

Management of the rise in raw material prices in supermarkets

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ABSTRACT: This article examines the impact of rising commodity prices on the retail sector, highlighting their repercussions on supply costs, profitability, pricing, and customer satisfaction. It identifies the economic, geopolitical, and environmental factors driving these increases, as well as their effects on margins, inventory management, competitiveness, and supplier relationships. Faced with these constraints, the study presents several adaptation strategies, including supply chain optimization, source diversification, contract negotiation, assortment management, elasticity-based pricing policies, and cost-reduction-oriented innovation. The article concludes that only an integrated and flexible approach enables supermarkets to strengthen their resilience in a context marked by persistent commodity volatility.

Keywords: Management , Commodity prices, Retail, Cost management, Supply chain, Adaptation strategies

1. INTRODUCTION

The rise in raw material prices is a major challenge for the retail sector, directly impacting profitability, competitiveness and consumer satisfaction. Several economic, geopolitical and environmental factors amplify this trend, making it essential to understand the underlying mechanisms in depth. Increased market volatility, fuelled by geopolitical tensions, currency fluctuations, as well as supply and sustainability issues, is leading to significant instability in pricing (Paché & Rouquet, 2025). In addition, widespread inflation and the energy crisis are contributing to an upward increase in the cost of essential raw materials, particularly in the agricultural, energy and industrial sectors. These developments require retailers to adopt appropriate strategies to mitigate their effects, while maintaining a balance between competitiveness and ethical responsibility. The dynamic nature of this context requires constant monitoring, rapid adaptability, and rigorous management of resources and business relationships (Heyer & Timbeau, 2022). Understanding the fundamental determinants of this increase is therefore an essential preliminary step in the development of effective solutions, combining operational optimization, strategic negotiation and innovation to preserve the sustainability of economic models in the face of this volatile situation.

2. THEORETICAL FRAMEWORK

The theoretical framework constituting this study is based on several economic and managerial foundations that make it possible to effectively analyze commodity price fluctuations. First, the theory of supply and demand serves as a pivot, highlighting that an imbalance between these two levers directly influences price dynamics. The scarcity or abundance of certain resources thus impacts their market cost, consequently affecting the entire value chain of mass distribution (Schiff, 2025).

Second, the concept of transaction costs and market regime sheds light on the structuring of the commodity market, marked by information asymmetries and monopolies or oligopolies, which can exacerbate price volatility. Contract theory and negotiation play a critical role in supplier relationship management, incorporating hedging and risk management strategies related to cost fluctuations (Buisson-Fenet & Navarro, 2023). In addition, value chain theory helps to identify levers for efficiency and optimization throughout the procurement process, in order to minimize the impact of price variations.

In addition, price elasticity models help to anticipate the effect of tariff adjustments on demand, facilitating the definition of appropriate tariff strategies to preserve competitiveness while controlling the margin. The theory of open innovation and reduction costs also offers avenues for reducing production and supply costs, integrating technological or organizational innovations. Theoretical approaches converge towards a holistic understanding of the phenomena, making it possible to develop adaptive strategies to deal with the volatility of raw materials, while respecting the regulatory and ethical constraints of the sector (Bakkali & Elmqaddem, 2023).

3. DRIVERS OF RISING COMMODITY PRICES

Several determining factors contribute to the rise in raw material prices, impacting market dynamics and mass distribution. Among them, globalization plays a major role in increasing competition for access to resources, exacerbating supply-side pressures and driving up costs. Rapid economic growth in some developing countries is leading to increased demand, especially for strategic raw materials such as grains, energy or metals, which is destabilizing the balance between supply and demand. At the same time, climatic and environmental disruptions, such as droughts, floods or storms, affect agricultural and mining production, reducing the availability of resources and causing inflation in their prices (Badiel, 2023).

Geopolitical issues, including tensions or conflicts in resource-rich regions, can also limit access to raw materials or cause instability in markets. Price volatility is also accentuated by currency fluctuations, particularly when the national currency depreciates against the dollar or other reference currencies, making imports more expensive. Financial speculation plays a significant role, amplifying price movements in a context of deregulated markets. The combination of these factors is transforming price dynamics, forcing retailers to anticipate and adapt their strategies to limit the impact of these increases on their margins and selling prices (Martin et al., 2025).

4. IMPACTS ON MASS DISTRIBUTION

The increase in raw material prices has significant repercussions on mass distribution, both economically and strategically. On the financial side, rising purchasing costs are forcing retailers to deal with increased pressure on their profit margins, which can lead to a reconfiguration of commercial strategies. Distributors

are often forced to pass on some of these costs to consumers, thus risking reducing their competitiveness in the face of increased competition and altering customer loyalty (Vignes, 2025).

