
Speculative inventories in the food retailing industry: a comment on French practices

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Abstract

Examines the reasons driving French food retailers to build major speculative inventories through forward buying from their suppliers. First analyses the origin of the phenomenon and its strategic basis. Then, using the model of postponement-speculation proposed by Louis Bucklin in the mid-1960s, explains why forward buying does not conflict with a reduction of in-store inventories. Finally, offers comments on the future of speculative inventories in the French context, which is characterized by permanently conflicting relations between manufacturers and distributors. To do so, reference is made to information collected in the course of interviews with the logistics managers of ten of the leading companies in the sector.

Introduction

During the last decade, French grocery companies have adopted a policy of speculative storage aimed at making the most of the promotional offers of manufacturers. This policy consists of forward buying very large quantities of products at a low price with a view to selling them later, usually at a normal price. A survey performed by GEA Consultanta Associata[1] between March 1993 and January 1994, involving 175 European companies thus showed that in France and Germany the inventories in regional distribution centres still accounted for half the inventories existing in the marketing channel (see Figure 1), compared to barely one-third in the UK (with a much smaller overall level).

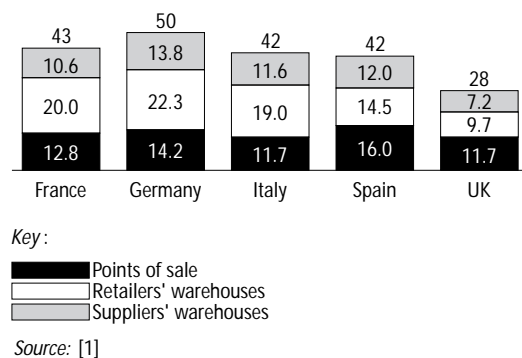
In the USA, the phenomenon also reaches alarming proportions. According to a report by Kurt Salmon Consultants[2], 104 days are now needed for dry grocery products to pass through the supply chain from the manufacturer's packing line to the consumer checkout (75-80 days if perishable products are included). This inefficiency is largely due to the fragmentation of the replenishment process: inventories tend to be "pushed" into retailers' warehouses by forward buying[3].

This article's objective is to demonstrate that speculative inventories, far from being a simple episode, correspond to a major trend in the French retailing industry: feverishly looking for the lowest purchase prices to compensate for the structural inadequacy of the mark up. It remains to be seen if such a trend is now being reversed and under what conditions.

Speculative storage, which is rarely studied in the academic literature, seems to be a significant component of French logistical systems. The very persistence of forward buying practices may endanger the implementation of a management system based on optimizing all logistical operations throughout marketing channels. The partnership between manufacturers and distributors would then be much more difficult to introduce in France than in other European countries, such as the UK.

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Figure 1 Breakdown of inventories in the supply chain (in days) according to GEA Consultantia Associata



The origins of forward buying

It is now commonly accepted that the increased importance of physical distribution in retailers' strategies is explained by the desire to reduce the costs of supplying the points of sale, while increasing the quality of service[4]. The French case appears somewhat different from the standard model.

The logistical costs of products depend on several trade-offs between the classical functions of warehousing, transportation, inventory and administrative support. For instance, a retailer who receives goods in a regional distribution centre, before ensuring the final delivery to the stores, consequently allows his suppliers to make significant savings in transportation, order picking and sales administration. The manufacturers traditionally pass these on to their customers as "quantity discounts".

The major problem for the French retailing industry lies in the fact that, with time, the quantity discounts have acquired critical importance. An in-depth financial analysis has shown that, in France, the fierceness of competition has led to a reduced mark up (in contrast to the UK). To ensure their growth, or even sheer survival, retailing companies have been obliged to look for a substitute income[5]. Quantity discounts are now a major part of this income.

In order to obtain the best prices from their suppliers and also to make significant economies of scale and exclude wholesalers from the marketing channels, the French mass merchandisers adopted a policy of quantity in purchasing as early as the 1970s. In so doing they simply rediscovered – and adapted – a principle established a century earlier by Aristide Boucicaul, the creator of department stores: only a higher business volume can compensate for a lower mark up. This is where some manufacturers, blinded by a short-term perspective, made a

serious error of judgement. Seeing that retailers had become particularly responsive to rebates, they inferred that the quickest way to increase their market share was to grant large discounts selectively on the list prices. With these incentives, they have encouraged behaviour they bitterly regret today.

