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Comparative Effect of Promotions (Discounts, 1+1, Coupons, Gifts) on Sales and Brand Margins in Different Retail Formats (Supermarket, Discounter, E-Commerce)

Ihor Obshta

Sales Representative, Kyiv, Ukraine.

Abstract

The study is focused on the systematic identification of how sales promotion instruments—price discounts, buy-one-get-one-free promo mechanics (BOGO/1+1), coupon programs, and gift-with-purchase offers—affect sales volume and the key financial indicators of brands. A substantial emphasis is placed on differences in the resulting effects depending on the retail format: supermarkets, hard discounters, and e-commerce channels. The empirical base pertains to the period of accelerated retail restructuring in 2020–2024 and also includes forecast estimates for 2025, taking into account the expanding application of artificial intelligence and the industry's shift toward hyper-personalized communications and offers. Within the framework of the work, the categories of incremental revenue and margin erosion are refined and decomposed into components, which makes it possible to separate the uplift truly generated by promotional activity from demand redistribution effects and profitability losses due to price pressure. At the same time, psychological mechanisms determining consumer perceptions of different promo types are examined: features of benefit evaluation under a direct price reduction, the specificity of reactions to an additional conditionally free unit of a product, the influence of coupons on the feeling of controlled savings, as well as the role of a gift as a non-monetary enhancer of value and purchase motivation. The obtained results indicate the heterogeneity of the impact of promotional instruments across channels: the digital environment provides the most pronounced sales growth for specific SKUs due to precise targeting and high controllability of contact, whereas in supermarkets omnichannel approaches more often generate a more noticeable synergy at the category level due to cross-effects, joint consumption, and basket expansion. Additionally, the fundamental significance of shifting the focus of effectiveness measurement from standard advertising metrics, including ROAS, to the assessment of incrementality, including iROAS, is identified, since it is precisely this analytical logic that enables a more accurate alignment of short-term sales growth with the long-term preservation of brand margins.

Keywords: *Retail Marketing, Sales Promotion, Brand Margin, Discounters, E-Commerce, Incremental ROI, Price Image, BOGO, Artificial Intelligence In Retail, Consumer Behavior.*

INTRODUCTION

Global retail trade in the middle of the current decade is undergoing a phase of profound reconfiguration of fundamental growth models and competitive positioning. According to forecast estimates, by the end of 2025 the aggregate volume of global sales may reach approximately USD 30 trillion, with e-commerce accounting for about one quarter of this magnitude, reflecting a sharp strengthening of the role of the online channel compared with a level of around 15% in 2020 [1]. At the same time, a cooling of market expansion rates after the post-pandemic acceleration is observed, along with intensified macroeconomic constraints, including inflationary pressure and the growth of trade frictions, which forces retailers and manufacturers to reconsider the architecture of demand-stimulation instruments and the principles of managing price competition [2].

The issue of the effectiveness of promotional activities as a key element of commercial policy becomes particularly acute. Mass discounting practices, long perceived as a universal driver of traffic and turnover, show signs of declining marginal effectiveness and create risks of long-term profitability degradation. In 2024, a substantial share of retail-sector executives—approximately 80%—identified

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price wars among the leading threats to the sustainability of financial results[4]. Additional pressure is created by the transformation of consumer behavior: in 2025, 56% of shoppers prioritize low price over loyalty to a specific brand [4]. Under these conditions, promotional instruments acquire the status not merely of a lever for short-term sales growth, but of a mechanism that simultaneously affects the retailer's price image and the brand's ability to preserve margins under high price sensitivity of demand [3, 5]

Adaptive strategies vary substantially depending on the retail format. Supermarkets are forced to balance between maintaining market share and protecting profitability amid the expansion of hard discounters, including Aldi and Lidl, which build a price advantage at the level of 30–40% due to operational efficiency and a high share of private labels [6]. In parallel, e-commerce is rapidly shifting toward a hyper-personalization model: the use of artificial-intelligence-based tools makes it possible to increase conversion by 20–30%, strengthening the precision of impact on demand and the controllability of promotional terms at the level of specific products and audience segments [1].

