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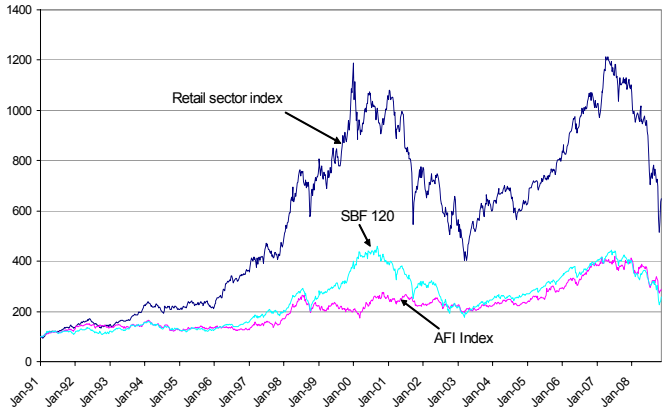
Agri-food industry margins in France

- The price of agricultural commodities rose sharply between 2007 and mid-2008. The downstream impact of this increase on food prices paid by consumers depends on relations between suppliers and supermarket chains, and on their relative bargaining power. In theory, this is determined primarily by the respective degrees of concentration among suppliers and supermarket chains, together with other factors such as product differentiation, regulations, and the dynamic effects of competition within a long-term vertical relationship.

- For several decades now, the relationship between supermarket chains and suppliers has tilted heavily in favour of the former, because of the greater concentration in that sector. Firms in the agri-food industries (AFI) do indeed appear to be less profitable than those in the retail sector in France, but this observation embraces a variety of situations. The performance of SMEs in the AFI sector is deteriorating, and this is partially offset by strong performances by a handful of very large firms. The relative situation of the AFIs overall deteriorated between the middle of the 1990s and 2005, with price variations mainly benefiting supermarket chains. Yet the profitability of the French agri-food sector is in line with the average for the main developed countries, the disparity vis-à-vis the supermarket chains stemming rather from the French supermarket chains' atypical profitability, as witnessed by the profit ratios of the leading retailers and the market capitalisations for the sector.

- The recent reforms have extensively overhauled the regulatory framework, particularly where retailing is concerned. It is not possible, based on currently available data, to measure precisely the effects of this new balance of power on margins in this sector. Nevertheless, stock market trends suggest that the effects of these reforms have begun to make themselves felt since 2006.

Comparative trends in retailing sector and agri-food industries indexes on the Paris stock exchange – base 100 in January 1991



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DGTPE
DIRECTION GÉNÉRALE DU TRÉSOR
ET DE LA POLITIQUE ÉCONOMIQUE

1. In theory, supermarket chains are at an advantage over suppliers, other than the largest of them, and consumers

1.1 The key determinants of the balance of power are ambiguous

1.1.1 Concentration plays a vital role in determining the profit split between upstream and downstream, but its impact on social welfare is ambiguous

Economic models that draw their inspiration from games theory emphasise bargaining power in explaining the profit split between upstream and downstream. The concentration and size of firms at a given level of the market reinforce their bargaining power vis-à-vis another level of the market. The firm that is least economically dependent on the other, i.e. the one with a larger reserve profit (i.e. the profit it can earn in the absence of agreement) reaps a larger share of the profit at the end of the negotiation. It should be borne in mind, however, that these effects may be diminished, or even reversed, by product differentiation effects (see below).

Concentration also has an impact on social welfare, both by diminishing the incentive to reduce prices and by discouraging innovation and the creation of new products.[1] The impact of concentration in retailing is unclear: on the one hand less competition boosts margins and hence the final price, while on the other supermarket chains obtain price reductions from suppliers, part of which are then passed on in the form of lower final prices. This latter mechanism nevertheless assumes that there continues to be real competition among supermarket chains notwithstanding the concentrations.

In addition, the role of central purchasing organisations is ambiguous. At first sight they give supermarket chains an advantage, allowing them to concentrate their buying power and maximise their margins to the detriment of their suppliers and consumers. But the creation of a central purchasing organisation need not automatically benefit supermarket chains. This is because they allow producers to make a credible commitment not to discriminate among the members of the central purchasing organisation. This power to commit strengthens their bargaining power vis-à-vis supermarket chains (in particular, by reducing competition among suppliers).[2] Currently the five largest French central purchasing organisations account for more than 90% of sales of staple products in food super and hypermarkets.

