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EDLP versus Hi–Lo pricing strategies in retailing—a state of the art article

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Abstract The pricing strategy is seen as one of the five most important priorities in retail management. Over the past years, price wars have emerged and price has become an even more focal point of retailers' agendas. Especially grocery retailers operate on very low margins and have fallen into a price-promotion trap, pressured both by competition and consumers. In times of intensive competition it is getting even more important for retailers to focus on profitable and successful pricing strategies. Furthermore, retailers act under complex circumstances, especially because of broad assortments, and should therefore define a clear framework for their pricing strategy. There are several studies which have been published on pricing strategy in retailing during the last years, but no comprehensive literature review of this topic with its determinants and outcomes exists. Based on the theoretical and conceptual foundations of pricing strategy in retailing, all relevant conceptual and empirical studies are analyzed. First, the different definitions of pricing strategy in retailing are examined and systemized. Furthermore, a division into studies on determinants and outcomes of pricing strategy in retailing is included followed by a discussion of main and further results. Based on this analysis of the existing literature, avenues for further research are identified and prioritized.

Keywords Retailer pricing strategy · Hi–Lo · EDLP

JEL Classification M31

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1 Introduction

Among the classical 4Ps of the marketing mix (product, price, placement and promotion), price is the only marketing mix variable that directly generates revenues, compared to the other three elements which involve expenditures or investments (cf. Monroe 2003, p. 8; Rao 1984, p. 39; Rao and Kartono 2009, p. 9). Also in retailing, the price is the most important marketing instrument (cf. Ahlert and Kenning 2007, p. 233). Over the past years, price wars have emerged and price has become an even more focal point of retailers' agendas (cf. Diller 2008, p. 500). Especially grocery retailers operate on very low margins and have fallen into a price-promotion trap, pressured both by competition and consumers (cf. Bolton et al. 2010, p. 301). In times of intensive competition it is getting more and more important for retailers to focus on profitable and successful pricing strategies (cf. Bolton et al. 2010, p. 301). Furthermore, retailers act under complex circumstances, especially because of broad assortments, and should therefore define a clear framework for their pricing strategy. Until now, in the retailing practice there is still a tendency towards easy pricing decision rules (cf. Simon and Fassnacht 2009, p. 471-506).

The pricing strategy is seen as one of the five most important priorities in retail management (cf. Bell and Lattin 1998, p. 67). Tang et al. (2001, p. 56) even stated that there is nothing more important in business than the right pricing strategy. Through a pricing strategy, the price-performance level of a store is marked out on a long-term basis and thus the framework for further marketing activities is set (cf. Barth et al. 2007, p. 198). The strategic framework represents the basis for all price-political decisions (cf. Liebmann et al. 2008, p. 544f.). A retailer's pricing strategy has to be developed carefully and is an important issue in order to maximize profits (cf. Ellickson and Misra 2008, p. 813; Gauri et al. 2010, p. 139). Therefore, a pricing strategy is of special importance for the enduring success of companies.

1.2 Goals and structure of the paper

In preparation of this paper, we conducted several interviews with high-ranked experts from the consumer goods industry, retailing, consulting, market research and science. Thereby all experts approved that the topic of retailer pricing strategy is highly relevant and different compared to pricing strategies of manufacturers or other firms. Because of the high relevance of the topic of retail pricing strategy, it is necessary to make a comprehensive review of existing research from time to time. Until now, two papers tried to give a literature review on pricing strategy in retailing. The article of Kopalle et al. (2009) provides a literature review on retailer pricing with a focus on the interaction between pricing strategies and competitive effects. Thereby the authors used the term pricing strategies also for certain pricing strategies and derived avenues for future research for each of these effects. Kopalle et al. (2009) focused on two studies (Bolton et al. 2007; Levy et al. 2004) when

building their conceptual framework. The literature base for our article is primarily built on all relevant conceptual and empirical papers on pricing strategy in retailing from leading journals such as Journal of Marketing, Journal of Marketing Research, Journal of Retailing, Marketing Science and many other peer-reviewed journals. Gauri et al. (2010) identified a framework of online and offline retail pricing with determinants and moderators and derived avenues for future research. The authors mostly focused on papers about tactical pricing instruments such as price promotions, pricing decisions, price level etc. rather than on papers about pricing strategy. Our article clearly differentiates from both described papers as we focus on research about pricing strategy and not about tactical pricing instruments in our literature review. Furthermore, our article extends both above named papers in the following ways: (1) we provide a detailed overview of the different definitions of pricing strategy in retailing, (2) we consider the determinants but also the outcomes of pricing strategy in retailing and (3) we provide a comprehensive research agenda for the research field of pricing strategy in retailing.

We found three further conceptual papers from Levy et al. (2004), Grewal and Levy (2007) and Ailawadi et al. (2009) that center the topics of pricing and retailing, but without specifically focusing on pricing strategy. Levy et al. (2004) focused on the determinants of optimal prices rather than pricing strategy in retailing. They identified seven factors that have to be considered to determine optimal prices in retailing (cf. Levy et al. 2004, p. 16). Ailawadi et al. (2009, p. 42) built a conceptual framework with the relationships between manufacturer and retailer decisions on communication and promotion and retailer performance, with focus on the retailer's perspective. The authors examined single retailer decisions among which there are also tactical elements of pricing strategy in retailing. The fact that these two publications focused more on tactical pricing elements rather than on the pricing strategy itself clearly differentiates these studies from our article. Grewal and Levy (2007) reviewed all papers published in the Journal of Retailing between 2002 and 2007 and classified these papers into ten topic categories. Then they highlighted key insights and derived avenues for future research for each area. As the field of pricing strategy in retailing was just shortly mentioned, one cannot speak of a comprehensive literature review. Furthermore, Grewal and Levy (2007) focused on papers from the Journal of Retailing and didn't take into account other peer-reviewed journals as it is done in our paper.

Our manuscript is the first that provides an extensive literature review about pricing strategy in retailing. Based on the theoretical and conceptual foundations (chapter 2), in the third chapter, a comprehensive review of the existing research is given. This is an innovation and development of the existing reviews. For the first time, all relevant articles about retailer pricing strategy are analyzed compactly. In different summary tables (see Tables 2, 3, 4, 5), the central findings, dependent and independent variables are displayed. In total, six conceptual and 21 empirical papers on pricing strategy in retailing were analyzed. The papers were identified via systematic key word search (pricing, strategy, retailing) in the databases ABI Inform Global, EBSCO/EPNET, JSTOR and Science Direct. Furthermore, the references of the single studies were screened. The paper concludes with a comprehensive future research agenda. We provide fruitful and uncovered avenues for future research

which build great potential for researchers in this field. Besides that, managers can use the results to determine how to take into account certain determinants and outcomes of retailer pricing strategy.

2 Definition of the pricing strategy in retailing

Regarding the research on the field of the pricing strategy in retailing it becomes clear that there exists no consistent comprehension of this term. In fact there are many different definitions and interpretations of pricing strategy in retailing. Table 1 shows selected definitions and their aspects, before similarities and differences are discussed.

First, most of the definitions include the term "pricing strategy" but some authors use the term "pricing tactic" when describing strategies such as Hi–Lo (High–Low)

References	Aspects	Definition
Bailey (2008), p. 211	Hi–Lo/EDLP as pricing strategy; store level; one- dimensional approach	"The pricing strategy can be every-day low prices (EDLP) or promotional pricing—HILO "
Bell and Lattin (1998), p. 67f.	Hi–Lo/EDLP as continuum and <i>pricing strategy</i> ; store level; one-dimensional approach	"Some retailers position themselves on the basis of 'low prices, everyday' across a wide assortment of product categories, while others offer temporary deep discounts in a smaller group of categories. The former strategy is commonly known as 'EDLP', the latter as HILO". "Pure versions of HILO and EDLP seldom exist in practice and EDLP/HILO is best thought of a continuum"
Bolton and Shankar (2003), p. 214f.; 221	Five pricing strategies; brand-store level; multi- dimensional approach (price/promotion)	"The distinctive nature of the brand-store pricing strategies underscores the fact that retailers customize their pricing strategies at the more fundamental brand-store level , in addition to the store level". " Pricing strategies are multi- dimensional : prior research has focused exclusively on a single dimension—price variation (i.e. EDLP vs. Hi–Lo pricing)—implying a single pricing continuum. By examining a broader set of measures, our results show that retailer pricing strategies reflect a richer set of dimension— including relative price, deal intensity, and deal support. [] the strategies we have uncovered are combinations of the four independent pricing dimensions, where each dimension is a separate continuum "
Cataluna et al. (2005), p. 331	Hi-Lo/EDLP as pricing strategy; store level; one- dimensional approach	"[] two strategies often used in retailing [] are the every day low prices (EDLP), or always low prices, which may be a philosophy applied by discount stores, and the high and low prices (Hi-Lo), or promotional prices more typical of hypermarkets"

