

Under the current pricing system, concern about the negative impact on producer prices of VMR induces shippers to request higher prices that do not reflect real market situations. Focusing on farmyards, the anticipated reduction in distribution prices of VMR may result in reducing the prices received by farmers and therefore promoting them to sell more non-OMR rather than VMR. On the other hand, the reduction in market prices of VMR may increase the demand from rice distributing companies.

In view of this dilemma, much effort should have been made by shippers, paying at-

tention to both producers and distributing companies, to reduce shipment cost and request reasonable prices reflecting the real market situation, in order to increase the sales amount of VMR and the producers' revenue.

(Note) VMR (Voluntarily Marketed Rice) is the rice distributed through registered rice shippers, in accordance with Voluntary Marketing Plans authorized by the Minister. GMR (Government-Marketed Rice) is the rice purchased and sold by the government. OMR (Orderly Marketed Rice) consists of VMR and GMR. Another distribution channel is allowed under the Food Law, which is referred to here as non-OMR.

Table 1. Factors Influencing Demand for VMR from Wholesalers

Variable	1995-2000			1995-1997			1998-2000		
	Coefficient	Std. Reg. Coefficients	t-Statistic	Coefficient	Std. Reg. Coefficients	t-Statistic	Coefficient	Std. Reg. Coefficients	t-Statistic
VMR price (log)	-3.5687	-1.1888	2.9426 **	-4.5964	-1.2897	1.2225	-5.2032	-1.1004	3.0128 **
Non-OMR price (log)	2.6807	0.9517	2.3591 *	2.4137	0.7606	0.7009	2.8488	0.6595	2.2642 *
Stock of rice by wholesalers (end of previous month) (log)	-0.5084	-0.4098	3.2686 **	-0.6043	-0.3265	1.7813	-0.5565	-0.4886	2.6889 *
Dec.-Feb. (dummy)	0.2199	0.3651	2.7556 **	0.1538	0.2559	1.2343	0.2160	0.3578	1.8553
Mar.-May (dummy)	0.3734	0.6199	4.8878 **	0.2872	0.4779	2.1023 *	0.3320	0.5500	3.0287 **
Jun.-Aug. (dummy)	0.2393	0.3818	3.2964 **	0.1928	0.3207	1.7156	0.2606	0.3957	2.4266 *
Stock of OMR (National) at the end of Oct. (log)	-0.3479	-0.3687	3.2738 **	-0.6166	-0.7756	2.8481 **	-0.5760	-0.4513	2.0270
Rice-crop index (log)	-2.9113	-0.2295	1.8681	2.0388	0.1071	0.6490	-8.8305	-0.7926	2.2274 *
Constant	33.190		3.5513 **	25.7224		1.8278	76.8808		2.5423 *
N of observations	69			35			34		
Adjusted R-squared	0.4152			0.2999			0.4974		
D-W stat.	2.0774			2.3256			2.0728		

Dependent Variable: Demand for VMR from wholesalers (log)

** : 1% significant

* : 5% significant

Table 2. Change in Demand for VMR from Wholesaler (%)

		Fall in VMR price (%)			
		0	1	5	10
Fall in	0	0.00	0.82	4.10	8.06
distribution	1	0.26	1.08	4.35	8.29
cost (%)	5	1.31	2.13	5.35	9.21
	10	2.60	3.40	6.57	10.30

Table 3. Change in Producer Price (%)

		Fall in VMR price (%)			
		0	1	5	10
Fall in	0	0.00	-0.28	-1.61	-3.79
distribution	1	0.46	0.17	-1.18	-3.39
cost (%)	5	2.30	1.99	0.57	-1.76
	10	4.60	4.28	2.75	0.24

Estimating Own and Cross Brand Price Elasticities, and Price-Cost Margin Ratios using Store-Level Daily Scanner Data

Junko KINOSHITA

This article addresses three issues related to Japanese dairy demand analysis. First, an econometric fluid milk demand model is estimated using store-level daily scanner data to determine whether the own-price elasticities are significantly different from previous estimates based on aggregate market-level data. This is important because of the current debate among Japanese dairy industry leaders concerning whether fluid milk is price inelastic or elastic. Own-price elasticity differences between fresh and reconstituted milk products are also examined. Second, milk product cross-price elasticities are estimated to measure the degree, if any, of substitutability between fresh milk and reconstituted milk products. Be-

cause most previous studies have relied upon aggregate market-level data, there are no previous estimates of cross-price elasticities for fresh milk and reconstituted milk products. Finally, price-cost margin ratios are estimated for each commodity using a method that does not require cost data, but rather relies on assumptions regarding the degree of competition to derive the price-cost margin ratio. [Econlit alphanumeric subject codes: Q110, Q130]