1.1.2 The regulatory framework has long worked to the supermarket chains' advantage, but the recent changes in regulations ought to remedy this imbalance

Restrictions on the opening of retail outlets limit the risks of the arrival of a new player and reinforce the position of existing retailers, through limitations on the availability of shelf space. For example, planning restraints on retail premises in France have long placed strict limits on the ability to open super and hypermarkets, distinctly reducing the threat of the arrival of a competitor, or of a significant expansion of existing players. The position of the retailer vis-à-vis suppliers and consumers is thereby reinforced. Moreover, competition for limited shelf space and the rules governing the setting of prices have led to an increase in the "listing fees", even though these no longer reflect any real service by the retailer to the supplier, representing rather a simple remuneration of scarcity. The recent regulatory changes (with an easing of rules and reforms of the Galland Act since 2004 and of the Raffarin Act since 2008) ought to remedy this.

Further, a producer's market power depends on its influence in setting the prices consumers pay. In that respect, the introduction of price bargaining at the beginning of 2008 ought to limit the power of suppliers.

1.1.3 Differentiation modifies the intensity of competition

Horizontal differentiation reduces the intensity of competition at a given level of the market, and so influences the revenues players can secure from the consumer. Competition is attenuated in a highly differentiated market, and prices charged can be higher, on average.

Differentiation also affects the balance of power between vertical partners, altering the share they can claim of the vertical structure's total profit. This is because the degrees of horizontal differentiation between producers and between retailers affect consumers' attachment to particular brands and stores. For example, if producers are more differentiated, then consumers will be more inclined to change stores than to change brands. In that case it is the suppliers who predominate, which lets them enjoy relatively high margins. Other effects may come into play. For instance a retailer may choose a supplier offering a product that is different from those sold by other supermarket chains purely in order to limit that supplier's power by depriving it of the advantage that comes from having more than one client.[3] In general, the number of products has grown faster than available shelf space, which has increased the relative power of the retailers.[4]

1.1.4 Retailers with dynamic strategies may prefer not to use their market power

A distributor may, for example, have an incentive to keep on ordering from an inefficient supplier merely in order to keep it in business and avoid the risk of later facing reduced supply and stronger bargaining power.[5] Moreover, except in the special case of a "hold up" in connection with specific investments, there is no reason why a competitive supplier should be forced to accept prices below its costs.

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(1) ALLAIN, Marie-Laure, WAELBROECK, Patrick, "La concurrence entre distributeurs favorise-t-elle la variété des produits?" (Does Inter-Vendor Competition Promote Product Variety?"), *Économie et prévision, 2007, no. 178-179 2007/2-3*.

(2) CHAMBOLLE, Claire, MUNIESA, Lucie, RAVON, Marie-Astrid, "Concentration et puissance d'achat" (Horizontal Mergers and Buying Power), *Économie et prévision, 2007, no. 178-179 2007/2-3*.

(3) CHAMBOLLE, Claire, VILLAS-BOAS, Sofia, "Buyer Power through Producer's Differentiation", Laboratoire d'économétrie de l'École polytechnique, 2007, *Cahier no. 2007-12*.

(4) ALLAIN, Marie-Laure, "The Balance of Power Between Producers and Retailers: a differentiation Model", *Recherches économiques de Louvain (2002), 68 (3), 359-370*.

(5) BERGÈS-SENNOU, Fabian, CHAMBOLLE, Claire, "The reciprocal producers' incentives to prey and the retailer's buying power", INRA, 2005 *Cahier de recherche 2005-08*.

1.2 Generally speaking, supermarket chains appear to be at an advantage relative to both suppliers and consumers

Super and hypermarkets emerged largely as a response, by pooling purchases, to the concentration of the agri-food industries and consumer staples (illustrating Galbraith's theory of countervailing power, whereby mergers among supermarket chains were a response to industrial concentrations).

For many decades now, the sector's balance has shifted in favour of the supermarket chains. Concentration and differentiation almost certainly give them an advantage in the balance of power vis-à-vis suppliers taken as a whole.

Supermarket chains are highly concentrated. The six largest retail chains held a 72% share of the market for large food stores, in 2007. What is more, the shares of the leading players have remained very stable over the period, contrary to what has been observed in other markets such as the United States.

In addition, the distribution sector appears to be highly differentiated. That is because the different store groups have pursued differentiation, notably through customer loyalty schemes. Finally, retailers have developed own or house brands enabling them to reduce still further their dependence on the national brands, thus enhancing their bargaining power with the latter. These different factors of differentiation weaken competition in the retail market and strengthen the distributor's hand vis-à-vis the consumer. The relative rationing of retail supply further reinforces this effect.