In addition, this pressure on costs is forcing us to rethink inventory management and product selection, favouring a prioritisation of high-turnover or higher-margin references while avoiding scarcity or stock-outs. The need to ensure continuity of supply in a context of volatile global markets is also pushing retailers to strengthen their relationships with suppliers, negotiating better terms or seeking to diversify their sources of supply to limit their exposure to price volatility.

In addition, faced with this situation, supermarkets often have to innovate to control their operational costs. This includes optimising logistics processes, using technologies for more efficient inventory management and reducing energy costs at points of sale. The increased complexity in setting prices and managing demand elasticity is also becoming a major strategic issue, as it is a question of balancing price visibility while maintaining acceptable profitability. Proactive management of these impacts is essential to preserve the financial stability of retail players in the face of persistent commodity volatility (Lazrak & Malainine, 2024).

5. MANAGEMENT AND ADJUSTMENT STRATEGIES

To cope with the rise in commodity prices, retail players must put in place effective management and adjustment strategies. The first step is to optimize the supply chain by strengthening the relationship with suppliers, diversifying supply sources and adopting more efficient logistics practices. This approach reduces transportation and inventory management costs, while anticipating market fluctuations. In addition, negotiation with suppliers is an essential lever for obtaining more favourable conditions, in particular through the contractualization of fixed or flexible prices, or through the implementation of long-term agreements that secure supplies and mitigate the impact of cost increases (Ghoubach & El amine, 2024).

Judicious assortment management also relieves pressure on margins while offering a range that is adapted to demand. This means favouring certain products, adapting the range to maximise turnover while controlling the associated costs. The pricing strategy must be based on a detailed analysis of demand elasticities, in order to adjust prices in order to maintain competitiveness while protecting margins. The implementation of targeted promotional policies or price differentiation help to preserve the attractiveness of points of sale in the face of a volatile economic situation.

Innovation is a key lever for reducing costs in the long term. The integration of new technologies, the improvement of internal processes, as well as the search for alternative or sustainable solutions, help to mitigate the impact of price increases. All of these strategies require constant monitoring of the market, a capacity for rapid adaptation, as well as proactive management of all economic levers. Their coordinated deployment helps to maintain the economic resilience of the players while ensuring a balanced relationship with suppliers and consumers.

5.1. Supply chain optimization

Optimizing supply chains is a critical step in mitigating the impact of rising raw material costs. It consists of rethinking and improving the entire logistics process, from the selection of suppliers to the delivery of products to the points of sale. Finding suppliers that are closer geographically or better integrated into a

proximity strategy can significantly reduce transport costs, while improving responsiveness to market fluctuations. In addition, diversifying supply sources helps to limit dependence on a single supplier or a specific region, thus strengthening resilience to disruptions (Emran & Tayebi, 2025).

The integration of advanced technologies such as traceability enabled by blockchain or data analysis (big data) facilitates more accurate supply planning. Dynamic inventory management, using artificial intelligence algorithms, avoids both overstocking and stock-outs, minimizing the loss of margins. Streamlining transportation, by bundling deliveries or optimizing routes, also helps reduce costs and carbon footprint. Particular attention must be paid to collaboration between the actors in the chain, from production to distribution, through real-time information exchanges, promoting rapid adaptation to price variations or logistical constraints. The establishment of strong and sustainable partnerships with suppliers is an additional lever, making it possible to negotiate more favourable pricing conditions in a context marked by market volatility (Ouedraogo, 2024). The optimisation of supply chains appears to be a major strategic lever to cope with the increased pressure of raw material costs, while strengthening the competitiveness and adaptability of mass distribution in the face of current economic challenges.

5.2. Negotiation and supplier relations

Negotiation with suppliers is an essential lever for dealing with the rise in raw material prices. It is based on a strategic approach aimed at establishing a sustainable and balanced partnership, allowing for favourable trading conditions while maintaining product quality and availability. Transparency and clear communication play a crucial role in this process, facilitating mutual understanding of each party's issues and constraints. Negotiation is not limited to the simple discussion of prices: it also includes the adjustment of the volumes ordered, the terms of delivery, as well as the terms and conditions of payment (Savy, 2025).

Traders need to take a proactive stance by relying on accurate and up-to-date data on the commodity market, in order to anticipate fluctuations and trade accordingly. Diversifying sources of supply is also a wise practice, reducing dependence on a single supplier or a specific geographic region. In addition, the establishment of long-term relationships of trust can lead to preferential framework agreements, offering better control of costs in the territory.

