INRA SCIENCES SOCIALES

N° 5-6 – NOVEMBER 2006

RESEARCH IN ECONOMICS AND RURAL SOCIOLOGY

Private Labels: A Winning Store Strategy

In the beginning, the retail industry's target was to offer low prices to consumers thanks to large quantities ordered from well-known brands, allowing better prices than in traditional retail businesses. Little by little, the part played by retailers (grocery stores) changed and now it has been 30 years since retailers have not only played an ordinary retailer's role, but are also managers of their own brands, named store brands and more commonly Private Labels (PL). For the great majority of products, one does not only find national brands (NB) on store shelves. Consumers may also purchase the retailer's brand, which exists in different forms (see frame 1). The first part of this text will concern the economic origin of Private Labels and reveal some of the objectives of retailers with the development of Private Labels. The second part will turn to the consumers, trying to find out their characteristics and choice determinants when buying a PL. Lastly, we shall take an interest in the reaction of well-known brand producers, especially through NB prices, against PL development.

The part played by Private Labels in "producer-retailer" relationships

In 1976, at the time when "Free Products" were first introduced by Carrefour, the clear objective was to get rid of the unavoidable nature of national brands. First of all, Carrefour wished to offer a new product, the characteristics of which were fixed by Carrefour in order to master cost prices and thus margins: this was the first PL. Thanks to this alternative product, the retailer's profit did not exclusively depend on well-known brands. Such competition between PL and NB helped Carrefour obtain price concessions from NB producers for their brands to be referenced. However, our research work shows that the positioning of the two products must not be too far apart in order for competition between the two goods to remain plausible. In fact, choosing the degree of substitutability is part of the retailer's strategy. High substitutability helps retailers gain in bargaining power vis-à-vis NB producers, which is the objective of standard (*me-too*) PL. When PL characteristics are such that its quality is lower than that of the NB, the retailer aims to help consumers whose willingness-to-pay is low or who would not have bought a NB (for example, this is the case with *first price* PL[1]). The additional profits resulting from the introduction of this sort of PL answer a strategy of discrimination of demand. Therefore, the different PL ranges offered by retailers have several complementary objectives, according to their positioning in terms of quality: demand segmentation, increase in retailer's bargaining power. *First price* and *high-quality* PL depend on the first category, while "*me-too*" PL chiefly aim to compete with NB and thus gain in bargaining power.

As well as the decision to introduce a PL, Private Label production factors may also modify upstream and downstream relationships. Different scenarios exist as regards retailers' strategy to have their PL manufactured. They either ask small, specialised businesses[2] or big NB producers; the latter agree to produce PL in order to reduce their production excess capacities. In this case, they may offer lower production costs than small businesses do. We have seen that for the retailer, the decision relies on the one hand on a question of efficiency, (NB producers are less costly), and on the other hand on a sharing stake (PL margins do not depend anymore on tariff negotiations with producers). NB producers are entrusted with the manufacture of PL products when the retailers' position is strong enough not to yield too much profit to NB producers. In fact, the production of both products (NB and PL) on which retailers' profits depend comes from the same agent. Moreover, low consumer loyalty to national brands may lead retailers to change their production policy by favouring small businesses ahead of NB producers. Since, in such a case, the PL constitutes a real alternative to NB, retailers have taken advantage of their brand's independent management rather than of NB producers' cost advantage.

Most of the articles dealing with PLs have considered that Private Label quality was known before purchasing. Although today, given the development of PL, such an assumption is reasonable, it might not have been the case at the time of their introduction. Thus, when we model PL as an

[1] Conversely, for niche products where NB are absent (regional products or products with fancy packaging), *high-quality* PL captures a particular consumer demand at a clearly higher price than average. It is also a matter of the retailer's objective of discrimination.