1.3 In particular, in markets where the offer is fragmented and relatively undifferentiated, the supplier will never be in a position to earn sizeable margins

In one of the rare extant empirical studies on the profit split between supermarket chains and their suppliers, Lustgarten[6] focuses on supermarket chains in the United States. This econometric study shows that, when the supplier structure is fragmented, additional concentration in the distribution sector does little to change the suppliers' situation: these can generate only meagre profits anyway. In a more theoretical approach, Shaffer[7] shows that, when producers are in a state of perfect competition faced with oligopsonistic supermarket chains, the profit split between firms benefits the downstream sector exclusively.

In these conditions, a small supplier is necessarily at a disadvantage relative to a fairly concentrated distribution sector and is unlikely to be much affected by any further concentration among supermarket chains or by the introduction of price bargaining.

1.4 Conversely, the largest suppliers and those occupying product niches are in a more advantageous position

Suppliers can be highly differentiated. Specific demand for a good strengthens a supplier's position vis-à-vis the consumer, and hence vis-à-vis the distributor. This can concern highly differentiated products, upmarket products, products with a registered designation of origin, products bearing a seal of approval, or "organic" products.

Among consumer staples, some large international firms have sizeable market shares and a high level of product differentiation, achieved thanks to highly sophisticated advertising and brand management strategies. In this kind of configuration, however, a variety of factors can attenuate the supplier's bargaining power in the commercial relationship, e.g.:

- if house or own brands hold a significant share of the market, this can curb the upward pressure exerted by suppliers, provided these products are indeed seen as substitutes for branded products;
- if retailers compete aggressively on the price of house or own brands, consumers may be led to question the justification for high prices; that may put heavier pressure on prices, but this risk is attenuated under a strict definition of the threshold for selling at a loss.

So while the theoretical determinants of the balance of power appear to be ambiguous, supermarket chains are indeed in a position of strength. This general observation needs to be qualified in practice, however, given the diversity of situations within either sector, as illustrated by the different measures of profitability.

2. The agri-food industry (AFI) is less profitable than distribution, although there are pronounced differences among the AFIs depending on the size of the players concerned

2.1 The large supermarket chains have greatly improved their profitability since 1995…

Only two of the six leading supermarket chains in France (Auchan, Leclerc, Intermarché, Système U, Carrefour and Casino) are quoted on the stock market, namely Carrefour and Casino. A study by Natixis[8] shows that the operating profitability (i.e. the ratio of operating profit[9] to revenues) of these large supermarket chains rose sharply in the second half of the 1990s. The average profitability of Auchan, Carrefour and Casino went from 2.7% in 1996 to 5.4% in 2004, before turning down as regulatory changes began to affect the sector. Overall, profitability rose between 1996 and 2006, by +1 percentage point of margin for Auchan, +1.3 point for Carrefour, and +2.5 points for Casino.

Between 1996 and 2004, French supermarket chains practically caught up with their main international competitors, i.e. Wal-Mart, Target, Kroger and Tesco), then fell back slightly between 2004 and 2006 (see chart 1).

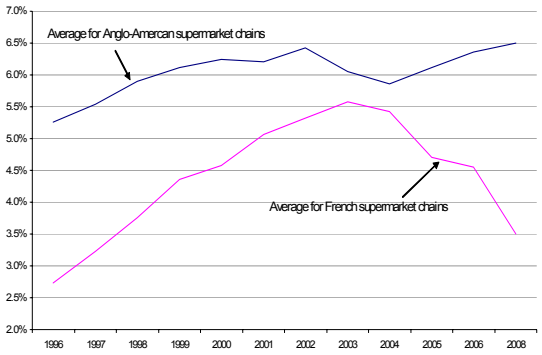
(6) LUSTGARTEN, Steven, "The impact of buyer concentration in manufacturing industries", *Review of Economic Studies, 1975, 57*.

(7) SHAFFER, Greg, "Slotting Allowances and Resale Price Maintenance: A Comparison of Facilitating Practices", *RAND Journal of Economics, Vol. 22, No. 1 (Spring, 1991), pp. 120-135*.

(8) Casas A., Raux C. "*Marges distributeurs alimentaires - industriels : une comparaison sur 10 ans*" (The margins of food supermarket chains-industrial firms: a 10-year comparison), Natixis 2007.

(9) Operating profit is defined here as the intermediate management balance reflecting the profitability of a company (or of an activity in the case of a sectoral aggregate) after deducting operating expenses alone (raw materials, wage costs, depreciation and provisions), not including net financial expenses (interest expense on borrowings) and non-recurring items.