The aim of the study is to compare the effectiveness of different types of promotional campaigns in terms of their impact on sales volume and brand margin in three key retail formats. Against the background that 71% of advertisers consider incrementality—the net sales uplift that would not have arisen in the absence of the campaign—as a priority KPI, an in-depth understanding of the operating mechanics of each instrument becomes a critical condition for a brand's competitiveness and the sustainability of its financial model.

The author's hypothesis is based on the assumption that the same promotional instrument yields fundamentally different magnitudes of incremental sales and degrees of margin erosion depending on the retail format (in e-commerce the effect is stronger due to targeting and algorithmic visibility, whereas in discounters it is weaker due to EDLP and the dominance of private labels), therefore evaluation by iROAS/NPI will be qualitatively more accurate than evaluation by ROAS/turnover.

The scientific novelty consists in the fact that the study proposes a unified causal framework for comparing promotional mechanics across three retail formats, which simultaneously decomposes the effect into incrementality/cannibalization/margin erosion; links the outcome to behavioral mechanisms of perceived benefit; and accounts for the 2025 transition to AI-managed microtargeting and algorithmic visibility effects in e-commerce.

MATERIALS AND METHODS

The methodological construct of the study is based on the integration of heterogeneous information arrays, which makes it possible to form a comprehensive view of the dynamics of promotional effectiveness. The empirical framework is formed through the combination of three groups of sources. First, macroeconomic indicators and specialized industry reviews are used, including statistics from the U.S. Census Bureau, Deloitte's 2025 US Retail Industry Outlook materials, as well as analytical publications by McKinsey, Gartner, and NielsenIQ [1]. Second, a targeted analysis of the academic body of work from the last three years was conducted, published in Journal of Retailing, Management Science, and International Journal of Retail & Distribution Management, with a focus on omnichannel practices, mechanisms of margin erosion, and models of consumer behavior [11]. Third, corporate cases and retail-media data are used, reflecting the effectiveness of advertising and promotional instruments on the platforms Amazon, Walmart, Ulta, and Sephora, as well as the results of field experiments implemented with the participation of large grocery chains [8].

The assessment of the financial effectiveness of promotional activities relies on a set of complementary computational approaches. A central place is occupied by the incremental ROI (iROAS) model, intended to separate sales driven by marketing impact from the organic component of demand. The computational logic is based on comparing the results of a test sample exposed to a promotional stimulus with a control group excluded from exposure, which ensures the identification of a causal effect [8]. The second element of the methodology is represented by cannibalization analysis, assessing the degree of substitution: an increase in sales of the promoted SKU may be accompanied by a decrease in sales of other items of the same brand or category sold at full price. Formally, the cannibalization coefficient is expressed as the ratio of the lost sales volume of existing SKUs to the sales volume of the new or promoted product [16]. The final block is the assessment of the net impact on profit, defined as the difference between the marginal contribution of incremental sales and the total margin losses arising as a consequence of cannibalization and discounting of the main sales volume [16].

The subject–object framework of the study covers three key retail formats. The first includes supermarkets, characterized by a broad assortment and the use of a High-Low pricing strategy, in which regular prices are complemented by periodic promotional reductions. The second format is represented by discounters with a limited assortment matrix, a high share of private labels, and pronounced price leadership as a system-forming element of the competitive model. The third group comprises e-commerce—digital channels combining marketplaces and retailers' online stores; they are typically characterized by high price volatility, rapid adjustment of offer conditions, and expanded opportunities for personalization of promotional communications.

RESULTS AND DISCUSSION

The effectiveness of promotional activities is determined not only by the formal design of the mechanic, but also by how the consumer interprets the value of the offer. Empirical data confirm that different types of promotions trigger non-identical cognitive reactions and, as a consequence, lead to differing commercial and reputational effects.