Rather than regularly ordering a given amount of goods, several mass merchandisers have used the opportunity of promotional offers to review their purchasing policy drastically. Some parts of the orders will now be made only over short periods of the year when goods are offered at an attractive price. Then, before being progressively sold in the stores, the items are stocked into regional distribution centres created *ex nihilo*, rented for the purpose or made available by third-party logistics[6]. In other words, the French mass merchandisers have decided to take advantage of the price fluctuations deliberately initiated by their suppliers. The resulting forward buying is certainly made in anticipation of future needs, but at the most opportune moment, three or four times a year. Such an approach is similar to the speculative practices described in the conventional industrial marketing literature[7].

Building up speculative inventories seems to be a reflection of a specific generic strategy in Porter's[8] sense, i.e. cost leadership, with or without specialization in a market segment. This strategy is the expression of a concern to look for unit costs lower than those of competitors, but with a quality close to the average.

In so far as the consumer is effectively able to discern the true level of prices in the stores, the retailer who wants to be perceived as cheaper than the competitors has two main levers at its disposal: purchasing and logistics[9]. Forward buying of goods benefiting from promotional offers undoubtedly gives an edge over the competition, even if this advantage is sometimes detrimental to the consistency of the product range.

Field survey

This article provides a study of the practices of forward buying in France. To do so, the author used information collected in the course of semi-structured interviews, conducted between July and September 1994 with the logistics managers of ten major food retailers: Carrefour, Casino, Comptoirs Modernes, Cora, Docks de France, Intermarché, Leclerc, Prisunic (Pinault-Printemps), Promodès and Système U[10]. This sample may be considered as representative to the extent that the companies account for a little over

70 per cent of the sales turnover of the whole French retail food trade.

Each interview, lasting two to four hours, dealt in turn with the strategies employed by the company in the last five years, the main stages in installing logistical tools (regional distribution centres, information technologies) and finally with the purchasing policy in the wider sense, obviously with the emphasis on the relative importance of forward buying. These interviews were supplemented by a review of the professional press (*Libre-Service Actualités*, *Points de Vente* and *Logistiques Magazine*).

The field survey identified three relatively typical groups of companies for which speculative inventories represent a more or less important part of the complete stock of goods in their warehouses: companies whose speculative inventories account for more than 40 per cent of the complete stock; companies whose speculative inventories account for 20–40 per cent of the complete stock; and companies whose speculative inventories account for less than 20 per cent of the complete stock.

Table I shows that, although all French retailers use forward buying as a competitive weapon, some favour it more than others. One can conclude that the policy of differentiation through the service provided (e.g. width and depth of the product range, “atmosphere” prevalent in the store) still remains an asset. Two subjects in particular will be dealt with here: the compatibility between speculative inventories and quick response technologies and the trends for change in the phenomenon since the start of the 1990s.

Are speculative inventories and QR incompatible?

It is paradoxical to speak of speculative inventories when, over the past decade, reference has often been made to just-in-time (JIT) – or quick response (QR) – in the retailing industry. At the beginning, JIT was introduced by manufacturing companies concerned with improving their competitiveness through a significant reduction of their inventories, and more generally of any waste

within production processes. After a period of observation, retailers too understood the benefit they could derive from adopting this new approach.

Obviously any inventory has a financial cost and generates a substantial commercial risk. It also tends to monopolize a large storage space. It is consequently better to adjust the reception of goods as closely as possible to the volume of sales.

Theoretical approach

The existence of speculative inventories seems to call into question the underlying logic of QR, or at least to highlight its limitations. How can one speak of QR when the level of goods in stock is so high? It is nevertheless quite possible, but not for all supply chains. As Des Garets [11] has clearly demonstrated, French retailing companies have gradually developed a dual management system depending on the products involved: when the products cannot be stored over long periods (fresh products) and/or when dealing with fast moving lines, companies tend to transit through stockless platforms – this is QR management; on the other hand, when products with a distant sell-by date are offered by the suppliers, with particularly attractive promotions (cleaning products), they are bought in very large quantities and stored – this is forecast planning based on an anticipated demand.

The coexistence of speculative inventories and of QR can also be explained if we examine sequentially the transactions occurring along a marketing channel. Here the value-added chain is composed of two major subsets, the commercial network (stores) and the logistical network. In fact, nothing prevents the simultaneous implementation of distinct policies for both networks: one focused on building speculative inventories with the logistical network, to take the best advantage of price terms, and the other focused on a strict adjustment of the offer to the demand, to reduce the unnecessary storage of items in the commercial network.