Chart 1: Comparative operating profit margin of leading French and Anglo-American supermarket chains



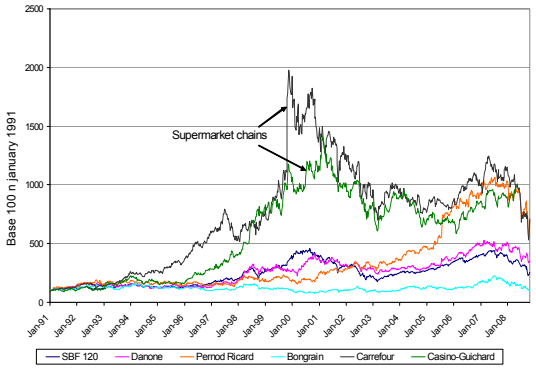
Source: Natixis

The supermarket chains' improving profitability resulted in a steep rise in the share prices of the large quoted companies (see chart 2).

2.2 … and so have the large suppliers

Five large French companies (Danone, Lactalis, Pernod-Ricard, Bongrain and Terrena) rank among the world's top 100 agri-food firms. Of these, only Danone, Pernod-Ricard and Bongrain are quoted on the stock market (Lactalis is owned by the Besnier family and Terrena is a cooperative). Moreover, the 120 companies belonging to the Institut de liaisons et d'études des industries de consommation, (ILEC-the suppliers' trade association) account for 60% of retail sales.

Chart 2: Market capitalisation of two retailers and three AFI firms



Source: Datastream

NB: The high point in Carrefour's market capitalisation in 2000 coincided with the merger with Promodès; the high point in the capitalisation of Pernod-Ricard in 2005 coincided with the takeover of Allied Domecq.

According to the Natixis study cited above, between 1996 and 2006 the operating profitability of the leading agri-food industrial firms rose faster than that of the retailers, i.e. by +6 percentage points for Danone, 11.8 points for Pernod-Ricard. Moreover, the industrial firms did not experience the drop in profitability experienced by the large supermarket chains between 2004 and 2006. This good performance can be explained by the effects of differentiation and niche marketing, which large suppliers have less trouble implementing.

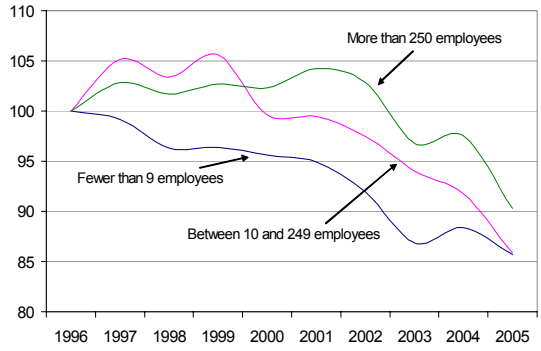
The market value of the major firms demands that we qualify this observation, however. For the period 1991-2009, Danone's capitalisation rose scarcely any faster than the SBF 120,[10] while Bongrain underperformed the index. The leading supermarket chains comfortably outperformed it, on the other hand. Only Pernod-Ricard registered a 10-year performance comparable to that of the leading supermarket chains (see chart 2).

2.3 The situation of small suppliers is a mixed one

The data provided by INSEE's "business trends" survey , available from 1996 to 2005, furnish a more comprehensive panorama of the AFIs. Figures for the B0 segment (AFI) have been aggregated[11] and split between three groups, namely micro-enterprises (0 to 9 employees), medium-sized enterprises (10-249 employees) and large enterprises (more than 250 employees), partly corresponding to the European categories (which also include revenue criteria).

The profitability ratio (EBITDA[12] /VA) is used here as it corresponds to the portion of value added that remunerates capital (in the form of profit, dividends or interest on loans).[13] This ratio is not entirely comparable for firms of different sizes or belonging to different sectors, since a higher EBITDA/VA could simply be a sign that the sector is more capital intensive and that a larger proportion of value added therefore needs to be devoted to the remuneration of capital. Consequently, chart 3 shows changes in the ratio only.

Chart 3: Ratio EBITDA/VA for AFIs (index 100 in 1996)



Sources: Enquête entreprises de l'INSEE (INSEE Business trends survey), Alisse database, DGTPE calculations

The overall situation of agri-food firms has deteriorated over the past ten years. Micro-enterprises experienced a slow deterioration between 1996 and 2000, then a more pronounced one between 2001 and 2005. The trend for firms with more than 250 employees was more mixed, with a period of stability or slow growth in 1996-2000,

(10) The SBF 120 stock market index contains the 40 stocks making up the CAC40 and the 80 most liquid stocks traded on the Euronext Paris first and second markets, from among the 200 leading French market capitalisations.

(11) This aggregate includes: B01 (meat industries), B02 (dairy industries), B03 (beverage industries), B04 (grain processing and manufacture of animal feed) and B05 (miscellaneous food industries), and excluding tobacco (B06).