Direct discounts retain the status of the most widespread and rapidly decoded signal of savings, attracting the attention of 93% of shoppers [17]. Their impact is dual in nature. In the short-term horizon, a rapid uplift in sales is observed, especially in digital channels, where the average increase reaches approximately 35%, and for high-demand consumer-pull products may intensify up to 85% [15]. At the same time, regular use of discounts contributes to the weakening of the brand's price image and creates structural prerequisites for margin compression. An additional risk is associated with the semiotics of a deep discount: in the absence of supporting communication, a substantial price reduction may be perceived as a marker of declining quality or a sign of an approaching expiration date [18]. Over a long time series, discounting lowers the reference price in consumers' minds, reinforcing the expectation of the correct price at a lower level and making it more difficult to return to full-price sales without losing market share [19].

Promotions of the buy-one-get-one-free type (BOGO/1+1) demonstrate a stable advantage over nominally equivalent percentage discounts, including 50%. The explanation relies on the theory of relative utility of pricing (RUP): a free unit is perceived as a pure gain, whereas a discount is perceived as a reduction of a loss, which is psychologically weaker in impact at comparable savings [14]. Experimental studies using eye-tracking record longer sustained attention on BOGO offers compared with percentage discounts given the same financial benefit [14]. The strength of consumer preference is also substantial: 66% of Americans choose BOGO among other forms of deals [20]. For the manufacturer, such a mechanic acts as a way to increase actual volume of consumption and accelerate inventory sell-through, but it is accompanied by the risk of stockpiling, when purchasing for future use provokes a sales dip in subsequent periods [21]. From the standpoint of margin, BOGO often turns out to be a comparatively advantageous instrument for the retailer under low variable costs per unit of product. Against this background, the idea of the golden ratio in package pricing is highlighted: profit maximization is achieved at certain ratios of package size and price, which in practical terms is often implemented through multipacks and constructs of the 3 for the price of 2 types [22].

Coupons and promo codes form a different class of incentives due to built-in selectivity: the discount is addressed primarily to those segments for which the price factor is critical, without fully undermining price discipline for less price-sensitive groups. In 2024, coupons acted as a purchase trigger for 80% of users [17]. In the digital environment, a significant financial parameter is the redemption rate: for example, on Amazon it averages around 50% [23]. This means that visually highlighting a product with a coupon marker increases the probability of choice and conversion, whereas the actual provision of the discount occurs only for a portion of transactions. Such a construct makes it possible to maintain more favorable margins compared with automatic discounts that apply to the entire sales volume.

Gifts and other non-monetary incentives are used in situations where it is necessary to strengthen the offer without forming an association with cheapness. Such mechanics, as a rule, are better aligned with the task of preserving brand equity and less often lead to a decrease in the reference price, since value is shifted from monetary savings to additional utility [19]. It is noted that at small benefit sizes, a bonus product is psychologically preferable to a minimal discount, whereas at a substantial level of benefit the preference advantage shifts in favor of a direct discount as the most transparent form of savings [19].

The effectiveness of the listed instruments changes significantly when moving between retail formats, since the decision-making context, assortment structure, price expectations, and the technical capabilities for targeting promotional impact differ (see Table 1).

Table 1. Comparison of retail formats by commercial characteristics (compiled by the author based on [17-19; 23])

Characteristic	Supermarket	Discounter	E-commerce
Pricing strategy	High-Low (promotion dependence)	EDLP (everyday low prices)	Dynamic pricing
Discount effectiveness	High (especially with catalogs)	Low (prices are already minimal)	Critical (affects ranking algorithms)
Private label share	Medium (20-30%)	High (up to 90%)	Growing (algorithmic promotion)
Target KPI	Traffic and category basket value	Operational efficiency	Incremental ROI and NTB sales

To synthesize the empirical magnitudes reported across sources and link them to channel-specific economics, Table 2 summarizes the expected sales uplift, margin implications, and the most appropriate effectiveness metrics for each promotion mechanic by retail format.