Research members

Junko Kinoshita, Nobuhiro Suzuki, Tamotsu Kawamura, Yasuhito Watanabe and Harry M. Kaiser

Table 1. Price Elasticities

		i					
		1	2	3	4	5	6
j	1	-1.860	0.117	3.503	2.825	1.727	2.550
	2	-0.074	-0.181	-0.085	-0.069	-0.042	-0.062
	3	0.419	0.016	-5.177	0.388	0.237	0.350
	4	0.151	0.006	0.173	-4.441	0.085	0.126
	5	0.117	0.004	0.134	0.108	-2.727	0.097
	6	0.139	0.005	0.160	0.129	0.079	-3.999
mean p_{ki}		164.1	189.6	193.8	178.8	147.3	156.4
mean q_{ki}		129.5	13.0	12.7	6.4	12.0	7.8

Notes: The Own-and cross-price elasticities were computed using the estimated coefficients and sample means. Figures in the 6 x 6 matrix for price elasticities are interpreted as the percentage change in item i's demand associated with a 1 percent change in item j's price.

"mean p_{ki} " is item i's average price (yen/liter).

"mean q_{ki} " is item i's average quantity sold (liter/1,000 customers).

The most popular (based on market share) items were selected from each of the milk and reconstituted milk categories until the combined sales values reach over two-thirds of the category's total sales values. This resulted in the following two items for fresh milk (Item 1 and 2) and four items for reconstituted milk (Item 2,3, and 6).

"Item 1" is the supermarket's private label whole milk (3.5% fat contents, 1 liter),

"Item 2" is the supermarket's private label whole milk from Hokkaido (3.7% fat content, 1 liter).

"Item 3" is national label reconstituted low-fat milk with more calcium (1 liter),

"Item 4" is national label reconstituted milk with more calcium and iron (1 liter),

"Item 5" is national label reconstituted skim milk with more calcium (1 liter),

"Item 6" is national label reconstituted chocolate milk (1 liter).

Table 2. Price-Cost Margin Ratios

Item	$\theta = -1$	$\theta = 0$	$\theta = 1$
1	0.382	0.538	0.905
2	3.133	5.532	23.616
3	0.110	0.193	0.789
4	0.127	0.225	0.978
5	0.207	0.367	1.600
6	0.141	0.250	1.084

Notes: The PCM values were estimated for the three cases: $\theta=0$ (the Bertrand case), $\theta=1$ (a price-matching case), and $\theta=-1$ (a non-collusive case), where θ is a indicator of market competitiveness.

Securing a Variety of Core Farmers and Structure of Regional Agriculture

Akira EGAWA

In this study the researcher took up a theme of new entrants to agricultural business (new entrants) from non-farming households, which has recently been focused on as a variation in the structures of agriculture, and implemented research of support measures (such as information supply, advice system, assistance to secure farmland and technical training, etc.) that are necessary for analysis of agricultural business entrance tendencies and their development of management.

Taking opportunities of applicants' (a) Determination of starting business, (b) Actual start-up of business and (c) Development of business, new entrants' business can be divided to three stages of (1) Preparation stage, (2) Starting stage and (3) Stabilized stage (Fig. 1). Concerning support at the preparation stage, supporting system to start agricultural business was prepared and chances to acquire management resources are offered in 90s. However, new entrants who become trainees in their preparation stages have potential problems in corresponding to accidents, etc. and there are cases of troubles, as their position is outside the scope of labor protection laws. On the other hand, business supporters

also are facing problems as social welfare, excluding industrial injury insurance, was not enough for trainees, therefore measures to farmers whose participation to social welfare system is lower than other business fields must be taken immediately (Table 1). In future, preparation of high quality training to meets needs of trainees are much expected and setting up of training programs and risk management such as social welfare is required.

Concerning support after the starting stage, supporting system such as farmland leasing using farmland holding rationalizing business, and funds for farm facilities are created recently but they are not enough for the support to the people in the preparation stage. For stable management of new entrants at early points, continuing political supports such as farm business management funds, procurement of farm land, assist of agricultural technologies are required. And, in order for new entrants to gain management resources, informal support of management and living from local farmers and local people who live near the applicants are also important.