(12) Earnings before interest, taxes, depreciation and amortisation (EBITDA): this corresponds to the balance of funds generated by the firm from its production activities, enabling it to remunerate its equity and loan capital, pay its corporation tax and finance all or part of its growth. This metric is obtained by deducting personnel costs from the value added to factor costs.

(13) Amortisation and provisions are deducted from EBITDA to obtain operating profit (the metric used in the studies of large firms cited above).

followed by a faster deterioration than for the SMEs between 2001 and 2005.

In addition, changes in the "profit for the year[14]/equity capital"[15] ratio are analysed insofar as it corresponds approximately to a measure of the return on capital of enterprises in the sector (see chart 4).

Chart 4: Return on capital for AFIs (index 100 in 1996)

Sources: Enquête entreprises de l'INSEE (INSEE Business trends survey), Alisse database, DGTPE calculations

The contrast between micro-enterprises and large ones for this metric is more pronounced. The return on capital has deteriorated for the former and improved for the latter.

2.4 In the final analysis, the leading supermarket chains outperform even the largest suppliers

While the large agri-food firms outperform the index as a whole, they perform less well, on average, than the largest retailers. A comparison of the two relevant sectoral indices confirms this finding[16] (see chart page 1).

The performance of the agri-food sector index is comparable to that of all quoted companies, whereas supermarket chains significantly outperform, particularly for the periods 1996-1999 and 2003-2007. The low point for the intermediate period very likely reflects the impact of the economic slowdown in the aftermath of the bursting of the Internet bubble in 2001, as reflected in the SBF120 index.

A similar conclusion can be drawn from a comparison of markups[17] estimated by the DGTPE for the period 1993-2004. This approach serves to broaden the comparison to all of the sectors concerned and no longer solely to quoted firms.

Table 1: Markups in retailing and the agri-food industry in 13 countries (1993-2004)

	GER	AUTS	BEL	DNK	SP	FIN	FRA	ITA	JAP	NETH	UK	SWE	USA
AFI	1.09	1.08	1.06	1.09	1.05	1.1	**1.12**	1.11	1.26	1.08	1.2	1.08	1.13
Retailing	1.01	1.25	1.06	1.04	1.19	1.2	**1.28**	1.2	1.17	1.32	1.3	1.22	1.15

Source: DGTPE estimates[18]

Overall, the French distribution sector is distinctly more profitable than in most of the other developed countries. The main exceptions are the United Kingdom (where the distribution sector is highly concentrated) and the Netherlands (where the situation has changed since the middle of the 2000s). This difference stems among others from the French regulatory framework (e.g. the absence of price bargaining, tight restrictions on planning permission to open retail premises), which long restrained competition in this sector. On the other hand, profitability in the AFI sector is close to the average for the developed countries, despite contrasting situations (small businesses have neither bargaining power nor the ability to use differentiation as a means to withstand the strong bargaining power of a concentrated distribution sector). Nevertheless, the profitability of both these sectors appears to be very distinctly higher than what would result from a situation of pure and perfect competition (implying a markup of 1), which means there is room for prices to be reduced. Needless to say, the apportionment of value added within the sector varies according to the product and period in question.

The AFIs' production prices and consumer prices depend on the cost of agricultural raw materials as well as other factors, and in particular the industrial firms' other costs, e.g. wages, and the price of intermediate goods consumed such as energy, services provided and the margins charged by the different middlemen. The share of basic agricultural produce in the AFIs' intermediate consumption varies very widely from one segment to another, and consequently the way in which a rise in the price of raw materials is passed on varies too. In 2004, for example, the share of agricultural produce in intermediate consumption was distinctly greater in the meat processing industry (60%) than in the dairy industry (41%) or cereals (33%).[19]

(14) This is the operating profit net of net financial expense and non-recurring profit or loss.

(15) Equity capital consists of all of the funds employed to finance the firm, comprising funds paid in, i.e. issued (or individual) capital, goodwill, retained earnings, investment grants, and regulated provisions.

(16) Agri-food producers' price index and retail price index, which comprises non-food as well as food retailing (respectively the Datastream FRANCE-DS Food Producers and FRANCE-DS Retail series).

(17) The markup, or economic margin, measures the intensity of competition in a sector: the more competitive the sector, the closer the markup is to 1. The markup corresponds to the ratio between the sale price and marginal cost of production: a markup of 1.2 means that the price a firm charges is 1.2 times its marginal cost. Consequently, the markup already incorporates the "normal" return on capital, as distinct from the book profit ratio as defined by the ratio EBITDA/VA. A high markup implies abnormally high profits, whereas a high profit ratio (EBITDA/VA) may simply reflect a sector's high degree of capital intensity.