This is a well known retailing approach: the model of postponement-speculation developed by Bucklin [12] in the mid-1960s. For the author, who studied the efficient operating conditions of marketing channels, companies are faced with two classical options:

- (1) The *postponement option*, involving delaying as far as possible a set of activities whose purpose is to differentiate the product or the service according to the requirements of the customers. For instance, a manufacturer will perform operations such as pack-

Table I Breakdown of surveyed companies

First group	Second group	Third group
Intermarché	Carrefour	Casino
Leclerc	Docks de France	Comptoirs Modernes
Prisunic	Système U	Cora
Promodès		

aging or labelling, or even the final assembly, solely on the basis of firm orders. As a consequence, he will be able to adjust to the changes in demand quickly.

- (2) The *speculation option*, in which one or several members of a supply chain voluntarily build a stock of raw materials, components or finished goods above the estimated demand. Various material and human resources are thus committed in advance in order to make economies of scale through the production – and later the delivery – of large quantities in one batch.

Empirical evidence

What do we see if we apply the Bucklin model to grocery companies? It seems that the actual strategic choices are an harmonious mixture of both options. With their forward buying, the retailers certainly anticipate the final demand, but they benefit from the promotions offered by the manufacturers (speculation). This does not prevent them from delaying to the utmost the allocation of items to the stores, replenishment from the regional distribution centres being initiated JIT according to the actual level of sales (postponement).

To find out whether this analysis was confirmed in the French context, we asked the logistics managers to tell us what stage in the adoption of electronic data interchange (EDI) their company was currently at. The installation of this information technology in practice seemed to be a good indicator of the existence of QR. However, the model of postponement-speculation would be valid if, and only if, speculative inventories had not impeded the adoption of EDI.

The outcome of our semi-structured interviews and the review of the professional press are that the sample can be divided into three major categories of retailers: the “leaders”, involved in many QR applications for at least three years – Docks de France, Prisunic and Promodès; the “followers” who are gradually arriving: Casino, Intermarché, Leclerc and Système U; and the “backmarkers”, with a somewhat wait-and-see attitude, who are still uncertain of the real value of QR – Carrefour, Comptoirs Modernes and Cora.

By comparing the different positions in the list in Table I, it can be seen that the firms in the third group, with a rather low level of forward buying, are the ones which are hesitant about adopting QR (the only exception being Carrefour). In contrast, the companies in the first and second groups see no contradiction between supplying their outlets on a JIT basis and having a high level

of forward buying. It is moreover interesting to observe that some grocery retailing firms, such as Docks de France and Prisunic, now use both practices – speculative inventories and QR – by using sophisticated software (see below).

However, let us put into perspective the degree to which French retailers are involved in the setting up of EDI networks. For instance, the most advanced company (Promodès) is currently only linked to 150 suppliers out of 1,000 for fresh products and with 50 suppliers out of 2,000 for dry groceries! This is way behind the levels of Tesco and Sainsbury in the UK[3]. The backwardness can be explained by the existence of a competitive market which acts as an inhibitor in the development of vertical collaboration[13].

The Prisunic case

Prisunic, a subsidiary company of the Pinault-Printemps group, operates a set of about 200 variety stores, either directly or by franchising. Purchasing management has always been a problem for successive management teams. The product range remains relatively heterogeneous compared to other outlets such as supermarkets. It is therefore not possible to follow any policy of quantity buying, unless they could join a powerful central purchasing unit. This was done in January 1994 when Prisunic affiliated to the Promodès group.

It is easy to understand why Prisunic is constantly trying to make the best of the available commercial offers. To do so, the company adopted the TOPASE software in April 1992 to gain 0.5 per cent in mark up by making the best use of prices and promotions offered by the suppliers, then by means of forward buying. As a result, speculative inventories represented about 60 per cent of the total inventory at the beginning of 1993.

This does not prevent Prisunic from being a pioneer in applying QR to foodstuffs. Well before mass merchandisers took an interest in the matter, the company operated according to the principle of a daily supply of stores, most of which do not have available storage space other than the display units.

The evolution of forward buying

Many analysts, like Kurt Salmon Consultants[2], today strenuously denounce the harmful influence of speculative inventories on the management of marketing channels. The problem lies in knowing whether this new awareness is already showing concrete results in company strategies.

In other words, are the French food retailers opting for a reduction in forward buying and, if so, at what pace? To answer this question, we will use the information collected during the field survey, especially the part of the interviews dealing with purchasing policy and logistical tools.