 Table 1
 Selected definitions of pricing strategy in retailing and their aspects

Table 1 continued

References	Aspects	Definition
Ellickson and Misra (2008), p. 811; 813	Hi-Lo/EDLP as continuum (with hybrid pricing) and pricing strategy; store level; one-dimensional approach	"[] pricing strategy can be characterized as a choice between offering relatively stable prices across a wide range of products (often called everyday low pricing) or emphasizing deep and frequent discounts on a smaller set of goods (referred to as promotional or PROMO pricing)". "Pricing strategies [] often have implications for other aspects of the retail mix. [] pricing strategy is more than just how prices are set: it reflects the pricing dimension alone , taking other aspects of the retail mix as given". "In practice, firms can choose a mixture of EDLP and PROMO []—hybrid pricing". "[] pricing strategy is best viewed as a continuum, with pure EDLP [] on one end and pure PROMO [] at the other"
Gauri et al. (2008), p. 256	Hi-Lo/EDLP as continuum (with hybrid pricing); store level; one-dimensional	"[] pricing [], for which the options available to retailers range from everyday low price (EDLP) to promotional or high-low (HiLo) strategies. An EDLP retailer tends to offer lower average prices, whereas a HiLo retailer offers frequent discounts []. [] a few retailers may offer some combination (i.e. hybrid pricing)"
Hoch et al. (1994), p. 16f.	Hi-Lo/EDLP as continuum and <i>pricing strategy</i> ; chain-/store-/category- level; one-dimensional	"The prototypical description of an EDLP pricing policy is as follows—the retailer charges a constant, lower everyday price with no temporary price discounts. The Hi–Lo retailer charges higher prices on an everyday basis, but then runs frequent promotions where prices temporarily are lowered below the EDLP level". "[] 'true' EDLP rarely exists. Instead, it takes on many forms: chain-wide , store-wide, and category-wide . Because there are many hybrids, EDLP is best seen as a continuum "
Kopalle et al. (2009), p. 57; 59	Hi–Lo/EDLP as pricing strategy; store level; one- dimensional	"Two key retail pricing strategies researched are everyday low pricing (EDLP) and promotional pricing (PROMO) []"
Lal and Rao (1997), S. 60f.	Hi-Lo/EDLP as pricing strategy; store level; multi- dimensional (price/ promotions, service, communications)	"Every day low pricing strategy is thought to differ from a promotional pricing strategy (PROMO or Hi-Lo) by not emphasizing price specials on individual goods but instead focusing consumer attention on good value on a regular basis". "Our analysis and results offer a more complete characterization of the EDLP and PROMO strategies. [] EDLP and PROMO strategies are positioning strategies, rather than merely pricing strategies, with different elements: price/ promotions, service and communications"

References	Aspects	Definition
Lattin and Ortmeyer (1991), p. 3–5	Hi-Lo/EDLP <i>as pricing</i> <i>strategy</i> ; store level; one- dimensional	"The strategy (EDLP ; note from the authors) is typically characterized by retail prices, stabilized on an everyday basis, at a level in between the regular and discount prices of promotional retailers. [] The promotional retailer sets a low promotional price and a high regular price"
Monroe (2003), p. 499f.	Hi-Lo/EDLP as aspect of positioning strategy; store level; multi-dimensional (price, advertising, service)	"The choice of everyday pricing versus high-low pricing is an aspect of a firm's positioning strategy. That is, firms that pursue either of these pricing formats must also choose unique combination of advertising, price and service "
Neslin and Shoemaker (1994), p. 1f.	Hi-Lo/EDLP; store level; multi-dimensional (price)	"There are three characteristics of retail pricing [] in comparing EDLP and Hi/Lo: (1) the frequency of in-store price cuts, (2) the depth of such price cuts, and (3) the duration of the price cuts. [] EDLP pricing should involve less variation in prices, i.e. price cuts that are not as steep, not as frequent, and longer in duration"
Ortmeyer et al. (1991), p. 3; 5; 55f.	Hi-Lo/EDLP/EDFP+ as pricing strategy; store level; multi-dimensional (price/service/assortment)	EDLP "is typically characterized by retail prices, stabilized on an everyday basis, at a level in between the regular and discount prices of promotional retailers". "The promotional retailer sets a low promotional price and a high regular price". "[] Typically, EDLP is accompanied by advertising claims such as 'guaranteed low prices". "[] EDFP+ (everyday fair pricing plus) [] means three things: restoration of everyday prices to levels that represent good value to consumers even though they do not purport to be the lowest in town; fewer sales events and, most importantly, excellence in other differentiating factors of the marketing mix, such as service and assortment"
Pechtl (2004), p. 223f.	Hi–Lo/EDLP as pricing strategy; store level; one- dimensional	"In the high-low promotion strategy (HILO) , temporary price discounts for selected items occur for some days, followed by weeks with normal prices. In the every-day-low-price (ELDP) strategy , the retailer promotes a basket of products with the argument to offer attractive low prices with will be constant for a longer period. These prices are lower than normal prices in HILO stores, but not as low as their price discounts"
Popkowski Leszczyc et al. (2004), p. 86	Hi–Lo/EDLP as <i>price</i> <i>format</i> and continuum; store level; one- dimensional	"EDLP stores tend to offer lower average prices, while Hi–Lo stores offer frequent price specials on individual goods. It is more appropriate to view these strategies as two extreme points on a continuum as most EDLP stores engage in some price promotions"

Table 1 continued

References	Aspects	Definition
Shankar and Bolton (2004), p. 31	Five pricing strategies; brand-store level; multi- dimensional (price/ promotion)	"[] retailer pricing strategy has been typically viewed as one-dimensional. We consider retailers strategic pricing strategy on multiple dimensions that recognize the existence of price promotions"
Shankar and Krishnamurthi (1996), p. 250	Hi-Lo/EDLP as pricing policy with tactical decisions; store level; multi-dimensional (price/ promotion)	"Typically, retailers are faced with two alternative pricing policies, an everyday low pricing (EDLP) policy or a high-low pricing (HLP) policy. Tactical decisions include decisions on retailer promotional variables such as price cut, feature advertising, and display "
Tang et al. (2001), p. 56	Hi-Lo/EDLP as <i>retail price</i> <i>format</i> and continuum; store level; one- dimensional	"Managers can select a retail price format on a continuum anchored by EDLP on one end and HiLo at the other"
Tsiros and Hardesy (2010), p. 49	Hi–Lo/EDLP as <i>pricing</i> <i>tactic</i> ; store level; one- dimensional	"Two particularly popular price promotion tactics are everyday low pricing (EDLP) and Hi–Lo pricing. Sellers that employ an EDLP tactic charge a constant, everyday price with no (or very infrequent and small) temporary price promotions []. Alternatively, sellers that employ a Hi–Lo pricing tactic set relatively higher prices on an everyday basis but offer frequent and substantial price promotions"
Voss and Seiders (2003), p. 37f.	Price promotion strategy; store level; multi- dimensional (price/ promotion)	"[] price promotion strategy, which we define as a coordinated set of pricing and promotion decisions designed to communicate a price position to consumers and influence short-term sales response and overall market performance". "[] we examine three distinct and important components of price promotion strategy: price variation policy [], price promotion advertising volume [], depth of discount []"

Table 1 continued

and EDLP (every day low price) (cf. Shankar and Krishnamurthi 1996; Tsiros and Hardesy 2010). Second, all of the definitions regard the pricing strategy in retailing from the retailer's point of view, not from the customer's point of view. Regarding the strategy literature, this makes sense because it is the retailer's long term decision, and not the customer's decision which pricing strategy to follow. Third, the majority of the definitions comprise two retailer pricing strategies—Hi–Lo and EDLP—and view pricing strategy as a dichotomous variable (cf. Bailey 2008; Cataluna et al. 2005; Kopalle et al. 2009; Lal and Rao 1997; Lattin and Ortmeyer 1991; Monroe 2003; Neslin and Shoemaker 1994; Pechtl 2004). However, many authors point out, that Hi–Lo and EDLP are not just two options of a bipolar classification scheme, but are best seen as the poles of a continuum with hybrid strategies in between (cf. Bell and Lattin 1998; Ellickson and Misra 2008; Gauri et al. 2008; Hoch et al. 1994; Popkowski Leszczyc et al. 2004; Tang et al. 2001). Beyond that, some authors identify even more pricing strategies in retailing. Bolton

and Shankar (2003) and Shankar and Bolton (2004) identify five pricing strategies at the store level (exclusive, premium, Hi-Lo, low and aggressive pricing) and at the brand-store level (exclusive, moderately promotional, Hi-Lo, EDLP and aggressive pricing). Furthermore, Ortmeyer et al. (1991, p. 55f.) suggest an EDFP+ (every day fair pricing plus) strategy besides Hi-Lo and EDLP, as "converting profitably to a credible EDLP strategy may be very difficult for a historical HiLo retailer [...]". Fourth, most of the definitions follow a one-dimensional approach concerning the pricing strategy in retailing (cf. Bell and Lattin 1998; Ellickson and Misra 2008; Hoch et al. 1994; Lattin and Ortmeyer 1991; Ortmeyer et al. 1991; Pechtl 2004; Tang et al. 2001). These definitions focus on one single dimension-mostly the dimension of price variation-when measuring pricing strategy in retailing. In contrast, there are authors that have a multi-dimensional approach of pricing strategy in retailing. These multi-dimensional approaches contain promotion and communication decisions in addition to the pricing decisions (cf. Bolton and Shankar 2003; Neslin and Shoemaker 1994; Shankar and Bolton 2004; Shankar and Krishnamurthi 1996; Voss and Seiders 2003). Furthermore, some authors also mention service and assortment as additional elements of the pricing strategy and see the pricing strategy more like a positioning strategy (cf. Lal and Rao 1997; Monroe 2003; Ortmeyer et al. 1991). In general, following these multi-dimensional approaches, the pure price focus is not comprehensive enough to mirror the strategic character of pricing strategy in retailing. A pricing strategy should fit in the marketing mix of a firm to serve to reach the firm's goals. Aspects of product-, placement- and promotion strategy should be considered when framing the pricing strategy, if not be declared as a part of the pricing strategy (cf. Lal and Rao 1997, p. 16; Wiltinger 1998, p. 26). Fifth, according to most of the definitions, the retailer pricing strategy is defined on the store-level, rather than on the assortment-, category- or brand-level. Conventional wisdom sees a pricing strategy as a principle and long-term decision on the store-level (cf. Berekoven 1995, p. 200). Because of its long-term character, the pricing strategy can strictly be separated from the tactical and short-term instrument of price promotions (cf. Scheuch 2007, p. 194f.). Contrary to this point of view, Bolton and Shankar (2003) and Shankar and Bolton (Bolton and Shankar 2003) identified the pricing strategies at the brand-store level, not at the store-level. They state, that retailers "customize their pricing strategies at the more fundamental brand-store level, in addition to the store level" (Bolton and Shankar Bolton and Shankar 2003, p. 221).