(18) The markups are estimated by the DGTPE, see Romain Bouis and Caroline Klein, "La concurrence favorise-t-elle les gains de productivité? Analyse sectorielle dans les pays de l'OCDE" (Does competition foster productivity gains? A sectoral analysis in the OECD countries), *Économie et Statistique*, upcoming, and *Trésor Economics no. 51*. The two sectors studied are sector 15-16 (Food products, beverages and tobacco-based products manufacturing) and sector 52 (Retail trade, other than automobiles and motor cycles; repairs to personal and domestic items).

(19) See Trésor Economics no. 32.

2.5 The fall in agricultural commodity prices flows from the reforms to the CAP, whose impact on farmers has been offset by direct aids, and from productivity gains in agriculture, which mainly benefited retailers from the beginning of 1990 to 2005

Application of the surplus account method to input-output tables serves to link productivity gains in agriculture and the AFIs to changes in the prices of goods and factors of production, and to assess whether there have been any transfers of income between the different agents resulting from the share-out of these gains. A study by Butault[20] has evaluated these figures for the period 1978-2005, extending the analyses performed by Dechambre[21] (input-output table data for 2006 and 2007 are not yet final, so the most recent evaluations are unreliable).

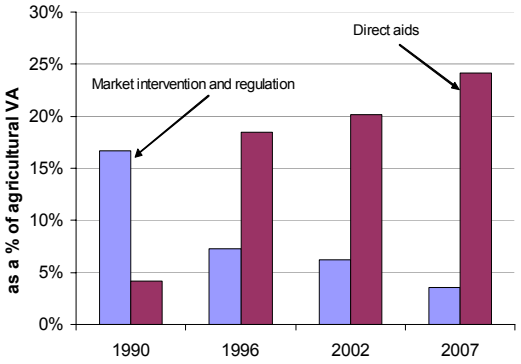
The study finds that the sector's productivity gains between 1978 and 2005, i.e. before the surge in commodity prices, stem almost exclusively from agriculture, the AFIs having achieved weaker total factor productivity gains than the rest of industry (0.12% per year, versus 0.65% per year). Agricultural sector productivity gains for the period as a whole represented €38 billion, at constant 2000 prices.

It should be noted that changes in the Common Agricultural Policy (CAP), starting with the 1992 reform, reduced EU price guarantees, replacing them with direct aid for production. Intervention and market regulation aids (in particular export refunds, intervention and aid for storage, and support for sales within the internal market) fell from €20.7 billion (at current prices) in 1990, or 17% of agricultural value added (AVA), to €5.4 billion, or 4% of AVA in 2007 (for all of the countries covered by the CAP), whereas at the same time direct aid paid to farmers rose from €5.2 billion at current prices, or 4% of AVA, to €37 billion, representing 24% of AVA (see chart 6). Consequently, farmers have received aid to compensate for falling prices.

For France, public aid added €4 billion (at constant 2000 prices) to the increased productivity cited above, between 1978 and 2004. The CAP reforms led to an increase in aid to production (€1 billion between 1979 and 1991; €6.6 billion between 1991 and 2004) and to a reduction in transfers (mainly via the elimination of cereal refunds, which declined from –€1.8 billion to –€1.9 billion over the same periods).

According to Butault's study, this fall in agricultural prices was passed on, albeit imperfectly, in the price of food products paid by manufacturers, and above all benefited the other sectors-i.e. institutional catering and retailing. End-consumers, on the other hand, benefited little from this trend. Initially (1978-1991), food prices fell slightly (with a total fall of around 6%), then rose a little. The only products to register a significant fall in prices for the consumer were meat and dairy products.

Chart 5: Change in Community spending in support of agricultural markets



Source: European Commission, DGTPE calculations

The study notes, finally, a reversal of transfers of value added due to productivity gains in favour of commerce, over the period. The profit ratio varied little between 1978 and 1991, a period in which retailing was restructured and rationalised. The profit ratio then rose fairly steeply in the early-2000s, and a slight rise in real consumer prices at the very end of the period. While the study reaches no conclusion as to why the profit ratio rose, we may assume that, since the regulatory framework encouraged concentration in the distribution sector, this would partly account for this phenomenon (cf. the 1996 acts governing relations between suppliers and retailers, and on planning permits for commercial premises), whereas the fall observed at the very end of the period was concomitant with the first reforms enacted in 2004-2005 (i.e. the Sarkozy agreements and the Dutreil Acts[22]).