Induced effects of speculation on the supply chain

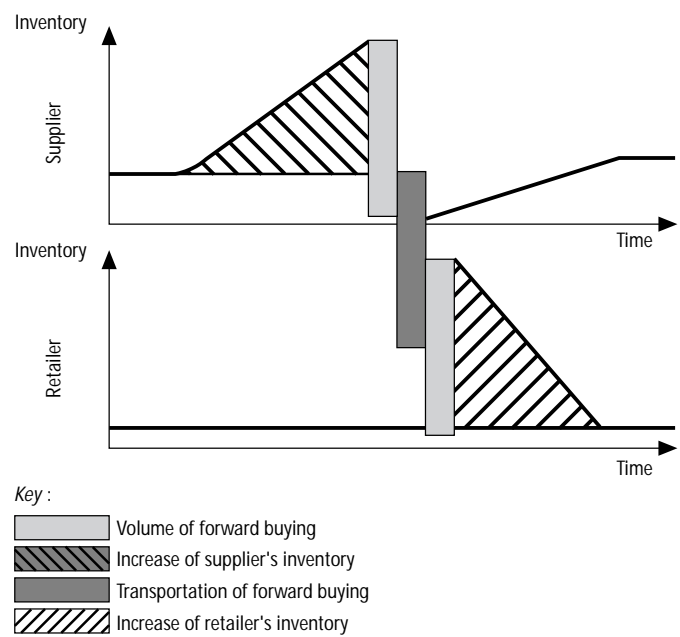
Generally, the impact of speculative inventories on production is dramatic. They create recurring disruptions because the volume of goods in circulation is subjected to very large ups and downs. The reason for such movements is simple. Once a retailer has made a forward purchase, the orders which follow are necessarily smaller than they would have been previously. The manufacturer involved is then likely to rebuild an important inventory of items he will be eager to sell off again when the moment comes, and so on.

To sum up, speculative inventories generate two successive effects, one positive, the other negative. Forward purchases start by whipping up production since the orders book is instantly filled. Then follows a natural phase of deceleration of purchases (if they do not stop altogether!), before going back, eventually, to the initial situation.

What is worse, since all retailers want to benefit from the same promotional offer at the same time, the manufacturer is obliged to produce in advance enough items to satisfy the simultaneous orders (see Figure 2). As a result, a step-up effect introduces sharp and costly cyclical variations in the activity: financially, with the obligation of creating inventories, then resorting to additional storage space, and in human resources, where temporary work, subcontracting and overtime are periodically necessary[14].

Three professors from Harvard Business School have conducted research to quantify the additional costs related to forward buying based on the US example[15]. The speculative inventories of the distribution companies actually represented between 40 and 50 per cent of all inventories for dry groceries, deep-frozen foods, household supplies and personal-care products. The survey showed that these additional costs represent between 1 and 2 per cent of the cost of the items sold by the agricultural and food processing industry. The authors put forward two reasons for this: the creation of excess production capacity and of buffer stocks to deal with an uncertain demand; and the waste of the hours worked by vendors who spend their time studying promotions and their hypothetical impact on sales.

Figure 2 The effects of forward buying according to Woindrich[7]



Source: [14]

This means that building speculative inventories blocks any idea of co-operation between manufacturers and retailers. On the contrary, it maintains an unstable situation which is not very favourable to supply chain management, probably because the parties involved do not really feel united by common interests. Is it possible to envisage further developments in this situation? There is some hope to be found in a number of weak signals.

The present counter-trends: scope and limitations

The field survey showed that six out of the ten companies admitted that they had deliberately set up regional distribution centres for the purposes of forward buying; these included all of those in the first group in Table I, plus Carrefour and Système U. For the others, the strategy was “emergent” in the sense of Mintzberg and Waters[16]. In other words, the existence of a logistical network simply provided the opportunity for purchasing in large quantities.

From this point of view, the case of France is relatively similar to that of Italy where the size of regional distribution centres is defined according to the previously estimated level of forward buying[17]. On the other hand, it is quite different from the British model where the distribution strategy of the retailers is first and foremost part of an optimization and organizational innovation perspective[18].

Nevertheless, the present trend lies rather in a stabilization of the phenomenon, if not in a com-

plete turn-about. Stabilization took place with Casino, Cora, Docks de France and Leclerc. As for turn-about, if reference is made to the extent to which forward buying has been reduced in the last two years, this can be qualified as progressive in the cases of Carrefour, Comptoirs Modernes and Système U and radical for Intermarché (see below), Prisunic and Promodès.