3 Review of the research on pricing strategy in retailing

In this chapter we review the literature about pricing strategy in retailing. Thereby we clearly focus on papers dealing with the topic of pricing strategy and don't include papers about certain tactical instruments in pricing. Within the literature review, it first makes sense to differentiate between conceptual and empirical papers. Furthermore, the relevant literature can be differentiated in terms of whether the determinants or outcomes of pricing strategy in retailing were examined. For the empirical papers, we follow this division and present the results for both groups



Fig. 1 Systematization of the scientific literature about pricing strategy in retailing

separately. Furthermore, main and further results are discussed. For the conceptual papers we present the results without this division as there are just six relevant articles which have different focuses. Figure 1 clarifies the procedure of our systematization of the literature about pricing strategy in retailing.

3.1 Results of conceptual papers

We found three conceptual papers that investigated the topic of pricing strategy in retailing with regard to determinants and outcomes. Ortmeyer et al. (1991) discussed the determinants, benefits and risks of a change from Hi-Lo strategy to EDLP or EDFP+ strategy. Concerning the determinants, they first stated that younger customers and dual income-households and higher income households prefer EDLP or EDFP+ retailers with a bigger product assortment and exceptional service (p. 58). Second, they asserted that cherry pickers-often including retired persons and two-parent families with one working spouse-will rather choose a Hi–Lo store, whereas the time-constrained shoppers rather shop at the EDLP retailer (p. 58; 60). Third, they stated that carrying easily comparable products and frequently purchased products and having lower merchandise prices increases EDLP believability. In contrast, the higher the amount of fashion merchandise, the lower is the ability to implement EDLP successfully. Fourth they suggest that retailers with incomplete assortments have lower merchandise costs and can therefore offer lower prices to the consumers (p. 59). Finally, the retailer type also influences the ability to implement EDLP or EDFP+. Warehouse clubs such as Price Club or Costco can easily implement EDLP "because their prices are both consistently and sufficiently low enough [...]" (p. 59). Other retailer types such as grocery stores, category specialists such as Toys R Us and Home Depot, general merchandisers like Sears and traditional department stores like Macys, have more difficulty to promote EDLP as their main competitive advantage because they don't have the lowest prices. Grocery stores have to provide "superior assortments in all departments, exceptional quality in their high-margin perishable departments, and fast and pleasant assistance in service departments and at the check-out counter as further sources of differentiation" (p. 60). As benefits of a strategy change to EDLP or EDFP+ they identified a smoother demand (less forecasting error and fewer stock-outs, less customer dissatisfaction, lower administrative costs) and fewer residuals, more efficient inventory management, more efficient use of personnel (reduced personnel costs, more time spent with customer), more advertising flexibility (less weekly flyers, more image-related advertising) and more consumer appeal (one-stop-shopping, pricing strategy perceived as more honest) (p. 57). As a risk for this strategy change they stated that "consumers' pricing perceptions have been conditioned by past pricing practices and may be hard to change [...]" (p. 62). A further risk is the possibility of an erupting price war due to an aggressive adoption of EDLP. Therefore a change in pricing strategy is expected to lead to a substantial decline in retailer profits, resulting of lower gross margins and higher advertising costs (p. 62).

Kopalle et al. (2009) provided an overall framework of retailer pricing and its competitive effects. The authors used the terms "pricing strategies", "retailer pricing" and "pricing" as synonyms (cf. Kopalle et al. 2009, p. 56f.). They identified seven different factors that determine retailer pricing—in-channel competition (on product/brand level), cross-channel competition and store positioning/format (EDLP/Hi–Lo), other marketing mix variables, customer factors, product type and complementary, manufacturer interaction and medium (on-/ offline)—and derived avenues for future research for each effect.

Similarly, Gauri et al. (2010) presented a conceptual framework of online and offline retail pricing. Thereby the authors focused mostly on papers on tactical pricing instruments. They identified firm factors (retail mix, price format, subscription vs. transaction), product and service characteristics (digital products, product from bundles, commodity information products, custom information products, products vs. services) and channel characteristics (online vs. offline) as key determinants of multi-channel retail pricing. Furthermore, customer characteristics (preference, price sensitivity, price expectation), environmental and economic factors (e.g. recession) and competitive factors (price dispersion, online vs. offline outlets) were identified as moderators of the relation between determinants and pricing strategy. For each determinant and moderator directions for future research were depicted.

There are three further conceptual papers by Levy et al. (2004), Grewal and Levy (2007) and Ailawadi et al. (2009) that center the topics of pricing and retailing, but without focusing on pricing strategy. Levy et al. (2004) focused in their paper on the determinants of optimal prices. They identified seven factors that determine optimal prices in retailing: "(1) price sensitivity; [...] (2) substitution effects; (3) dynamic effect of price promotions over time; (4) segment-based pricing; (5) cross-category effects; (6) retailer costs (wholesale prices and trade deals) and discounts; and (7) to what extent competition at the retail level influences retail prices" (Levy et al. 2004, p. 16). Grewal and Levy (2007) reviewed all papers published in the Journal of Retailing between 2002 and 2007 and classified them into ten topics: price, promotion, brand/product, service, loyalty, consumer behavior, channel, organizational, internet and other. Then they highlighted key insights and derived avenues

for future research for each area. Ailawadi et al. (2009, p. 42) built a conceptual framework with the relationships between manufacturer and retailer decisions on communication and promotion and retailer performance, with focus on the retailer's perspective. The authors examined single retailer decisions about price promotion, non-price support, price, advertising, loyalty program and national brand versus private label and derived avenues for future research. The objectives of the retailer are to maximize corporate, chain, store, category, private label and customer profits. The outcome measures were store traffic, sales per square foot, store share, profit, store satisfaction and share of wallet (cf. Ailawadi et al. 2009, p. 44). In their literature review in the field of consumer promotions, the authors stated that "retailers can improve the effectiveness of promotions by coordinating them with pricing decisions. They can use the knowledge and understanding of the determinants of price promotion strategy and coordination to improve their profitability". (Ailawadi et al. 2009, p. 49). With respect to future research the authors claim more research from the retailer's point of view as there is already much research from the manufacturer's perspective (cf. Ailawadi et al. 2009, p. 50).

3.2 Results of empirical papers

3.2.1 Determinants of pricing strategy in retailing

Previous research distinguished between several determinants of pricing strategy in retailing such as customer, market, chain, store, category, brand, competitor and assortment factors. We decided to group these determinants according to their content into market and consumer factors, retailer factors (assortment, category, store and chain factors), competitor factors and manufacturer and brand factors and present the results for each group separately.

3.2.1.1 Market and consumer factors Main results: in general, Ellickson and Misra (2008, p. 812) found that consumer demographics are very important in the choice of pricing strategies. Retailers choose the pricing strategy that their consumers demand. Gauri et al. (2008, p. 258) mentioned that the characteristics of the trading area such as population density, income, distance from store and other sociodemographic variables are important for the choice of pricing and format strategy of retailers. Table 2 summarizes the findings of the analyzed papers.

The first converging result within the group "market and consumer factors" deals with the influence of consumer income on pricing strategy in retailing. Ellickson and Misra (2008, p. 812) found that consumer demographics are very important in the choice of pricing strategies. Retailers choose the pricing strategy that their consumers demand. They found that consumers with lower income prefer EDLP, whereas consumers with higher income clearly prefer Hi–Lo. This finding is consistent with the research of Bell et al. (1998, p. 365) who found that lower income families prefer EDLP. Also Gauri et al. (2008, p. 263) found that "as the average income [...] in the trading area increases, retailers also prefer a Hi–Lo or hybrid pricing strategy". Bailey (2008, p. 218) also expected higher income

References and view	Determinant(s)/independent variable(s)	Dependent variable(s)	Central findings
Bailey (2008) (JRCS) C	Consumer factors : sale proneness, store loyalty, consumer income	Consumer response to EDLP = attitude toward EDLP, attitude toward the chain, store	 High sale-prone shoppers respond better to EDLP than low sale-prone consumers High store lovel approximate
		patronage intentions	 have a lower likelihood of patronage of a competing retailer implementing EDLP than low store-loyal consumers
			• Consumer income influences the consumer attitude toward an EDLP retailer as well as the consumer intentions to patronize an EDLP retailer
Bell et al. (1998) (JMR) C	Market/consumer factors: fixed/variable hopping costs, family size, age, income, large/	Store choice (EDLP or Hi-Lo)	• EDLP stores impose higher average fixed costs and lower average variable costs
	small basket shoppers		• Large basket shoppers prefer EDLP, small basket shoppers prefer Hi–Lo stores
			• Larger, younger families with lower income prefer EDLP stores
Bell and Lattin (1998) (MS) C	Consumer factors : basket attractiveness, large/small basket, shopping frequency	Store choice (EDLP or Hi–Lo)	• Large basket shoppers prefer EDLP stores, small basket shoppers prefer Hi–Lo stores
			• Households who shop more/less frequently prefer Hi–Lo/EDLP
Ellickson and Misra (2008) (MS) R	Market/consumer factors: income, family size, vehicle ownership, racial composition	Pricing strategy (EDLP, Hi–Lo)	• EDLP is the preferred strategy for geographic markets that have larger households, more racial diversity, lower income and fewer vehicles per household
			• Consumers with higher income prefer Hi–Lo
Gauri et al. (2008) (JR) R	Market/consumer factors: income, household size, age, population density	Retail Strategy (=pricing and format strategy)	 Higher income and populous neighborhoods are more associated with Hi–Lo or hybrid pricing strategy than with EDLP
Hoch et al. (1994) (JM) R	Consumer factors : installed base of users, nonusers	EDLP	 The greater the ratio of installed base (existing customers) to new opportunity (new customers), the more difficult it will be to make EDLP pay out
Kocas and Bohlmann (2008) (JM) R	Consumer factors : size of switcher segments	Retailer pricing strategies (discount deeply or frequently)	 A large retailer should offer deeper (shallower) discounts if the relative share of switchers is large (small), a midsize retailer should follow a partitioned discounting strategy, a small retailer should price high and play the niche