A look at prices in the sectors concerned appears to confirm this diagnosis. Charts 6 and 7, drawn from Butault's study, show for two sub-sets of AFIs comparative trends in prices of agricultural products purchased by AFIs ("intermediate agricultural consumption"), AFIs production prices, and prices charged to the end-consumer. They also show the supermarket chains' profit ratio as a proportion of final consumption.

Production prices fell in all sectors, as did intermediate agricultural consumption prices. The AFIs therefore transmit declines in agricultural commodity prices fairly well. On the other hand, final consumer prices fell only slightly for meat and milk, and not at all for the other AFIs. For meat and milk, consumers' purchasing power rose due to falling prices until the early-1990s, but gains thereafter appear to have accrued to supermarket chains. This is because profit ratios rose continuously for supermarket chains in the meat and milk sector. For other sectors, a sharp inflection occurred in the middle and at the end of the 1990s, a period during which supermarket chains' profit ratios rose steeply.

(20) BUTAULT, Jean-Pierre, "*La relation entre prix agricoles et prix alimentaires*" (The relationship between farm prices and food prices), *Revue française d'économie (2008), 23 (2), 215-241*. Appendix 3 to this study describes the surplus account method in detail.

(21) DECHAMBRE, Bernard, "*Le Partage de la valeur ajoutée entre l'agriculture et son aval*" (How value added is split between agriculture and downstream industries), French Ministry of Agriculture, 2000.

(22) In June 2004, the major retailers and suppliers agreed to cut prices on leading brands by 2% on average (under the "Sarkozy" agreements). The Dutreil Act permitted the inclusion of part of the listing fees into the definition of the threshold for determining whether a product is being sold at a loss in 2005 and 2007.

Chart 6: Change in prices in the meat and dairy industries, and supermarket chains' profit ratio

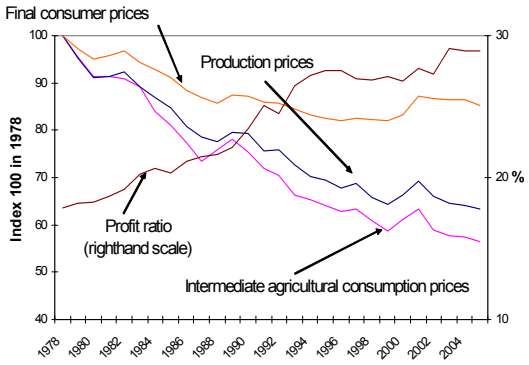
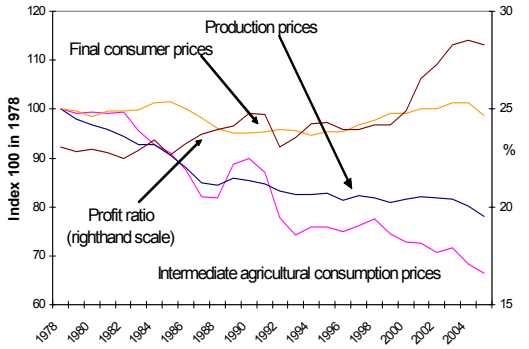


Chart 7: Change in prices of other AFIs and supermarket chains' profit ratio



Source: Butault, INSEE, INRA calculations

2.6 During the first half of 2008, past increases in commodity prices were transmitted in varying degrees, depending on the products

Prices of agricultural commodities, particularly cereals, oilseeds and milk, began rising from the end of 2006 and peaked in the first half of 2008. Yet prices on these markets have retreated significantly over the past few months. These price rises have been transmitted in certain food products whose prices have risen steeply in France since the autumn of 2007. Thus food prices in France went from a year-on-year rate of increase of 0.8% in summer 2007 to nearly 5% in February 2008 (see Trésor Economics no. 32).

As well as pointing out that the weakness of competition in retailing is the main reason for persistently high food prices, the December 2008 Besson report on the formation of food prices showed that the transmission of price rises varies widely between the different agricultural products. For instance, these increases are passed on faster and to a greater extent for perishables such as salad and tomatoes than for storable and manufactured products such as pasta, pork or dairy products, where retailers' bargaining power is stronger.

Comparing prices of raw materials, AFIs' production prices and consumer prices provides some pointers as to the mechanism for the transmission of price increases, depending on the sector considered. It is important to note that production price trends in the industry depend on the prices of other intermediate goods consumed. In recent years, raw materials purchases have accounted for only 50%, roughly, of AFIs' costs on average. In particular, part of the short term spike in these prices can no doubt be ascribed to the rise in energy prices, which peaked at the same time. Over the long period, labour costs have had a not-insignificant impact, the cost of labour for AFIs having risen 31% between 2000 and the second quarter of 2008.