At the same time, close collaboration with suppliers promotes joint innovation, for example through the search for alternative solutions or the implementation of cost-cutting programs. Negotiation also becomes an act of strategic alignment, where each party seeks to maximize their profits while minimizing the impact of price changes. Effective management of these relationships can thus represent a significant competitive advantage, allowing the distributor to better control its costs, improve the stability of its supplies and ensure a coherent pricing policy in the face of market volatility.

5.3. Assortment optimization and margin management

Assortment optimization is a key step in maximizing margin while mitigating the impact of rising raw material costs. By re-evaluating the composition of product lines, retailers can prioritize those that offer better value and faster turnover, resulting in increased profitability. Rationalizing SKUs, in particular by reducing the number of low-performing or poorly differentiated items, promotes more efficient inventory management, reduces logistics costs and limits obsolescence (Demarle, 2024).

In addition, margin management is based on a precise analysis of costs and consumer price sensitivity. It is a question of adopting a strategic vision integrating the differentiation of products according to their respective margins, in order to optimize the overall contribution of the portfolio. Segmentation makes it possible to adjust promotions, adjust sales prices in a targeted manner, while maintaining competitiveness. Controlling margins can also involve differentiating between own-brand products, which are often more profitable, and those of national brands, in a situation of sharp rise in raw material prices.

Proactive assortment management is based on constant monitoring of market trends, the implementation of advanced analytical tools, and close collaboration with suppliers to anticipate and pool costs. Diversifying sources of supply and finding alternatives can also help limit the impact of price fluctuations. An integrated assortment optimization and margin management strategy allows retail players to adopt a more resilient posture in the face of raw material volatility, while preserving their competitiveness and profitability (Poitras & Rebolledo, 2024).

5.4. Pricing and elasticity strategies

Pricing strategies play a central role in retail's response to rising raw material costs. It is imperative that price setting takes into account the elasticity of demand, i.e. the sensitivity of consumers to price variations. Too much increase can lead to a significant decrease in sales or even a loss of customers, while a moderate increase, accompanied by transparent communication, can preserve loyalty while partially passing on the increase in costs to consumers. A detailed elasticity analysis allows retailers to adjust their prices strategically. For example, for products with high elasticity, there is limited room for manoeuvre; In such cases, it is better to compensate for the increase through efficiency gains or supplier diversification. Conversely, for products with little elasticity, a price increase may be accepted to cover more of the additional cost. In addition, price segmentation, by modulating prices according to customer segments or regions, also helps to mitigate the negative impact while maximizing margins (Martins, 2025).

Implementing dynamic tactics, such as real-time pricing or differentiated management based on purchasing behavior, helps optimize profitability. Some retailers also incorporate psychological pricing strategies, using specific price thresholds or formats, in order to influence the consumer's perception of value. Transparency and sincerity in the communication on the reasons for price adjustments also strengthen the brand's credibility with its customers, which facilitates the acceptance of increases.

5.5. Innovation and cost reduction

Innovation is a key lever for mitigating the impact of rising raw material costs. By deploying advanced technological solutions, retail players can optimize their internal processes and significantly reduce their expenses. For example, the integration of digital inventory management systems helps minimize waste and improve product turnover, generating substantial savings. In addition, the use of automation of logistics operations and the digitization of supply monitoring help to reduce labor costs and increase responsiveness to market fluctuations. Innovation also extends to the design of alternative or substitute products, making it possible to meet demand while limiting the consumption of expensive or scarce raw materials. Research and development play a strategic role here, by identifying cheaper or more sustainable materials, and by adapting offers to the new expectations of environmentally conscious consumers (LHAMIDI et al.2025).

In addition, partnerships with innovative suppliers or technology start-ups offer the opportunity to access creative solutions, such as the use of recycled materials or the optimization of packaging. These approaches contribute not only to cost control, but also to differentiation on the market, strengthening the competitive position of brands. In addition, organizational innovation, particularly through the redesign of processes and the promotion of a culture of continuous improvement, makes it possible to reduce hidden costs and improve operational flexibility in the face of economic challenges. Regular evaluation of the innovations implemented, combined with a capacity to adapt quickly, becomes a key factor in effectively managing price increases and preserving profitability.