 Table 2
 Empirical research on the influence of market and consumer factors on pricing strategy in retailing

References and view	Determinant(s)/independent variable(s)	Dependent variable(s)	Central findings
Lal and Rao (1997) (MS) R	Consumer factors : time constrained, cherry pickers	Pricing strategies (EDLP, Hi-Lo)	• EDLP attracts time constrained shoppers + cherry pickers (lower service level), Hi–Lo attracts cherry pickers + time constrained shoppers (higher service level)
Lattin and Ortmeyer (1991) (research paper) R	Consumer factors: cherry pickers, expected-price shoppers	Pricing strategies (EDLP, Hi–Lo)	• The EDLP appeals the expected-price shoppers, the Hi–Lo retailer is able to price discriminate between the cherry pickers and the expected-price shoppers
Pechtl (2004) (JRCS) C	Consumer factors: gender, age, household size, basket size, EDLP/Hi–Lo prone consumers	Store choice (EDLP or Hi–Lo)	• EDLP prone consumers tend to prefer EDLP stores and have larger shopping baskets than other segments, Hi–Lo prone consumers tend to prefer Hi–Lo stores. But both consumer types also buy in both EDLP and Hi– Lo stores
			• Deal prone segments differ in gender and age, females are non-deal/Hi–Lo prone
Popkowski Leszczyc et al. (2000) (JR) C	Consumer factors : household size, family income, shopping frequency, hours worked, amount spent per trip	Store choice (EDLP, Hi– Lo)	 Segment 2 (rather Hi–Lo shoppers): more single earner families with more time to go shopping, shopping frequency is greatest and household size and number of hours worked increase shopping trips
			 Segment 1(rather EDLP shoppers): spend more per shopping trip and shop less often, number of hours worked decreases shopping trips
Popkowski Leszczyc et al. (2004) (JR) C	Consumer factors : shopping frequency, income, household size, weekly expenditures,	"Pricing strategy" (shop at EDLP or Hi–Lo), location strategy,	 Households shopping at EDLP/ HiLo stores shop less/more often
	time-constrained service/price seekers, cherry pickers	shopping strategy (single/multi-purpose shopping trips)	• Time-constrained service seekers: shop at Hi–Lo stores with higher service and convenient locations close to the households
			• Time-constrained price seekers: shop at EDLP stores, where they obtain lower average prices, tend to buy larger quantities and make fewer shopping trips
			• Cherry pickers: low opportunity cost for shopping, shop at several stores

Table 2 continued

References and view	Determinant(s)/independent variable(s)	Dependent variable(s)	Central findings
Shankar and Bolton (2004) (MS) R	Market factors: market type (metro/small city) Consumer factors: Own-price elasticities, Cross-price elasticities, Deal elasticities	Retailer pricing strategy (single dimensions)	 Retailers in metropolitan cities are more price consistent and coordinate price and promotion more than those in smaller cities
			• Prices are more consistent, price promotion is less intensive coordinated and relative brand prices are lower for brands in own-price elastic markets
			• Prices are inconsistent, price promotion is more intensive and less coordinated and relative brand prices are higher in more deal-elastic markets
Shankar and Krishnamurthi (1996) (JR) R	Consumer factors: price sensitivity	Retailer promotional variables, pricing policy (EDLP, Hi–Lo)	• EDLP chains attracts more price sensitive consumers
			• Hi–Lo chains attracts less price- , more deal-sensitive consumers (cherry pickers)
Tang et al. (2001) (CMR) C	Consumer factors: fixed/ variable utility, large/small basket shoppers	Store choice (EDLP or Hi–Lo)	• Hi–Lo stores have a higher fixed, but lower variable utility than EDLP stores
			• Large basket shoppers perceive a higher total utility at EDLP stores, small basket shoppers perceive a higher total utility at Hi–Lo stores

Table 2 continued

C customer's perspective of the paper, R retailer's perspective of the paper

CMR California management review, JR Journal of Retailing, JBR Journal of Business Research, JM Journal of Marketing, JRCS Journal of Retailing and Consumer Services, QME Quantitative Marketing and Economics

consumers to be less price sensitive and therefore less responsive to EDLP, but—in contrast to the above shown results—discovered that consumer income has no significant impact on consumer attitude toward EDLP. As an explanation they state "that consumers, regardless of income levels, like to shop around for deals" (Bailey 2008, p. 219). In contrast to these results, Popkowski Leszczyc et al. (2000, p. 339) and (2004, p. 93) found no significant influence of family income on store choice.

The second converging result covers the influence of family size on pricing strategy in retailing. Bell et al. (1998, p. 365) as well as Ellickson and Misra (2008, p. 815) stated that larger families prefer EDLP stores. On the other hand, Gauri et al. (2008, p. 263) asserted that household size doesn't have a significant impact on the pricing strategy. Also Pechtl (2004, p. 228) didn't find a significant difference between EDLP and Hi–Lo prone shoppers with regard to family or household size. Popkowski Leszczyc et al. (2000, p. 339) even found that household size has the

strongest positive effect on the likelihood of a shopping trip for the consumer segment which rather shops at Hi–Lo stores.

One of the most researched and largely discussed determinants of pricing strategy in retailing is the size of the shopping basket. This is the third converging result found in existing relevant literature. Bell and Lattin (1998, p. 66) detected that large basket shoppers prefer EDLP, whereas small basket shoppers prefer Hi–Lo. This result is also echoed by Bell et al. (1998, p. 365f.). Further support for this result is drawn from Pechtl (2004, p. 229) who stated that EDLP prone consumers tend to have larger shopping baskets. Furthermore, Tang et al. (2001, p. 63) asserted that large basket shoppers perceive a higher total utility (fixed and variable utility) at EDLP stores and that small basket shoppers perceive a higher total utility at Hi–Lo stores.

The fourth converging result deals with the influence of population density on pricing strategy in retailing. Gauri et al. (2008, p. 263) stated that populous neighborhoods are more associated with Hi–Lo or hybrid pricing strategy than with EDLP. Shankar and Bolton (2004) postulated that the fact, "whether the market is a metropolitan city or a small city, may be associated with a particular pricing environment and thus may be related to pricing practice" (p. 34). They looked at the influence of the market type "metropolitan city versus small city" on the four underlying dimensions of retailer pricing strategy—price consistency, price promotion intensity, price promotion coordination and relative brand price. They found that "retailers in metropolitan cities tend to be more price consistent than those in smaller cities (p. 38)". Furthermore, a "retailer tends to coordinate price and promotion when the store is located in metropolitan cities (p. 40)". The type of market (metropolitan or small city) doesn't have an impact on promotion intensity and relative brand price. According to the classification scheme of Bolton and Shankar (2003, p. 220), these results can be interpreted as a Hi–Lo pricing strategy.

The fifth identified determinant is about the influence of shopping frequency on pricing strategy in retailing. Bell and Lattin (1998, p. 93) found that consumers who shop more frequently prefer Hi–Lo stores, whereas shoppers who shop less frequently prefer EDLP stores. This finding was supported by Popkowski Leszczyc et al. (2000, p. 339) and (2004, p. 93) who stated that the shopping frequency is higher for the consumer segment of Hi–Lo shoppers.

The sixth important determinant within this group is the segmentation of customers into time constrained service or price seekers, expected price-shoppers and cherry pickers. Cherry pickers are actively searching for price promotions and willing to shop opportunistically and accelerate the purchase when a better price comes available. The expected price shopper wants to shop at a reasonable price but doesn't want "to spent time monitoring day to day price changes or time their purchases during the retailer's deal interval (Lattin and Ortmeyer 1991, p. 4)". The time constrained shoppers have high opportunity costs for shopping (Popkowski Leszczyc et al. 2004, p. 88). Lattin and Ortmeyer (1991, p. 62) affirmed that EDLP appeals the expected-price shoppers and the Hi–Lo retailer can price discriminate between cherry pickers and the expected-price shoppers. Lal and Rao (1997, p. 62) stated that EDLP stores attract time constrained customers, whereas Hi–Lo attracts the cherry pickers. When service is included, Hi–Lo stores offer a higher service

level to attract time constrained consumers, whereas EDLP stores offer a lower service level and attract cherry pickers. In contrast to the finding of Lattin and Ortmeyer (1991), they found that both EDLP and Hi–Lo stores attract both types of customers. In accordance with Lal and Rao (1997), Popkowski Leszczyc et al. (2004, p. 89) asserted that EDLP stores attract the time constrained price seekers and that time constrained service seekers prefer to shop at Hi–Lo stores. Furthermore they also found that cherry pickers shop at both EDLP and Hi–Lo stores.

The seventh converging determinant is the price sensitivity of consumers. Shankar and Bolton (2004, p. 39) investigated the impact of own-/cross-price and deal elasticity on the four dimensions of pricing strategy in retailing, as described above. They found that these elasticities "explain only a small portion of the variance in retailer pricing, but they are significant" (Shankar and Bolton 2004, p. 44). In general they stated that in own-price elastic markets, retailers tend to use price rather than promotions as their primary marketing tool. On the other hand, in more deal-elastic markets, retailers tend to use promotions rather than price changes as their primary marketing tool (cf. Shankar and Bolton 2004, p. 44). These results are in line with the study of Shankar and Krishnamurthi (1996, p. 269), who found that EDLP stores attract more price-sensitive and Hi–Lo stores more deal-sensitive consumers.