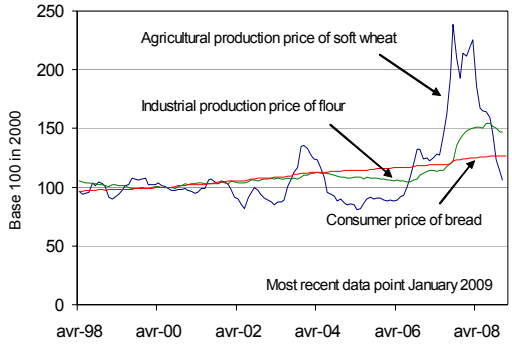
The examples of bread and cheese illustrate these considerations.

2.6.1 From wheat to bread

Consumer prices for bread are only weakly dependent on the price of cereals, reflecting the small share of wheat prices in the price of bread (around 5%) relative to the other factors of production. Thus over the last ten years, the annual rise in the price of bread remained in a range of between 1.5% and 2.5%, i.e. at a level close to that of inflation, other than during periods of sharply rising wheat prices, as in January 2004 (4.1%) and in June 2008 (5.5%).

The rise in raw materials prices is transmitted towards the downstream end of the sector, though tapering off in the process. Between March 2006 and March 2008, cereal prices rose 155%, whereas flour prices rose by only 42%, and the price of bread by 7%. Also, there was a slight delay in this transmission, since the sharp rise in the price of wheat began in May, whereas its impact on the consumer price of bread only became visible from August onwards.

Chart 8: Cereal sector prices



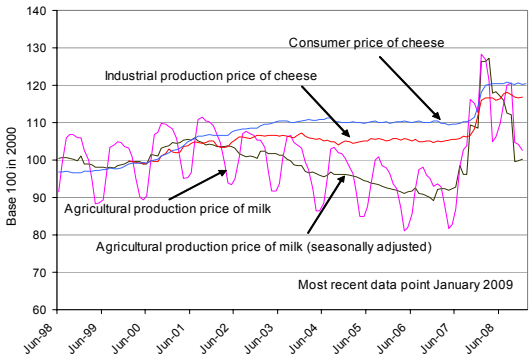
Source: INSEE

2.6.2 From milk to cheese

Consumer prices of cheese do not reflect the seasonal variations in the agricultural production price of milk.

Whereas the production price of milk fell by 10% between January 2003 and January 2007, the consumer price of cheese remained stable overall. This fall in the price of milk offset the rise in other factors of production. When the price of milk surged recently, the price rise was transmitted, but with tapering effect along the production, processing and distribution chain: the milk production price rose 38% between March 2007 and March 2008, whereas the industrial production price of cheese rose by 10.8% and the consumer price of cheese by 9.6%.

Chart 9: Milk sector prices



Source: INSEE

2.6.3 Overall Europe-wide evaluation

A European Commission study in May 2008 calculated expected theoretical price rises on the assumption that rises in raw materials prices were transmitted in full but that the other components of the final price (retailer's margin and other costs) were held constant. From this it appears that, from February 2007 to February 2008, only a portion of the observed retail price rises could be attributed to the rise in raw materials prices. The particularly hefty rises in the retail prices of dairy products, cheese, oil and butter are presumably explained by the non-transmission to the consumer of reductions in the wholesale prices of these raw materials, all of which declined, with the exception of vegetable oils. The rise in the retail price of bread also appears to be particularly disconnected from the theoretical impact of the rise in cereals prices (see table 2).

The Commission's study appears to show that consumer prices have risen more than can be accounted for by the rise in agricultural raw materials alone. But it does not allow us to say whether this is attributable to the rise in other intermediate prices (energy especially), or whether margins in the agri-food or distribution sectors rose on this occasion.

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Pierre-EMMANUEL LECOCQ

Table 2: Actual and theoretical impact of rises in raw materials prices in the European Union

		Estimated		Observed	
Change in agricultural prices Feb. 08 / Feb. 07		Estimated change in consumer prices Feb. 08 / Feb. 07		Observed change in harmonised index of consumer prices	
Wheat	84%	Bread and cereals	3%	Bread and cereals	10%
Maize	28%				
Poultry	9%	Meat	8%	Meat	4%
Pork	3%				
Livestock	2%				
Butter	21%	Oil and fats	8%	Oil and fats	12%
Rapeseed oil	63%				
Milk	30%	Milk, cheese, eggs	12%	Milk, cheese, eggs	15%
Cheese	35%				
Eggs	17%				
		Total	5%	Total	7%

Source: European Commission

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