6. MEDIUM-TERM PROJECTIONS AND OUTLOOK

Medium-term projections indicate that the upward trend in commodity prices is expected to continue in a global context marked by geopolitical tensions, increasing demand for certain products and disruptions in supply chains. However, this evolution will not be uniform and could be accompanied by increased volatilities, forcing players to anticipate various scenarios. The transition to renewable energy sources and an increased focus on sustainability could also influence the structuring of costs, by promoting investments in sectors less dependent on traditional raw materials. The digitalization of processes and the adoption of innovative technologies should increase operational efficiency, thus reducing some indirect costs. In addition, the rise of traceability and social responsibility initiatives could increase the pressure on suppliers, in the interest of increased transparency. Beyond immediate strategies, the focus will be on the ability to adapt to markets characterized by increased uncertainty, with particular attention to the flexibility of logistics structures and negotiation capacities. Cooperation between distributors and suppliers is essential to develop sustainable solutions, in particular through long-term agreements or investment in alternative sectors. In summary, managing price increases in a changing context will require a balanced approach combining innovation, strategic resilience and continuous adaptation to regulatory and economic developments, in order to ensure medium-term stability while maintaining competitiveness.

7. CONCLUSION

Effective management of rising commodity prices in retail relies on a deep understanding of the strategic levers available. Optimizing supply chains helps reduce logistics costs and identify sources of diversification to mitigate the impact of price fluctuations. Negotiation with suppliers is also an essential lever, promoting the search for long-term agreements and the improvement of commercial conditions. In addition, the adjustment of assortments and fine margin management help to preserve profitability while offering a range adapted to demand and market prices. Implementing pricing strategies based on elasticity helps balance competitiveness and profitability, including through differentiation and promotion management. Innovation, in particular through cost reduction and the introduction of more efficient processes, plays a key role in controlling expenses. In addition, compliance with the regulatory framework and the integration of ethical issues guarantee responsible management, promoting consumer confidence and the sustainability of operations. Finally, in the face of uncertain development prospects, the diversification of supply sources and strategic monitoring is a major challenge to anticipate future tensions and strengthen the resilience of the sector. The ability to combine these different approaches will allow retail to navigate cycles of fluctuations with enhanced adaptability, ensuring economic stability and customer satisfaction in a constantly changing market environment.

REFERENCES

- Paché, G. & Rouquet, A. (2025). Marchés d'intérêt national: un modèle logistique précurseur de la grande distribution alimentaire. *Entreprises et histoire*.
- Heyer, É & Timbeau, X. (2022). L'économie mondiale sous le (s) choc (s). *Revue de l'OFCE*.
- Schiff, M. (2025). Le commerce peut-il empêcher l'effondrement des ressources naturelles en cas de croissance de la population?. *Revue d'économie du développement*.
- Buisson-Fenet, E. & Navarro, M. (2023). Chapitre 4. Les imperfections de marché.
- Bakkali, W. & Elmqaddem, N. (2023). La gestion des connaissances en innovation ouverte: une revue de littérature. *Journal of Information Sciences*.
- Badiel, A. (2023). Au-delà de la binarité Nord-Sud: La neutralité sociale comme éthique de la marchandise dans la mondialisation. *Cahiers du CRINI*.
- Martin, R., Ravaka, A., & Diny, R. (2025). Instabilité des prix du riz à Madagascar: Analyse économique et stratégies d'adaptation des producteurs. *African Scientific Journal*.
- Vignes, A. (2025). Une crise agricole mais quelle crise?. *Le juste prix des produits agricoles*.
- Lazrak, B. & Malainine, C. (2024). Stabilité Économique et Coopération Internationale: Les Rouages de la Prospérité Mondiale. *Revue Française d'Economie et de Gestion*.
- Ghoubach, S. & El amine, B. (2024). Le rôle de l'optimisation des coûts logistiques à l'amélioration de l'efficacité des opérations de la chaîne d'approvisionnement. *International Journal of Accounting*.
- Emran, s. & tayebe, o. (2025). L'avenir se décide aujourd'hui: pour une stratégie marocaine des minerais critiques et stratégiques. *policy*.
- Ouedraogo, Y. (2024). Les achats à leviers complexes: un changement de paradigme à venir?. *IRBM News*.
- Savy, M. (2025). Les Nouveaux Enjeux de la logistique.
- Demarle, E. (2024). La faisabilité d'une centralisation et une gestion automatisée de stock de Jeunesse du Canton de Genève
- Poitras, C. & Rebolledo, C. (2024). La gestion des achats et de l'approvisionnement.
- Martins, Y. (2025). Tarification de l'électricité dans le secteur résidentiel: selon l'heure ou la puissance?.
- Lhamidi, s., Gouch, a., & Boulitama, O. (2025). Technologies de l'industrie 4.0 et performance logistique: Analyse thématique de la littérature. *International Journal of Accounting Finance Auditing Management and Economics*, 6(9), 462-478.