Table 2. Channel-specific effects of key promotion mechanics on sales uplift and brand margin (compiled by the author based on [8; 14–15; 17; 23–25; 28–30])

Promotion mechanic	Supermarket (High–Low)	Discounter (EDLP, high PL)	E-commerce (algorithmic visibility)	Margin / profitability implication	Best-fit KPI to report
Direct discount	Strong short-term uplift when supported by media; 15% cut → ~11% sales uplift; flyer alone ~8%; combined → ~52%(synergy).	Typically weaker incremental effect because base prices already low; brand discounts struggle vs private label value proposition.	Often high SKU-level response; average uplift around ~35% and can reach ~85% for high-demand items.	Highest risk of reference price erosion and broad-based margin compression; may turn unprofitable online once fulfillment/returns are included.	iROAS + NPI, plus elasticity / depth-response curve.
BOGO / 1+1	High consumer attractiveness; boosts volume and basket, but can create post-promo dip due to stockpiling.	Limited strategic role for national brands; may be constrained by EDLP positioning and private-label dominance.	Works well for conversion/volume, but profitability depends on shipping economics and repeat/stockpiling dynamics.	Often "softer" on price image than deep % discounts, but can inflate volume with lower contribution per unitand induce intertemporal substitution.	Incremental units + NPI, post-promo baseline tracking (demand dip).
Coupons / promo codes	Selective savings; can be layered onto loyalty/CRM to protect price discipline for less sensitive shoppers.	Can be used tactically, but overall incremental headroom is limited in EDLP; operational simplicity often preferred.	High visibility effect (coupon badge); redemption is partial (e.g., ~50% average cited for Amazon), improving margin vs blanket discounts.	Better margin control due to self-selection and non-universal redemption; still requires incrementality checks to avoid subsidizing organic buyers.	iROAS, redemption rate, NTB (new-to-brand) share.
Gift-with-purchase	Useful to add value without "cheapening"; supports brand equity and can expand basket via complementarity.	Less aligned with discounter model (simplicity, price leadership), except limited-time specials.	Effective when bundled with personalization and add-to-cart nudges; can improve conversion without explicit price cuts.	Lowest direct reference-price damage; costs shift into COGS/ promo budget; ROI depends on gift cost and cannibalization.	NPI, contribution margin after promo cost, repeat rate / retention.

In the supermarket format in 2023–2024, it received empirical confirmation that the effectiveness of price-based stimulation depends substantially on the communication context in which it is implemented: the highest commercial return is provided not by the isolated use of individual levers, but by their complementary combination. Field experiments in grocery retail demonstrate that a 15% price reduction in itself is accompanied by an 11% increase in sales, whereas the use of a promotional catalog (flyers) alone without a price change yields an uplift of about 8%. When both instruments are activated jointly, the sales increase reaches 52%, that is, it noticeably exceeds the simple sum of autonomous effects, indicating pronounced synergy [24]. Importantly, in supermarkets the strength of such interaction manifests itself 250 percentage points more intensively than in discounters [24]. Against the background of accelerated digitalization, the resilience of printed media is also preserved and, in essence, confirmed: in 2024 about half of buyers continued to prefer paper promo leaflets [25]. The discontinuation of printed catalogs correlates with a decline in the frequency of trips to the store and a reduction in total household spending in this chain, which indicates the role of offline communications as a driver not only of product choice, but also of the very probability of a visit [25].