The sale proneness and store loyalty of consumers are two further determinants examined in the context of pricing strategy in retailing. Pechtl (2004, p. 224; 231) stated that EDLP prone consumers prefer EDLP stores and Hi-Lo prone consumers prefer Hi-Lo stores. But as stronger differences could have been expected, they derived that both consumer types also buy in both store types. Bailey (2008, p. 215) examined the influence of sale proneness and store loyalty on consumer response to EDLP and discovered that high sale-prone consumers respond more favorably to EDLP than low sale-prone consumers. Furthermore, loyal customers are less responsive to an EDLP announcement by a competitor. The author derived, that when implementing an EDLP strategy, retailers can segment the market according to the consumers' sale proneness. Similarly, Hoch et al. (1994, p. 23) affirmed that the greater the installed base, the more difficult it will be to make EDLP pay out. The installed base consists of consumers already shopping at the retailer. Kocas and Bohlmann (2008, p. 124; 138) stated that the pricing strategy of a retailer to discount deeply or frequently is driven by the ratio of the size of switcher segments for which the retailer competes to the size of its loyal segment. Rather in contrast to Hoch et al. (1994) they stated, that a large retailer should offer deeper (shallower) discounts than a smaller firm if the relative share of switchers is large (small).

The tenth and last identified converging result addresses the influence of fixed and variable costs and utility on pricing strategy in retailing. Tang et al. (2001, p. 58) affirmed that a customer's choice of store depends on the perceived fixed and variable utility from that store, e.g. benefits minus costs. "The perceived fixed utility does not vary from trip to trip and is not a function of the shopping list [...] the perceived variable utility changes from trip to trip because it depends on the size and composition of the shopping list" (Tang et al. 2001, p. 58). They found that Hi–Lo stores have a higher fixed utility and a lower variable utility than EDLP stores.

These results are in line with the study of Bell et al. (1998, p. 366) who found out that EDLP stores impose higher average fixed costs and lower average variable costs which are preferred by large basket shoppers.

Further results: besides the above shown results, we found six further determinants of pricing strategy in retailing in the group "market and consumer factors", but which cannot be aggregated to converging or diverging results: age, gender median vehicle ownership, racial composition, number of hours worked and amount spent per trip.

Concerning the influence of age of customers on pricing strategy in retailing, Bell et al. (1998, p. 365) found that younger customers prefer EDLP stores. In contrast, Gauri et al. (2008, p. 259; 263) couldn't confirm their hypothesis that older age level customers are associated with Hi-Lo. Pechtl (2004, p. 228) found no substantial differences between EDLP and Hi-Lo prone consumers regarding age and therefore stated that age will not help to segment shoppers according to their deal proneness to an EDLP or Hi-Lo strategy. Pechtl (2004, p. 228; 230) stated that deal prone segments also differ in gender. He found a higher proportion of males among the EDLP prone consumers and a higher proportion of females among the Hi-Lo and non-deal prone consumers. Ellickson and Misra (2008, p. 823) used median vehicle ownership and racial composition as determinants of pricing strategy in retailing and stated that EDLP is the preferred strategy for geographic markets with more racial diversity and fewer vehicles per household. Popkowski Leszczyc et al. (2000, p. 339) stated that the number of hours worked by a household decreases the likelihood of shopping trips for the EDLP shoppers, but increases the likelihood for the Hi-Lo shoppers. They assume that the Hi-Lo segment consists "of more single earner families with a stay-at-home spouse who has more time to go shopping (Popkowski Leszczyc et al. 2000, p. 339)". Furthermore, they asserted that households that spend more per shopping trip tend to shop less often, particularly for households rather shopping at EDLP stores. In contrast, Popkowski Leszczyc et al. (2004, p. 93) stated that weekly expenditures don't have a significant impact on store choice.

3.2.1.2 Retailer factors Table 3 shows the analyzed papers and aggregates the most important results.

Main results: the first converging result (subgroup "store factors") deals with the influence of store size on pricing strategy in retailing. Popkowski Leszczyc et al. (2000, p. 339) found that larger stores are associated with EDLP, whereas smaller stores are more likely to apply a Hi–Lo strategy. Similarly, Voss and Seiders (2003, p. 45) asserted that firms with smaller stores use more price variation, whereas retailers with larger stores rather promote stable everyday prices. Furthermore, retailers with smaller stores promote their prices less likely and tend to offer deeper discounts than retailers with larger stores. Ellickson and Misra (2008, p. 822) also stated that EDLP is the preferred strategy of retailers with larger stores. Shankar and Bolton (2004, p. 38–42) detected different results and stated that larger stores are associated with higher price promotion intensity and price promotion coordination

References and view	Determinant(s)/ independent variable(s)	Dependent variable(s)	Central findings
Ellickson and Misra (2008) (MS)	Store factors: store size, vertically integrated	Pricing strategy (EDLP, Hi–Lo)	• Stores choosing EDLP are larger and more often vertically integrated into distribution
R	Chain factors: chain size, chain/global market effect		• The total number of stores in the chain is negatively related to EDLP; chain and chain/global market random effects are highly significant
Gauri et al. (2008) (JR) R	Store factors: number of features/services	Retail strategy = pricing and format strategy	 Improved service features are more associated with Hi–Lo or hybrid pricing than with EDLP pricing strategies
Popkowski Leszczyc et al. (2000)	Store factors: store size	Store choice (EDLP, Hi–Lo)	• Households in segment one prefer larger stores in suburban areas, EDLP
(JR) C			• Households in segment two prefer smaller in neighborhood areas, HiLo
Shankar and Bolton (2004) (MS) R	Category factors: storability, necessity, assortment size Store/category factors: store size, category assortment Chain factors: chain size, chain positioning	Retailer pricing strategy (single dimensions)	• Retailers are more/less price consistent for brands in storable/ nonstorable categories, categories that are necessities/nonessential and categories with small assortments; price promotion intensity is high for storable products and for necessity categories; price promotion coordination is lower for storable and higher for necessity categories
			 Retailers are more price consistent for smaller and EDLP chains and categories with smaller assortments; the price promotion intensity is higher for larger and Hi–Lo chains, for larger stores and smaller assortments; price promotion coordination is higher for Hi–Lo chains, larger stores and assortments Relative brand price is lower for EDLP stores and larger stores/ assortments

 Table 3
 Empirical research on the influence of retailer factors (assortment, category, store, chain factors) on pricing strategy in retailing

References	Determinant(s)/	Dependent	Central findings
and view	independent variable(s)	variable(s)	
Voss and Seiders (2003) (JR) R	Assortment factors: assortment perishability, assortment heterogeneity Store/chain factors: retailer differentiation, store size, number of stores	Retail price promotion strategy (single dimensions)	 Retail sector level: product assortment perishability increases price variation, price promotion advertising volume and average depth of discount; product assortment heterogeneity exerts a direct positive effect on price variation and average depth of discount and exerts a moderating effect on the association between assortment perishability and the dependent variables Retail firm level: as the number of stores increases, price promotion advertising volume increases; as store size grows, price variation and advertising volume increases and average discount depth

Table 3 continued

C customer's perspective of the paper, R retailer's perspective of the paper, JR Journal of Retailing, JM Journal of Marketing, MS Marketing Science, JRCS Journal of Retailing and Consumer Services

and lower relative brand price. According to Bolton and Shankar (2003, p. 220) this results can be equalized with a Hi–Lo pricing strategy on the store level.

The second converging result (subgroup "chain factors") discusses the influence of chain size, the number of stores in a chain, on pricing strategy in retailing. Shankar and Bolton (2004, p. 38–42) found that smaller chains are associated with higher price consistency, lower price promotion intensity and lower price promotion coordination which can be equalized with "exclusive pricing" or "low pricing" (cf. Bolton and Shankar 2003, p. 220). In line with this result, Ellickson and Misra (2008, p. 823) affirmed that "the total number of stores in the chain is negatively related to EDLP". Voss and Seiders (2003, p. 45) discovered differentiated results and stated that smaller chains promote their prices less likely and offer deeper discounts than larger chains. The fact to promote less likely is rather a sign for EDLP, but the fact to offer deeper discounts is rather a sign for Hi–Lo.

Further results: regarding the subgroup "assortment and category factors" we found no converging results in the studied literature and summarize the findings in the following. Shankar and Bolton (2004, p. 38–42) found that storable categories are associated with higher price consistency, higher price promotion intensity and lower price promotion coordination (rather "exclusive pricing" or "premium pricing" according to Bolton and Shankar 2003, p. 220) whereas necessary categories are associated with higher price consistency, higher price promotion intensity and higher price promotion coordination (rather Hi–Lo pricing according to Bolton and Shankar 2003, p. 220). Smaller assortments are related to higher price

consistency, higher price promotion intensity, higher price promotion coordination and higher relative brand price. Voss and Seiders (2003, p. 46) used assortment perishability and assortment heterogeneity across competitors as determinants of their identified three dimensions of retail price promotion strategy. They found that assortment perishability has a positive direct effect on price variation, price promotion advertising volume and average depth of discount. They further stated that when assortment heterogeneity across retailers is high, "perishability had no effect on price variation, a negative effect on price promotion advertising volume, and a positive effect on average depth of discount" (Voss and Seiders 2003, p. 46). Furthermore, assortment heterogeneity has a positive direct effect on price variation and average depth of discount, but no significant effect on price promotion advertising volume. According to the authors, competitors in heterogeneous sectors should advertise more their assortment rather than their prices. Similar to Shankar and Bolton (2004) one cannot derive clear predictions for the identified determinants of Voss and Seiders (2003) with regard to specific pricing strategies.

In the subgroup "store factors", Ellickson and Misra (2008) discovered that stores with an EDLP strategy are "far more likely to be vertically integrated into distribution" (p. 823) than Hi–Lo or Hybrid stores. Another aspect was mentioned by Gauri et al. (2008, p. 263) who examined the number of services in a store as determinant of pricing strategy and found that increased service levels are rather associated with Hi–Lo or hybrid pricing strategy than with EDLP.

3.2.1.3 Competitor factors Competitor factors are claimed by some authors to explain the most variation in retailer pricing strategy. We found three studies about this topic and summarize the results below.