Whereas the average level of speculative inventories represented about 60 per cent of the complete inventories of the French mass merchandisers at the beginning of the 1990s[19], Table I indicates that more than half the companies studied are currently lying below the 40 per cent level. The logistics managers interviewed justify the strategic change with the four following arguments: speculative inventories are not compatible with the generalization of the EDI and disrupt the supply chain, thus opposing any permanent partnership between manufacturers and distributors; in view of the extreme instability of consumer behaviour (less brand loyalty), it seems highly risky to buy significant quantities on speculation; with the improvement in the tools derived from cost accounting, and more particularly since the introduction of the DPP analysis, it has been found that the savings made in purchasing are no greater than the increased logistics costs induced; suppliers now play along with the mass merchandisers, accepting more easily to spread their promotion campaigns over the whole year.

The spreading of promotional offers appears to be the first motive for reducing the level of speculative inventories. In any case, it is the most frequently mentioned factor in our semi-structured interviews. It corresponds, in the author's mind, to a downward levelling in so far as the price conditions have systematically been reviewed downward, sometimes drastically so. Most manufacturers now agree to sell permanently at the lowest price negotiated during previous promotion operations.

This downward levelling is not unique to France, far from it. However, some have been clever enough to take advantage of the situation to improve their productivity. The US company Campbell, for example, grants an identical rebate to all retailers committing themselves to place regular orders. Consequently, it reduced its finished goods inventory by 30 per cent and its manufacturing costs by 9 per cent, while its sales increased by 14 per cent[20].

The multiplication of these encouraging experiments should lead to a redefinition of trading relationships within marketing channels.

They indicate that win-win type strategies are quite feasible, even in a business environment which has long been shaped by a mind-set – a culture? – of conflict. On the other hand, it seems unlikely that speculation will disappear from supply chains. The concern for reducing the number of stock-outs will still lead, and for a long time, to anticipating the final demand, for instance by shipping goods to the regional distribution centres before receiving firm orders[21].

The Intermarché case

Since its creation in 1969, the Intermarché retailing group has adopted a mass merchandiser positioning, and has acquired powerful logistical infrastructures designed to concentrate the transportation of goods intended for the stores. However, the company is mainly known in France for having followed, sometimes excessively, a purchasing policy focused on building enormous speculative inventories – which could represent up to one year's consumption of some products in the stores!

According to the new management team, set up in December 1993, such a policy is no longer relevant. Rather than managing forward buying (the quantity of which has been decreased two-fold between 1989 and 1994) as efficiently as possible, today the trend is to accelerate the turnover of items. In the near future, only two types of inventories should be found in the regional distribution centres: a basic stock, to satisfy the demand of stores during the lead time from manufacturers, and a safety stock, to deal with a longer than planned lead time or with an incomplete delivery. It should be noted that Intermarché has no intention of abandoning forward buying. They will simply build the inventories more judiciously and sparingly. These will be made of "panic buying" products, sometimes experiencing swift rises in price (such as coffee) and will never exceed six months.

Conclusion

For many observers, now is the time for manufacturers and retailers to co-operate rather than compete on the levels of marketing and logistics. The gains to be made from a close collaboration are not negligible: elimination of redundant inventories, shipment consolidation, easier planning of manufacturing activities, etc. It is the whole of the supply chain which should become more efficient.

Unfortunately, this view remains very far from current practice, at least in France. Speculative

inventories still exist, although they are slowly decreasing in number, thus showing that the optimization of all processes from the plants to the stores is not exactly on the agenda. Companies such as Promodès are certainly trying to implement an efficient consumer response, like Wal-Mart in the USA, with the help of sophisticated computer systems. These are but isolated examples, standing against the prevailing dogma adopted by French retailers for more than 20 years. Moreover, the adoption of technologies such as EDI should not lead us to think that forward buying will necessarily diminish. For almost all the companies surveyed, EDI mainly makes it possible to introduce automatic replenishment procedures from the regional distribution centres to the stores. Through these procedures they hope to improve significantly the level of service perceived by consumers[22]. On the other hand, EDI is not systematically used to communicate their sale volumes in real time to the connected suppliers.

All in all, if the French grocery companies are no longer indifferent to a logistical optimization approach, they still watch out for “good purchasing bargains”. As long as this state of mind is present, it seems difficult to imagine that partnership between manufacturers and distributors will catch on and spread rapidly.

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