[2] Certain retailers, like Intermarché in France, have their own production units such as cheese factories or fisheries. However, such a strategy is marginal in the industry.

experimental good in the face of a well-established and well-known NB (quality is only anticipated before purchase, it only becomes well known after consumption), the retailers' "private label strategy" becomes relevant. The result we obtain is that the retailer introduces a PL, the quality of which meets consumers' expectations when the good is a frequently purchased product. Otherwise, retailers do not bother if consumers' expectations are disappointed, because not buying the own brand does not put the product at a disadvantage, since it is rarely purchased. The more the retailers' bargaining power increases, the more their incentive to cheat over the quality decreases. In other words, the failure of private label "health and beauty care" or "food new-born babies and children" departments may be explained by the "experimental" aspect of the goods for which the PL have not succeeded in making up for the time lost in terms of risks perceived by consumers. Here, PL production takes on a new stake with the upstream sector.

In the previous section, we presented the results of our works showing that PL stakes have a consequence on producers, be it price-related or qualitative. We shall now consider consumers and private labels, and particularly try to see if there is a PL consumer profile-type.

Private Labels and consumers: what are the choice determinants?

Given that, on average, Private Labels are less expensive than National Brands, we may suppose that PLs are bought by the less wealthy households. Econometric studies do not bring any clear conclusions: some show that the PL's market shares decrease with income, others that purchasing PL is typically the done by medium-income households, and still others do not bring any link to light. PL purchasers appear to be households whose education level is high and some recent articles reveal the positive link existing between store loyalty and PL purchasing. The impact of socio-economic variables is still being debated and it has to be pointed out that most of the research is conducted from declarative data, which contains an evident bias in comparison with observed purchasing data: the lack of a real paid price and an approximate perception of the product.

We deal with the matter of consumers' determinants between NB and PL by using effective purchasing data. Our analysis is on a frequently purchased product (pasta), the Private Label of which comes as *me-too* PL and *high-quality* PL: This allows determination of the value of the PL attribute by controlling other product characteristics.

Here are the main results. Irrespective of price, consumers on average find better utility in *me-too* PL than in NB: 56% of panellists would rather buy the PL offered at the same price. Conversely, only 40% of the consumers have a positive willingness-to-pay for *high-quality* PL. Its recent introduction seems to be an explanatory factor for this poor performance. Socio-economic variables do not play any part in the PL perception, contrary to store loyalty. The "loyal" consumers' willingness-to-pay for PL is, on average, 1.7 higher than that of other consumers.[3] For a price of 1.5 €/kg, a value which is close to the average observed price, the gap between the market share of both household groups is 11%, "loyal consumers" buying more PL in volume. After introducing PL based on low-quality products sold at low prices, retailers developed PL substitutes for NB. Our analysis shows that such a strategy can be very profitable. In fact, store loyalty influences households' purchasing structure, since households loyal to a store purchase more PL than others. Such a result contributes to justifying the efforts made by retailers, who develop loyalty programs (cards, coupons…). At present, retailers are banking on high quality for their PL such as niche products or products with public quality labels (PDO, Red label, Organics). Such a strategy can have indirect effects, at least initially, and does not directly raise product value. Returns on investments would be achieved through standard Private Labels, which would benefit from a quality range effect. In fact, the reputation of a store selling high-quality products modifies the consumers' perception of standard products. The very presence of niche-products next to standard ones gives consumers a positive image of the store name and standard product, whereas the actual quality of the latter is unchanged: the quality range effect works fully.

So the development of PL has benefited retailers in terms of competition with National Brand products or store image. This rapid expansion has occurred to the detriment of NB producers. Apart from the strategy consisting, for NB producers, in also producing PL for retailers, there is another reaction in the selection of NB characteristics with an impact on their final price.

The reaction of National Brand producers to the development of Private Label**s**

NB producers often argue that Private Label development has led them to lower their prices, constantly innovate, and that in general, leaders' brands suffer less than other brands in terms of market share losses. We tested these predictions with a statistical study on the price trend of 218 products from the food-processing industry, consumed by a French consumer panel over 1998-2001. A first descriptive analysis shows that the market share of PL retailers increased for most products and that, at the same time, national brands also benefited from an upwards trend (see Table 1).

To take these first observations further, we modelled correlations between national brand prices and different variables such as PL market shares (see Frames 2 and 3).

Contrarily to what is often stated, we demonstrate that the prices of high-quality brands increased in a significant way together with the development of Private Labels, for the great majority of products studied (development coefficient significantly positive for 136 goods over 156) - see Figure 1, with the example of milk.