The only converging result found in the group of competitor factors deals with the influence of competitor pricing strategy on the retailer's pricing strategy. Shankar and Bolton (2004, p. 33f.) looked at competitor price level and competitor deal frequency as competitor factors. They found that competitor factors are the most dominant determinants of retailer pricing strategy among several other determinants. Ellickson and Misra (2008, p. 815) also stated that competitor factors play a major role in determining retailer pricing strategy. In detail, when "competitors charge lower prices, a retailer communicates the relative attractiveness of its offerings through higher price consistency, lower price promotion intensity, and higher price promotion coordination-while maintaining lower relative brand prices" (Shankar and Bolton 2004, p. 42). According to Bolton and Shankar (2003, p. 20) this can be equalized with a "low pricing" or "aggressive pricing" strategy at the store level. Furthermore, when "competitors offer deals more frequently, retailers are less price consistent, offer aggressive promotions, more actively coordinate price promotion, and charge lower prices (Shankar and Bolton 2004, p. 43). This can rather be equalized with a Hi-Lo pricing strategy on the store level (cf. Bolton and Shankar 2003, p. 220). These results show that retailers match their own pricing strategy with the competitor's pricing strategy. Ellickson and Misra (2008) asserted that "firms coordinate their actions, choosing pricing strategies that match their rivals (p. 822). More specifically they state, that retailers with a high share of EDLP-competitors will far more likely choose an EDLP than either Hi–Lo or hybrid pricing strategy.

Therefore there is "no evidence that firms differentiate themselves with regard to pricing strategy" (p. 823). These results are echoed by Gauri et al. (2008) who found that as the number of Hi–Lo stores "in the trading area increases, retailers continue to prefer Hi–Lo over EDLP" (p. 263). In this case, no differentiation in pricing strategy exists, as also stated by Ellickson and Misra (2008). But as the number stores with hybrid pricing strategy increases, retailers prefer EDLP over hybrid and therefore differentiation exists in this scenario.

Gauri et al. (2008, p. 263) investigated the distance to competition as further competitor determinant on pricing strategy in retailing and found that with increasing average distance to competition, retailers rather prefer a Hi–Lo over an EDLP strategy.

3.2.1.4 Manufacturer and brand factors Within this group of determinants, we found two papers and summarize them in the following. Hoch et al. (1994) looked at the influence of a manufacturer's everyday low purchase price (EDLPP) strategy on a retailer's pricing strategy. They suggested that when manufacturers pursue the EDLPP strategy, retailers should not immediately pass the prices to the consumers but instead should maintain higher margins and use "wholesale cost savings to fund more aggressive promotional activity internally, in essence a "hyper" version of Hi-Lo pricing" (p. 25). Shankar and Bolton (2004, p. 35; 38-42; 43f.) investigated the brand preference and the relative brand advertising as determinants of pricing strategy in retailing. They found that for brands with higher brand preference, retailers "charge premium prices and are less price consistent, promote more intensely, and coordinate prices and promotions more closely" (p. 43), which can be equalized with a Hi-Lo strategy (cf. Bolton and Shankar 2003, p. 220). Similarly, brands with higher relative brand advertising levels "are positively associated with premium relative brand price, price inconsistency, and price-promotion coordination" (Shankar and Bolton 2004, p. 43).

3.2.2 Research on the outcomes of pricing strategy in retailing

In this chapter, the relevant empirical papers on the outcomes of pricing strategy in retailing are analyzed and discussed. We differentiated between outcomes concerning the retailer and outcomes concerning the customer and present the results for both groups separately.

3.2.2.1 Retailer outcomes Within the identified five relevant papers we couldn't find converging results. We therefore aggregate the results with regard to content. Table 4 summarizes the analyzed papers.

The first identified result deals with the impact of pricing strategy on retailer sales. Mulhern and Leone (1990, p. 188–192) investigated "sales dollars" as an outcome of change in pricing strategy from featuring many items at small discounts, to a few items at deep discounts. This change in strategy led to an increase in

chain-level sales dollars and also to an increase in store-level sales for stores located in competitive markets. For stores with only little competition from other grocery stores in their market, the change in strategy did not increase store sales and traffic. Hoch et al. (1994, p. 20) examined "sales volume" as an outcome and stated that a 10 % decrease in EDLP prices led to a 3 % increase in unit volume, whereas 10 % increase in Hi–Lo prices led to a 3 % unit volume decrease. As the strategies mentioned in the study of Mulhern and Leone (1990) cannot be equalized with the EDLP and Hi–Lo strategy examined in the study of Hoch et al. (1994), the results of the two papers can hardly be compared and therefore no aggregation into converging or diverging results is possible.

Retailer profitability is another outcome examined in connection with pricing strategy. Hoch et al. (1994, p. 20) found that—despite the sales results shown above—a 10 % increase in Hi–Lo prices led to a 15 % increase in profits, whereas a 10 % decrease in EDLP prices reduced profits by 18 %. In contrast, Lal and Rao (1997, p. 69) stated that industry profits are higher in an equilibrium, where retailers choose different pricing strategies (EDLP and Hi–Lo) than when stores adopt identical strategies. In equilibrium the profits are higher for the EDLP than for Hi–Lo store, due to the combination of pricing and communication strategy.

A further result discusses the influence of pricing strategy on retailer costs. Lattin and Ortmeyer (1991, p. 5) asserted that the promotional retailer benefits from lower variable costs by selling more products during trade deal periods from the manufacturer but has also additional fixed costs associated with variable pricing. The EDLP retailer benefits from reduced fixed costs because of lower personnel costs, fewer stocking problems and less advertising costs. Hoch et al. (1994, p. 24) stated that retailers that follow a less promotion-intense strategy will have lower costs because of warehouse and in-store efficiencies. In contrast to Lattin and Ortmeyer (1991), they didn't differentiate between variable and fixed costs.

Furthermore, the influence of pricing strategy on traffic in the store or chain is another relation examined in the study of Mulhern and Leone (1990, p. 188–192). They affirmed that a change in pricing strategy did not affect the customer traffic in the store and chain. Dhar and Hoch (1997, p. 223) investigated the influence of EDLP on store brands and asserted that in lower quality categories, the EDLP strategy benefits the store brand.

3.2.2.2 Customer outcomes Here we found four relevant studies, summarized in Table 5. Similar to chapter 3.2.2.1, we couldn't always find converging results and aggregate them with regard to content.

Suri et al. (2000, p. 199f.) as well as Suri et al. (2002, p. 166) investigated the influence of pricing strategy on the perception of quality, value and sacrifice of a product. They stated that the perceived quality and value is higher when the price is presented in a fixed price format than in a discounted format. Furthermore, both studies found that the perceived sacrifice is significantly higher when the price is presented in a discounted format than as a fixed price.

Suri et al. (2002) also asserted that "subjects exposed to the fixed price format felt significantly happier than those exposed to the discounted price format (p. 166)"

References and view	Independent variable(s)	Outcome(s)/dependent variable(s)	Central Findings
Dhar and Hoch (1997) (MS) R	EDLP	Retailer outcomes: store brand effects	• The EDLP strategy benefits the store brand but only in lower quality categories
Hoch et al. (1994) (JM) R	EDLP	Retailer outcomes: sales volume, dollar profits, costs	• A 10 % EDLP category price decrease led to a 3 % sales volume increase, a 10 % Hi–Lo price increase led to a 3 % sales decrease
			• EDLP reduced profits by 18 %, Hi–Lo increased profits by 15 %
			 Retailers pursuing less promotion-intense strategies will incur lower costs because of warehouse and in-store efficiencies
Lal and Rao (1997) (MS) R	Pricing strategies (EDLP, Hi–Lo)	Retailer outcomes: profits	• In equilibrium, profits are higher for the EDLP store than for the Hi–Lo store
			• It is the combination of pricing and communication strategy that results in higher profits for the EDLP store
Lattin and Ortmeyer (1991) (research paper) R	Pricing strategies (EDLP, Hi–Lo)	Retailer outcomes: costs	• The promotional retailer benefits from lower variable costs (by moving more product volume during periods of trade deal from the manufacturer)
			• EDLP retailers benefit from reducing fixed costs associated with variable pricing
Mulhern and Leone (1990) (JBR) R	Change in pricing strategy from featuring many items at small discounts, to a few items at deep discounts	Retailer outcomes: total chain sales dollars, total chain traffic, store sales dollars, store traffic	• The change in promotion strategy led to an increase in chain-level sales dollars but did not affect total chain traffic
			• The strategy change did boost sales for stores located in competitive markets, but had no impact on store traffic
			• The change in promotional strategy did not increase the levels of sales and traffic at the stores located in noncompetitive markets

 Table 4
 Empirical research on retailer outcomes of pricing strategy in retailing

R retailer's perspective of the paper, JBR Journal of Business Research, JM Journal of Marketing, MS Marketing Science

and that "the fixed price format was associated with less uncertainty than the discounted price format (p. 166)". Another result of their study was that the information processing of fixed price offers is easier than in a discount format. More detailed, they affirmed that the amount of positive and simple evaluative thoughts is higher for the fixed prices than the discounted prices, whereas the amount of negative and attribute-oriented thoughts is significantly higher for the discounted prices than the fixed prices (cf. Suri et al. 2002, p. 167).

Boatwright et al. (2004, p. 179–185) investigated "promotional sensitivity" as an outcome of pricing strategy in retailing. Thereby price response, display and feature response, response to competing account price and to competing brand price were investigated as factors of promotional sensitivity. They found that EDLP customers are less price sensitive than Hi–Lo customers. Furthermore, they stated that EDLP accounts are less responsive to displays and features and that EDLP consumers are less sensitive to competing brands than Hi–Lo customers. In general they asserted that in high competitive markets, there is a greater sensitivity to competing account price.

Pechtl (2004, p. 229) found that EDLP prone consumers have a stronger preference for well-known brands than Hi–Lo prone consumers.

4 Implications

Until now there has not been much research on pricing strategy in retailing. Based on our literature review, we derive and prioritize directions for future research as well as implications for managerial action in the following.