The environment of hard discounters (Aldi, Lidl) forms a different set of constraints for branded promotional mechanics, since the competitive model of such chains relies on structurally low margins and the ability to keep prices 30–40% below supermarket levels due to operational efficiency and the dominance of private labels [6]. The entry of a discounter into a local market is accompanied by a reduction in the margins of incumbent retailers by an average of 7.3%, which reflects the scale of redistribution of price pressure across the entire competitive system [7]. For national brands, an additional barrier is competition with private labels, which are not only cheaper but are also increasingly perceived as comparable in quality, as a result of which direct discounting of branded SKUs loses differentiating power. Within discounters, promotional activity often shifts toward weekly special offers in non-food categories (the so-called middle aisle), creating a treasure-hunt effect and supporting impulse traffic; however, such a construct is weakly converted into long-term strengthening of the margins of grocery brands [6, 10].

In e-commerce, promotional campaigns acquire a distinctly algorithmic nature, since they affect not only the final price, but also ranking, visibility, and behavioral signals interpreted by the platform. On Amazon, launching a weekly Best Deal can increase revenue by 10–20% and simultaneously improve the product's Sales Rank, forming an inertial effect that persists after the end of the promotional period.23 At the same time, the online channel is where the problem of illusory sales manifests itself most acutely, when a significant share of transactions attributed to advertising and promotions in fact pertains to organic demand and is only redistributed among touchpoints. Illustrative is the case of a cosmetics brand, where the iROAS value differs substantially across platforms: for Amazon, iROAS 2.8x is recorded, which is interpreted as high incrementality and a better ability to attract new buyers; on Ulta the indicator is 1.2x, corresponding to moderate effectiveness; on Sephora it is 0.7x, which indicates low incrementality and the dominance of a situation in which the discount is received by those who would have made the purchase even without it [8, 12]. Such divergence objectively stimulates the reallocation of budgets in favor of platforms that provide higher net sales uplift, and in general reflects the industry shift toward causal metrics: by 2025, 71% of advertisers identify incrementality as the most important KPI [8].

The financial sustainability of promotional strategies is limited by margin vulnerability, which in grocery retail is a critical parameter: in 2024, average net profit decreased to 1.7%, forming an extremely narrow corridor of error in assessing demand elasticity and choosing the depth of the stimulus [27]. Under these conditions, the risk of losses often arises not at the level of visible sales uplift, but through hidden mechanisms of sales redistribution within the brand and the category. Cannibalization manifests itself in that the growth of a specific SKU is ensured by the partial displacement of other items of the same manufacturer; empirically, cases are described in which up to 40% of the sales spike during flash sales was explained by cannibalization of the brand's high-margin products [28]. To formalize the effect, the Net Profit Impact (NPI) model is used, defined as the difference between the marginal contribution of incremental sales and profit losses from cannibalization. It is indicative that with a cannibalization coefficient of about 15% and a margin of 25%, the launch of a new store or a new SKU may retain a positive NPI value; however, the actual benefit turns out to be substantially lower than that demonstrated by raw sales statistics without adjustments [13, 16].

A specific risk of e-commerce is associated with the fact that online a significant part of the functions that in a physical store are performed by the buyer are transformed into direct costs of the retailer or the brand. In offline retail, gross profit in a simplified form is reduced to the difference between price and cost of goods sold (COGS), whereas online, to COGS are added costs for picking, packaging, last mile, and returns processing, which changes the economics of each transaction: gross profit = price − (COGS + picking + packaging + last mile + returns) [29]. Under deep discounting and a small average order value, such additional components can shift a sale into negative margin. At the same time, in 2024 for e-commerce average gross margins of about 44.88% were recorded, yet net profit continued to experience pressure due to customer acquisition cost and logistics expenses, which underscores the need to evaluate promotions not only by gross, but also by full unit-economics metrics [26, 30].