This increase in prices can be partly explained by a strategy of differentiation from national brand producers. We show this in Table 2, where the differentiation coefficient index (see Frame 3) is significant and positive.

By working on quality, originality or packaging, and by modifying their product content or characteristics, NB producers attempt to differentiate themselves from PL. Another explanation could be found in the refocusing of NB on their more loyal consumers attached to the brand name and therefore less aware of prices. However, given the

[3] Standard deviation is similar between both sub-samples.

available data on prices (retail price), it is impossible to identify the source of that rise. Is it a manufacturers' policy that finally stands for their most loyal consumers, or is it a retailers' policy that reserves high-quality brands for certain market-segments in order to develop their Private Labels?

Research work also shows evidence that the size of increase in prices varies according to the type of Private Labels they face. Although the development of *me-too* and *first price* PL has a significant and positive impact on NB prices, the development of *high-quality* Private Labels does not show any significant effect. Furthermore, *me-too* Private Labels lead to a greater rise in NB prices than in *first price* PL. This confirms the economic explanation of why *first price* and *me-too* PL are used in order to attract new consumers, whereas *me-too* PL claims to be an alternative to NB products.

Lastly, national brands coming in second and third position on the market do not seem more affected than the leader brand (in terms of market shares).

Conclusion

Through the introduction of Private Labels, retailers focus on two economic targets: on the one hand, compete with high-quality products to get better tariff conditions and, on the other hand, offer products to particular consumers (on price or quality) in order to segment the demand. Producing PL is also a decision which commits retailers to NB producers, because sometimes the latter are also PL producers. On the demand side, our studies show evidence that socio-economic variables have little impact on consumers' decision to buy a PL. However, store loyalty appears to be a particularly significant factor, because the most loyal consumers to a store name buy more PL than others.

Faced with the development of PL, we note a rise in NB prices indicating not only a readjustment of NB characteristics (ingredients, packaging, etc.), but also a desire by NB producers to refocus on more loyal clients or a retailers' willingness to bring to the fore their Private Labels, in terms of prices.

After introducing and developing Private Labels, the retailers' present challenge consists in fighting against *Hard-discount* stores, which are winning market share from them. In this struggle, retailers, who have now reached quite an advanced level of expertise in the sphere of production or product specification thanks to their own brands, use their Private Labels as a new strategy. In fact, they have completely modified their policy of *first price* PL in order to conform to the discount store's very competitive tariffs. Considering the retail industry's latest figures, which show a rise in big store market shares and a downward trend *in Hard-discount* stores, this policy seems to be working.

Fabian Bergès-Sennou, Sylvette Monier-Dilhan and Valérie Orozco, INRA ESR, Toulouse, France
fberges@toulouse.inra.fr, monier@toulouse.inra.fr, orozco@toulouse.inra.fr

For further information

Bergès-Sennou, F. (2006). Store loyalty, bargaining power and the private label production issue. *European Review of Agricultural Economics,* vol. 33, n° 3, pp 315-335.
Bergès-Sennou, F.; Hassan, D.; Monier-Dilhan, S. and Raynal, H. (2006). *Consumers' decision between private labels and national brands in a retailer's chain: a mixed multinomial logit application.* Document de travail Inra-Toulouse, 13p.
Bergès-Sennou, F.; Bontems, P. and Requillart, V. (2004). Economics of private label: a survey of literature. *Journal of Agricultural and Food Industrial Organization,* vol. 2, n° 1, article 3, 25.
Bontemps, C.; Orozco, V.; Requillart, V. and Trevisiol, A. (2005). Price effects of private label development. *Journal of Agricultural and Food Industrial Organization,* vol. 3, n° 1, article 3, 18 p.

Published by the INRA Social Sciences, Agriculture and Food, Space and Environment Publishing unit
Editorial Director: Hervé Guyomard – Editor: Didier Aubert (Chief Editor), translation and composition: Ariel Gille

1 - Description of "Private Labels" (PL) and difference with "National Brands" (NB)

In its article 62, the New Economic Regulations Act (Loi NRE) of May 15^{th} 2001 describes Private Labels as follows: "Is considered as a product sold as a private label (store brand), a product the characteristics of which have been specified by the firm or group of firms in charge of its retail sale, and which is the owner of the brand name under which it is sold".