- 4.1 Directions for future research
 - 1. Detailed measurement of pricing strategy in retailing: as the review of the definitions shows, most researchers define pricing strategy in retailing as a bivariate variable with two possibilities Hi–Lo and EDLP. A more detailed measurement of pricing strategy in retailing would be adequate, taking into account the complex circumstances under which retailers act, reflected by complex assortments with many different products and prices. It could be interesting to build an index representing the extent of the pursuit of pricing strategy as a continuum. Furthermore and as an extension of the work of Bolton and Shankar (2003), a typology of different pricing strategies at the store level could be developed. In this context it would be interesting to work with objective scanner data with different product categories from different types of retailers.
 - 2. Retailer-related outcomes of pricing strategy in retailing: most of the existing papers have examined the determinants of pricing strategy in retailing. Future research should therefore focus on the outcomes of pricing strategy in retailing. Retailer-related outcomes like sales, turnover, profitability, costs, in-store traffic and average receipt amount of the pricing strategy could be investigated, as this field has been largely neglected in the existing research.

References and view	Independent variable(s)	Outcome(s)/ dependent variable(s)	Central findings
Boatwright et al. (2004) (QME) C	Account retail strategy (EDLP or Hi– Lo)	Customer outcomes: promotional sensitivity (price response, display and feature response, response to competing account price, response to competing brand price)	 Consumers who shop at EDLP stores are less sensitive to short term price changes than consumers at non-EDLP/Hi–Lo stores Consumers at EDLP stores can be assured of lower average prices and do not have as much incentive to track deals and switch stores as consumers in Hi–Lo stores EDLP accounts are much less responsive to displays and features In market areas with greater competition there is greater sensitivity to competing account price EDLP customers are less sensitive to competing brand prices
Pechtl (2004) (JRCS) C	Store choice (EDLP or Hi– Lo)	Customer outcomes: brand preference	• EDLP prone consumers exhibit a stronger preference for well-known brands than Hi–Lo prone consumers
Suri et al. (2000) (JPBM) C	Fixed format versus discount format	Customer outcomes: t perception of quality/sacrifice/ value	 The perception of quality is higher when price information is presented in a fixed price format than in a discount format The perception of sacrifice is higher when price information is presented in a discount format than in a fixed price format The perception of value is higher when
Suri et al. (2002) (JPBM) C	Fixed format versus discount format	Customer outcomes: positive effect, information processing, perception of quality/sacrifice/ value	 price information is presented in a fixed price format than in a discount format The evaluation of fixed price offers is associated with stronger positive effect (happier, less uncertain) The evaluation of fixed price offers is associated with less thorough processing of price information than in a discount format (more simple evaluative and positive valenced thoughts, less attribute-oriented and negative valenced thoughts) Perceptions of quality and value are significantly higher when price information is presented in a fixed price format than in a discount format Perceptions of quality is significantly higher when the price is presented as a discount format

Table 5 Empirical research on customer outcomes of pricing strategy in retailing

C customer's perspective of the paper, JPBM Journal of Product and Brand Management, JRCS Journal of Retailing and Consumer Services, QME Quantitative Marketing and Economics

One could compare short-term and long-term profitability of different pricing strategies with a survey. Another possibility would be to work with objective data from different stores e.g. with information on sales and turnover.

- 3. Customer-related outcomes of pricing strategy in retailing: besides the retailer-related outcomes, also more research could be done on customer-related outcomes. Future research could examine promotional sensitivity, brand preference, customer's mood and information processing as outcomes and check if the results are convergent or divergent to the existing research of Boatwright et al. (2004), Pechtl (2004) and Suri et al. (2000, 2002). Furthermore, the study of Suri et al. (2000, 2002) with perception of quality, value and sacrifice as outcomes could be replicated with a bigger non-student sample and within the grocery sector. Further interesting customer-related outcomes are customer loyalty, cross-and up-selling potential and price image.
- 4. *Influence of pricing strategy on price image:* especially the impact of pricing strategies on the perceived price image of a retailer would be a very interesting field for future research. The topic of price image was heavily investigated as an outcome of price promotions (e.g. cf. Nyström et al. 1975) but not with regard to pricing strategies.
- 5. Influence of competitor factors on pricing strategy in retailing: in the existing literature, competitor factors build the most important determinant of pricing strategy in retailing. Despite this fact, there is not much research on this topic. Especially the distance to competition is an interesting factor as only the paper of Gauri et al. (2008) considered this until now. Another interesting determinant could be the number of competitors nearby, which was not included in any of the analyzed papers.
- 6. Influence of retailer factors on pricing strategy in retailing: as seen in the literature review (Table 2), many studies investigated market and consumer factors as determinants of pricing strategy in retailing. Much less research was conducted concerning the influence of retailer factors on pricing strategy in retailing. Within the subgroup "assortment and category factors", aspects such as category type (storable, necessary), assortment size (smaller vs. larger), assortment heterogeneity and assortment perishability could be investigated. Within the subgroup "store factors" one could build on the research of Ellickson and Misra (2008) and Gauri et al. (2008) and examine the influence of vertically integrated stores or the number of services in a store on pricing strategy in retailing. Furthermore, costs play an important role in formulating a pricing strategy (cf. Nagle et al. 2011, p. 197), so it would be interesting to investigate how costs may influence the pricing strategy of a retailer.
- 7. Influence of manufacturer and brand factors on pricing strategy in retailing: it would be interesting to extend the study of Hoch et al. (1994) who focused on the manufacturer's EDLPP as a determinant of the retailer's pricing strategy. Other manufacturers' pricing strategies could be used as determinants. Besides that, the extent of brand advertising could be examined, building on the study of Shankar and Bolton (2004). The brand strength could also be an interesting determinant. At the store level one could question if retailers differ

in their pricing strategy with regard to the rate of strong brands in their assortment.

- 8. *Research from the retailer's point of view:* despite the fact that pricing strategy is an important concern of the company, many researchers regard this topic from the customer's point of view. It would be desirable if more studies would consider the retailer's perspective, e.g. through interviews or experiments in the retailing industry.
- 9. Research from the pricing strategy perspective: there are many studies that investigated the determinants and outcomes of the tactical instrument of price promotions. More studies from the perspective of pricing strategy would be desirable. In today's retailing practice, pricing strategy is still seen as a rather short-term day-to-day decision. It may be a fruitful area to do more detailed research on the determinants and outcomes of long-term store level pricing strategies in retailing. Thereby research could create more awareness of this important topic in the retailing practice and could derive interesting managerial implications for retailers.
- 10. *Pricing strategy at the category level:* though the pricing strategy in retailing is defined at the store level, it would be interesting to examine different categories with regard to the pursued pricing strategy and compare the results. Thereby it would be also desirable to work with objective scanner data containing a representative selection of different product categories in a "product basket".
- 11. *Influence of further determinants:* it would be a fruitful avenue for future research to examine further factors influencing the choice of pricing strategy in retailing such as regulations by law. Until now, no empirical investigation has considered this aspect. Furthermore, pricing history (cf. Nijs et al. 2007) could be another interesting direction of future research.
- 12. Online versus offline pricing strategies: It would be a very fruitful area to investigate if retailers pursue different pricing strategies or extents of pricing strategies in their offline and online channels. Is there a higher extent of Hi–Lo pricing strategies in the online versus offline? Or are there totally different types of pricing strategies in the online world? Do other factors than identified for offline retailers determine the online pricing strategy? How do online pricing strategies affect consumer online and offline shopping behavior? In this context, it could be interesting to examine data from a grocery retailer that started to operate online.

4.2 Managerial implications

1. Definition of the pricing strategy in retailing: our literature review showed that there exists no consistent definition of the term pricing strategy in retailing. For retail firms it is even more important to define a clear pricing strategy in order to create a clear positioning for the customers. Retailers should therefore clearly define if they rather pursue an EDLP or a Hi–Lo pricing strategy and if they determine the pricing strategy at the product-, assortment- or store-level. Furthermore, retailers should view the pricing strategy more like a positioning strategy, including elements like service and communication decisions.

- 2. Change of pricing strategy: retailers should be aware of possible consequences when switching their pricing strategy, e.g. from Hi–Lo to EDLP. A change towards EDLP could on the one hand lead to smoother demand, fewer residuals, more efficient inventory management, more efficient use of personnel, more advertising flexibility and more consumer appeal but on the other hand could also involve the risk of confusing customers, whose pricing perceptions have been conditioned by past pricing practices and of erupting price wars which could lead to a substantial decline in retailer profits (cf. Ortmeyer et al. 1991)
- 3. Influence of market and consumer factors on pricing strategy in retailing: in general, retail managers can use the converging results to determine in which areas (income, population) to build or buy new stores, which customer segments (time-constrained service/price seekers, cherry pickers) to focus on, how to take into account the price sensitivity, the shopping frequency or the size of the shopping basket of customers etc. Specifically, one of the converging results indicated that consumers with lower income prefer EDLP, whereas consumers with higher income prefer Hi–Lo. Therefore EDLP/Hi–Lo retailers should position themselves rather in lower/higher income areas. Furthermore, EDLP/Hi–Lo retailers should think about how to attract the higher/lower income segment.
- 4. *Influence of competitor factors on pricing strategy in retailing*: our literature analysis showed that retailers match their own pricing strategy with their competitor's pricing strategy. According to this result, retailers don't differentiate with regard to pricing strategy. With many retailers having similar pricing strategies in one area, price wars can easily erupt and thus retailer profits will probably diminish drastically. Therefore, retail managers should rethink their competitor-driven choice of pricing strategy. They could rather use factors such as service or assortment to differentiate themselves from their competitors and attract customers.
- 5. Retailer outcomes of pricing strategy in retailing: within the retailer outcomes, we couldn't find converging results. Existing research therefore cannot give clear advice, which pricing strategy is better in terms of sales dollars, sales volume, costs, store traffic or profitability. Lal and Rao (1997) stated that industry profits are higher when retailers choose different pricing strategies, than when stores adopt identical strategies. This supports our argumentation in the previous point.
- 6. *Customer outcomes of pricing strategy in retailing*: similar to the retailer outcomes, also for the customer outcomes, no converging results could be found. Nevertheless, there are interesting results for retail managers. The finding of Boatwright et al. (2004), that EDLP customers are less price sensitive than Hi–Lo customers shows, that through the use of more and more price promotions, customers are educated to become more price sensitive. Retailers should be careful when implementing price promotions and reductions because this could lead to price wars and thus to a decrease in profits for the whole retail industry.