By 2025, a transition is observed from mass promotional approaches to a micro logic of demand management, where the key driver of effectiveness is artificial intelligence technologies. At the level of market expectations, 71% of retail executives forecast active use of AI by consumers to search for the best prices, which increases the transparency of price competition and raises requirements for the precision of offers [4]. In response, retailers implement their own AI tools: the use of GenAI-based chatbots during the Black Friday 2024 period was associated with a 15% increase in conversion due to personalized recommendations and the prompt delivery of discount offers at the moment of decision-making [4]. The technological contour is complemented by dynamic pricing aimed at minimizing losses and increasing resilience: the use of Gradient Boosting algorithms for automatic price adjustment for perishable goods, taking into account remaining shelf life, inventory levels, and current demand, makes it possible to protect margins, for example by selling the product with a 20% discount instead of subsequent full write-off, and simultaneously reduce food waste.31 In parallel, the role of retail superapps is strengthening as an integration platform for interaction, combining payments, loyalty programs, personalized promotional push notifications, and in-store navigation; according to Deloitte, 7 out of 10 executives plan to implement AI capabilities for hyper-personalization of the experience through such applications already in the current year [9].

The development outlook for sales promotion is increasingly determined by the intersection of data and behavioral economics, since technologization strengthens not only the effectiveness of influence, but also the tension around trust: by 2025, 69% of executives note an increase in sensitivity and conflict associated with technology implementation [4]. The shift in consumer priorities also changes the requirements for promotional design: 80% of experts forecast a strengthening of the preference for spending on experiences compared with goods, which in fact requires an event-based reconfiguration of promotional campaigns [4]. In this logic, gamification (prize draws, interactive mechanics such as spin the wheel) and offers embedded in social networks (Social Commerce) demonstrate conversion 3 times higher than traditional websites, which indicates the value of engagement as an independent component of the commercial outcome [1]. Finally, the influence of values-based choice is increasing: 55% of shoppers report prioritizing environmentally friendly brands, and promotional initiatives integrated into

the sustainable development agenda (for example, a discount for returning old packaging or a contribution to tree planting with a purchase) are associated with a 30% increase in loyalty [1]. Such a shift creates for brands an opportunity to move away from direct dumping toward value positioning, reducing margin pressure while preserving the stimulus function of promotions.

CONCLUSION

The comparison of promotional practices in supermarkets, discounters, and e-commerce for 2020–2025 makes it possible to identify a set of fundamental conclusions that have direct relevance for the strategic management of brands.

First, the phase of indiscriminate mass discounting has in fact exhausted its potential. Under structurally low retail profitability (1.7% net profit) and heightened price sensitivity of shoppers, the transition to incrementality management becomes key. Replacing the traditional ROAS with iROAS constitutes a necessary analytical condition that makes it possible to distinguish channels and activities that generate new demand from situations where promotion merely finances purchases by an audience with a high probability of conversion even without stimulation.

Second, the effectiveness of promotional instruments is determined by the logic of the retail format, which sets the boundaries for mechanics, frequency, and the role of communication support. In supermarkets, the highest return is achieved by omnichannel combinations of a price stimulus and media support, including digital and print media, capable of generating sales uplift above 50%. In discounters, the priority shifts toward operational efficiency and offer differentiation, since direct price rivalry with private labels is embedded in a structure that is a priori unfavorable for brands. In e-commerce, decisive factors are algorithmic visibility effects and instruments operating through the behavioral and technical mechanisms of platforms, including coupons with their specific features of perception and redemption.

Third, BOGO/1+1 retains leadership as the most psychologically attractive deal format: it ensures pronounced attention and a substantial sales volume with a more controllable impact on perceived quality compared with deep percentage discounts. At the same time, the application of this mechanic requires increased caution in categories of perishable goods due to the likelihood of creating excessive inventories among consumers and the subsequent intertemporal demand dip.

Finally, the technological contour of 2025—artificial intelligence, dynamic pricing, and retail superapps—forms a toolkit of precise stimulation, enabling a shift from mass approaches to microtargeted scenarios. Such reorientation reduces the risks of cannibalization and margin erosion, transforming promotion from a forced compromise into a controllable lever of profitability. The priority challenge in the near-term perspective is maintaining a balance between intensive sales stimulation and preserving trust in brand value as a sustainable asset.

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