The first point to note is that a label on which the store name is not mentioned, but which is exclusively managed by the retailer, is a private label. Other terms also designate private labels: own brands like "Pâturages" which designates dairy products at Intermarché supermarkets, store brands (like "Carrefour products", or even private brands such as "Marque Repère" at Leclerc hypermarkets, or "Reflets de France" at Carrefour hypermarkets).

The second point concerns the exclusive link which exists between brand names and products: it means that different retailers will not provide the same private labels. Such is not the case when retailers trade (French or foreign) producers' brands, often designated as national brands (NB) as soon as they are widely distributed in the home country.

2 - Data and methodology for the analysis of the consumers' choice determinants

Observations come from the Sécodip panel for 2001 and concern purchasing behaviours in one of the five biggest store names, representing 5427 purchasing acts by 1414 households. To take into account the heterogeneity of the households' preference, especially in the perception of the PL attribute, we estimate a *mixed multinomial logit* models. Here are the following explanatory variables: constants, which take into account the utility generated by each of the four NBs and two PLs, a dichotomy variable measuring the marginal utility for the PL attribute and price. In some specifications, the utility gained from the PL by the household depends on the socio-economic category to which it belongs: low-income households do not value PL the same way as wealthy households do. Interactions between the PL attribute and income, but also with standard of education, household size and loyalty to store name[1] are thus estimated.

3 - Data and methodology for the analysis of the impact of private label development on national brand prices

From the purchasing-data of a consumer panel (the Sécodip panel), we built series for prices and market shares for each of the 218 products observed over 1998-2001. The general model analysing the correlation between national brand prices and private label development (via their market share) is as follow

$$lnPrix^i = \sum_j \beta_j \cdot lnPdm_j + \gamma \cdot I^i + \sum_s \alpha_s \cdot \delta_s + \beta_0 + \varepsilon^i$$

With $Prix^i$ the price of the i^{th} NB, i representing a given NB, or the NB aggregate for a given price;
Pdm_j the market share of the j^{th} PL, j representing the PL aggregate or a PL type;
I^i differentiation index of the i^{th} NB–it is the ratio between the volume of the NB sold on a specialized segment (niche products) and the whole volume of that NB
δ_s Quarterly dichotomy variables;
β_0 A constant parameter;
ε^i The error term

For each of the 218 products, we estimate various models derived from this general model by varying the number and type of variables used.

[1] A household is said to be loyal to the store name when the proportion of its food expenses in the store is greater than one third.

Table 1: Monthly development of PL market shares and NB prices over 1998-2001 (in %)

Product	***Monthly development (in ‰)***		***Product***	***Monthly development (in ‰)***	
	PL market share	***NB price***		***PL market share***	***NB price***
Milk	2,8	4,6	Bottled water	1,4	0,6
Emmental cheese	2,1	1,9	Biscuits (aperitif)	1,1	2,4
Margarine	-1,1	3,8	Chocolate	0,8	0,7
Coulommiers cheese	3,3	2,7	Goat cheese	2,9	0,3
Fresh cheese	0,8	2,6	Fruit juice	1,7	2,9

The issues given in reference provide results for a greater number of products.

Table 2: Estimated values of the parameters of NB price regression

Product	**Pdm_{PL}**	**I^{PL}**
Milk	0,357***	1,292***
Emmental cheese	0,266***	0,193*
Margarine	0,05***	0,352**
Coulommiers cheese	0,269***	0,737***
Fresh cheese	0,02*	0,538***
Bottled water	0,055*	2,415***
Biscuits (aperitif)	0,094***	1,252***
Chocolate	0,187***	0,548**
Goat cheese	0,088**	0,38***
Fruit juice	0,27***	1,251***

- ****, ** and * respectively indicate the significance at 1%, 5% and 10%;***
- **I^{NB} *a differentiation index;***
- ***We chose not to indicate the estimated coefficients of the quarterly dichotomy variables and constant for the table to be more clear to read;***
- ***The papers given in reference provide results for a greater number of products.***

Figure 1 : Development of the average NB price faced with the expansion of PL (milk, 1998 - 2001).