to the Rule of Reason after Leegin," *Behavioral Antitrust*, (February), 805-864.

Tremblay, Victor J. and Carol Horton Tremblay (2012), *New Perspectives on Industrial Organization: Contributions from Behavioral Economics and Game Theory*, New York: Springer Publishing.

Tversky, Amos and Daniel Kahneman (1974). "Judgment under uncertainty: Heuristics and biases," *Science*, 185, 1124–1130.

Tversky, Amos and Daniel Kahneman (1991), "Loss Aversion in Riskless Choice: A Reference-Dependent Model," *Quarterly Journal of Economics*, 4 (November), 1039-1061.

Tversky, Amos, Shmuel Sattath and Paul Slovic (1988), "Contingent Weighting in Judgment and Choice," *Psychological Review*, 95 (July), 371-384.

Urbany, Joel E. and Peter R. Dickson (1991), "Competitive Price-Cutting Momentum and Pricing Reactions," *Marketing Letters*, 2 (November), 393-402

Urbany, Joel E., Peter R. Dickson, and Rosemary Key (1990), "Actual and Perceived Consumer Vigilance in the Retail Grocery Industry," *Marketing Letters*, 2 (January), 15-25.

Völckner, Franziska and Julian Hofmann (2007), "The price-perceived quality relationship: A meta-analytic review and assessment of its determinants," *Marketing Letters*, 18, 181-196.

Webster, Frederick E. (1992), "The Changing Role of Marketing in the Corporation," *Journal of Marketing,* 56 (October), 1-17.

Weinberg, Bruce D., Lenita Davis, and Paul D. Berger (2013), "Perspectives on Big Data," *Journal of Marketing Analytics*, 1, 4, 187-201.

Weintraub, E. Roy (2007), *Neoclassical Economics. The Concise Encyclopedia of Economics*, Retrieved September 26, 2010, from http://www.econlib.org/library/Enc1/NeoclassicalEconomics.html

Williamson, Oliver E. (2002), "The Theory of the Firm as Governance Structure: From Choice to Contract," *Journal of Economic Perspectives,* 16 (Summer), 171-195.

Winter, Ralph A. (1993), "Vertical Restraints and Price versus Non-Price Competition," *Quarterly Journal of Economics*, 108, 61-76.

Yadav, Manjit S. and Paul A. Pavlou (2014), "Marketing in Computer-Mediated Environments: Research Synthesis and New Directions," *Journal of Marketing,* 78 (January), 20-40.

Yamey, Basil S. (1954), *The Economics of Resale Price Maintenance*, London: Pitman.

Yamey, Basil S. (1966), *Resale Price Maintenance: A Comparative American-European Perspective*, Chicago IL: Aldine Publication.

Zhang, Jie, Paul W. Farris, John W. Irvin, Tarun Kushwaha, Thomas J. Steenburgh, and Barton A. Weitz (2010), "Crafting Integrated Multichannel Retailing Strategies," *Journal of Interactive Marketing*, 24 (May), 168-180.

Zimmerman, Ann (2012), "Can Retailers Halt 'Showrooming'?," *Wall Street Journal*, April 11, 2012.

Zorn, Burton A. and George J. Feldman (1937), *Business Under the New Price Laws,* New York, NY: Prentice-Hall, Inc.