5 Conclusion

This paper gives an overview of the state-of-the-art of research on the topic of pricing strategy in retailing. Based on a detailed analysis and discussion of different definitions of pricing strategy in retailing, a comprehensive review of the relevant conceptual and empirical articles is given. Thereby we first classified the relevant research into conceptual and empirical studies. For the empirical papers, a further allocation of studies about determinants and outcomes of pricing strategy in retailing is carried out. The results of both the conceptual and empirical studies are discussed while presenting main as well as further results. The analysis of the determinants shows that many papers examined the influence of market and consumer factors, retailer factors, competitor factors and manufacturer and brand factors on pricing strategy in retailing. Thereby research mainly addresses the influence of market and consumer factors on pricing strategy in retailing and finds converging results concerning income, family size, size of the shopping basket, population density, shopping frequency, time-constrained consumers versus cherry pickers, price sensitivity, sale proneness, store loyalty and fixed and variable costs and utility. Among the retailer determinants, converging results concerning the influence of store and chain size on pricing strategy are found. Among the competitor determinants, the only but most important converging result found is the influence of competitor pricing strategy on the retailer's pricing strategy. Regarding the manufacturer and brand factors as determinants, no converging results were found. The investigated outcomes of pricing strategy in retailing were grouped into retailer and customer outcomes. We found five studies concerning the retailer outcomes and four studies concerning the customer outcomes of pricing strategy. No converging results for both types of outcomes could be asserted. On the basis of the analyzed literature, fruitful avenues for future research as well as implications for managerial action were presented and prioritized. Thereby it became clear that the topic of pricing strategy in retailing contains many unanswered research questions: how can pricing strategies in retailing be adequately measured in order to represent the complex circumstances in retailing? How does pricing strategy influence customer- and retailer-related outcome variables? What influence on price image do certain pricing strategies have? Do certain pricing strategies differ in terms of short-term versus long-term profitability? What are important determinants of pricing strategy in retailing? Do retailers that operate in multiple channels pursue different pricing strategies in the different channels? Future research should try to give answers to these and many other interesting research questions. Besides the theory, our review also presents several implications for managerial action. Retail firms should define a clear pricing strategy in order to create a clear positioning for the customer. Furthermore, retailers should be aware of the chances and risks connected with a change in pricing strategy. Moreover, retail managers can use the results to determine, how to take into account certain determinants and outcomes of pricing strategy in retailing.

References

Ahlert D, Kenning P (2007) Handelsmarketing. Springer, Heidelberg

- Ailawadi KL, Beauchamp JP, Donthu N, Gauri DK, Shankar V (2009) Communication and promotion decisions in retailing: a review and directions for future research. J Retail 85(1):42–55
- Bailey AA (2008) Evaluating consumer response to EDLPs. J Retail Consum Serv 15(3):211-223
- Barth K, Hartmann M, Schröder H (2007) Betriebswirtschaftslehre des Handels, 6th edn. Gabler, Wiesbaden
- Bell DR, Lattin JM (1998) Shopping behavior and consumer preference for store price format: why "large basket" shoppers prefer EDLP. Mark Sci 17(1):66–88
- Bell DR, Ho T-H, Tang CS (1998) Determining where to shop: fixed and variable costs of shopping. J Mark Res 35(3):352–369
- Berekoven L (1995) Erfolgreiches Einzelhandelsmarketing, 2nd edn. Beck, München
- Boatwright P, Dhar S, Rossi PE (2004) The role of retail competition, demographics and account retail strategy as drivers of promotional sensitivity. Quant Mark Econ 2(2):169–190
- Bolton RN, Shankar V (2003) An empirically derived taxonomy of retailer pricing and promotion strategies. J Retail 79(4):213-224
- Bolton RN, Shankar V, Montoya DY (2007) Recent trends and emerging practices in retailer pricing. In: Krafft M, Mantrala MK (eds) Retailing in the 21st century: current and future trends. Springer, Berlin, pp 255–269
- Bolton RN, Shankar V, Montoya DY (2010) Recent trends and emerging practices in retailer pricing. In: Krafft M, Mantrala MK (eds) Retailing in the 21st century: current and future trends, 2nd edn. Springer, Berlin, pp 301–318
- Cataluna FJR, Franco MJS, Ramos AFV (2005) Are hypermarket prices different from discount store prices? J Product Brand Manag 14(4):330–337
- Dhar SK, Hoch SJ (1997) Why store brand penetration varies by retailer. Mark Sci 16(3):208-227
- Diller H (2008) Preispolitik. 4. Aufl. Kohlhammer, Stuttgart
- Ellickson PB, Misra S (2008) Supermarket pricing strategies. Mark Sci 27(5):811-828
- Gauri DK, Trivedi M, Grewal D (2008) Understanding the determinants of retail strategy: an empirical analysis. J Retail 84(3):256–267
- Gauri D, Janakiraman R, Kalayanam K, Kannan PK, Ratchford B, Song R, Tolerico S (2010) Strategic online and offline retail pricing: a review and research agenda. J Interact Mark 24(2):138–154
- Grewal D, Levy M (2007) Retailing research: past, present, and future. J Retail 83(4):447-464
- Hoch SJ, Drèze X, Purk ME (1994) EDLP, Hi-Lo, and margin arithmetic. J Mark 58(4):16-27
- Kocas C, Bohlmann JD (2008) Segmented switchers and retailer pricing strategies. J Mark 72(3):124-142
- Kopalle P, Biswas D, Chintagunta PK, Fan J, Pauwels K, Ratchford BT, Sills JA (2009) Retailer pricing and competitive effects. J Retail 85(1):56–70
- Lal R, Rao R (1997) Supermarket competition: the case of every day low pricing. Mark Sci 16(1):60-80
- Lattin JM, Ortmeyer G (1991) A theoretical rationale for everyday low pricing by grocery retailers. Research paper 1144, Stanford University, Stanford
- Levy M, Grewal D, Kopalle PK, Hess JD (2004) Emerging trends in retail pricing practice: implications for research. J Retail 80(3):13–21
- Liebmann H-P, Zentes J, Swoboda B (2008) Handelsmanagement, 2nd edn. Vahlen, München
- Monroe KB (2003) Pricing: making profitable decisions, 3rd edn. McGraw-Hill, New York
- Mulhern FJ, Leone RP (1990) Retail promotional advertising. J Bus Res 21(3):179-194
- Nagle TT, Hogan JE, Zale J (2011) The strategy and tactics of pricing, 5th edn. Pearson, New Jersey
- Neslin SA, Shoemaker RW (1994) The relationship between retail EDLP pricing and repeat purchasing. Working paper
- Nijs VR, Srinivasan S, Pauwels K (2007) Retail-price drivers and retailer profits. Mark Sci 26(4):473-487
- Nyström H, Tamsons H, Thams R (1975) An experiment in price generalization and discrimination. J Mark Res 12(2):177–181
- Ortmeyer G, Quelch JA, Salmon W (1991) Restoring credibility to retail pricing. Sloan Manag Rev 33(1):55–66
- Pechtl H (2004) Profiling intrinsic deal proneness for HILO and EDLP price promotion strategies. J Retail Consum Serv 11(4):223–233
- Popkowski Leszczyc PTL, Sinha A, Timmermans HJP (2000) Consumer store choice dynamics: an analysis of the competitive market structure for grocery stores. J Retail 73(3):323–345

- Popkowski Leszczyc PTL, Sinha A, Sahgal A (2004) The effect of multi-purpose shopping on pricing and location strategy for grocery stores. J Retail 80(2):85–99
- Rao VR (1984) Pricing research in marketing: the state of the art. J Bus 57(1):39-60
- Rao VR, Kartono B (2009) Pricing objectives and strategies: a cross-country survey. In: Rao VR (ed) Handbook of pricing research in marketing. Elgar, Cheltenham, pp 9–36
- Scheuch F (2007) Marketing, 6th edn. Vahlen, München
- Shankar V, Bolton RN (2004) An empirical analysis of determinants of retailer pricing strategy. J Retail 23(1):28–49 (In: Diller H, Herrmann A (Hrsg) Handbuch Preispolitik)
- Shankar V, Krishnamurthi L (1996) Relating price sensitivity to retailer promotional variables and pricing policy: an empirical analysis. J Retail 72(3):249–272
- Simon H, Fassnacht M (2009) Preismanagement, 3. Aufl, Gabler
- Suri R, Manchanda RV, Kohli CS (2000) Brand evaluations: a comparison of fixed price and discounted price offers. J Product Brand Manag 9(3):193–206
- Suri R, Manchanda RV, Kohli CS (2002) Comparing fixed price and discounted price strategies: the role of affect on evaluations. J Product Brand Manag 11(3):160–173
- Tang CS, Bell DR, Ho T-H (2001) Store choice and shopping behavior: how price format works. Calif Manag Rev 43(2):56–74
- Tsiros M, Hardesy DM (2010) Ending a price promotion: retracting it in one step or phasing it out gradually. J Mark 74(1):49-64
- Voss GB, Seiders K (2003) Exploring the effect of retail sector and firm characteristics on retail price promotion strategy. J Retail 79(1):37–52
- Wiltinger K (1998) Preismanagement in der unternehmerischen praxis: probleme der organisatorischen implementierung. Gabler, Wiesbaden