An Analysis of Transition Price Policies in the Lithuanian Food and Agricultural Sector

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ABSTRACT

Lithuania has been progressing rapidly in the privatization of agriculture and the development of market economy mechanisms. An important component of the transition reforms has been the deregulation of input, farm, and consumer prices. The context, processes, and results of the price policies are examined for the major food and agricultural products. As of November 1992, real input prices and consumer prices have increased, while real farm prices and real wages have declined compared with prereform levels in 1990. The large gap that previously existed between retail prices in state stores and private markets has virtually disappeared. Although input prices are approaching world market levels, food and agricultural product prices are still well below border prices. How these will evolve in the longer term depends on the domestic market and foreign trade policy regime that has yet to be adopted by the government.

AN ANALYSIS OF TRANSITION PRICE POLICIES IN THE LITHUANIAN FOOD AND AGRICULTURAL SECTOR

The transition from a command economy to a market-oriented economy is fraught with difficulties and uncertainties. One of the economically and socially disruptive aspects of this transition in most post-communist states is the removal of subsidies in the food and agricultural sector and the realignment of severely distorted prices. The countries of Central and Eastern Europe have made different decisions on how and when to liberalize prices, and only time and experience will reveal which path or paths will prove the most successful. In addition to the initial steps to liberalize prices in concert with related economic and institutional reforms, countries in transition must evaluate and choose longer term directions for domestic market and trade policies in the food and agricultural sector.

Lithuania is one of the post-Soviet states that has undertaken a fairly rapid path of agrarian reforms, including price liberalization. The pace of price reforms has been similar to that of other Baltic states, faster than that in most other post-Soviet countries and slower than that in Poland. In order to understand and evaluate the progress that has been achieved and the problems and policy choices that remain, we review the context of the reforms and analyze the changes that have occurred in input prices, farm prices, retail prices, and implied marketing margins. We then discuss some policy choices that remain and how they may affect the development of the food and agricultural sector in Lithuania.

A Context for Price Reform

The production sector of the Soviet system was characterized by subsidized and centrally allocated inputs, subsidized output prices, and production quotas for delivery to the government processing and distribution system. Since investment decisions, production plans, and quotas were not generally driven by economic optimization, output for any particular commodity could be higher or lower than what would occur in a market economy.

In 1991 and 1992 the government of Lithuania removed many of the regulations and constraints that existed during the Soviet period. While these cannot truly be called free market policies, virtually all government subsidies and many government constraints on producers have been removed. Input prices are rising rapidly toward world market prices, and output prices are generally rising, but at a lower rate, in response to these higher costs. The structure of production is beginning to change in response to economic incentives, land reform, and privatization measures. Producers are generally free to sell wherever they wish, but in reality have limited options due to the still poorly developed marketing infrastructure. The Lithuanian government still purchases some commodities to provide supplies for state institutions and export agreements, but the importance of these purchases is declining.

The processing and distribution of food and agricultural products was also subsidized in the Soviet period. These subsidies supported large inefficiencies in this sector as well. The inefficiency costs include poor equipment, high energy use, and waste and spoilage in the handling of raw materials and processed products. In the absence of subsidies, the inefficiency of this sector causes higher consumer and lower producer prices than would occur in a well-functioning market economy. This situation leads to greater political pressures on governments from producers and consumers to continue subsidies or controls. It also reduces the competitiveness of products in world markets.

There has not yet been sufficient time for the kind of restructuring and efficiency gains that would reduce processing costs. Most of the processing is still concentrated in a small number of large plants, but little if any budget support is provided to the sector. Nor has there been time for significant competition to emerge that would push processing firms to cut costs. These costs may actually go up in the short run, as investments are made to modernize plants and as processing volumes decline, leading to excess capacity in the large processing plants. Consumers in the Soviet period benefitted from subsidies that often exceeded processing costs. That is, the retail price of food was even below the producer price of an equivalent unit of the good. The low food prices, combined with the lack of alternative goods, led to food consumption levels and dietary patterns that approached those of consumers in the West, where much higher incomes exist. Actual rationing and/or lengthy queuing at food shops was not uncommon under these policies.

With the price liberalization that occurred in 1991 and 1992, virtually all consumer subsidies are gone. This has led to very large price increases, which have only partially been offset by wage increases and direct income transfers. Real incomes have declined while real prices of food increased, and the portion of household income spent on food has increased substantially.

State trading was the norm in the Soviet period, so the level of trade did not generally reflect excess demand or supply conditions. Although there now appear to be few import barriers, export licensing was used in early 1992 as a mechanism to control food and agricultural exports and moderate consumer price increases. These constraints have been gradually softened or eliminated so that enterprises have more incentive to export. The government still engages in state trading, but enterprises have more freedom to conduct direct trade with enterprises in the former Soviet Union or other external markets.

A very simple illustration in Figure 1 compares conditions during the prereform and postreform periods. Closed economy assumptions are used to simplify the example. In this figure S_0, PF_0, and PR_0 represent planned farm supply, producer price, and retail price in the prereform period. In the postreform situation, market farm supply is represented by S_1, farm-level demand and price by FD_1 and PF_1, and retail demand and price by RD_1 and PR_1. It is expected that real consumer prices have to rise significantly during the transition when input and product subsidies are removed. Real farm prices are also likely to rise in the long run but far less than retail prices. In a well-functioning market economy, processing costs would be lower, narrowing the gap between farm and retail prices.

Deregulation of Input Prices

Lithuanian agriculture was, and to a great extent still is, dependent on imported inputs. During the Soviet period before the price reforms, production inputs in agriculture were heavily subsidized.

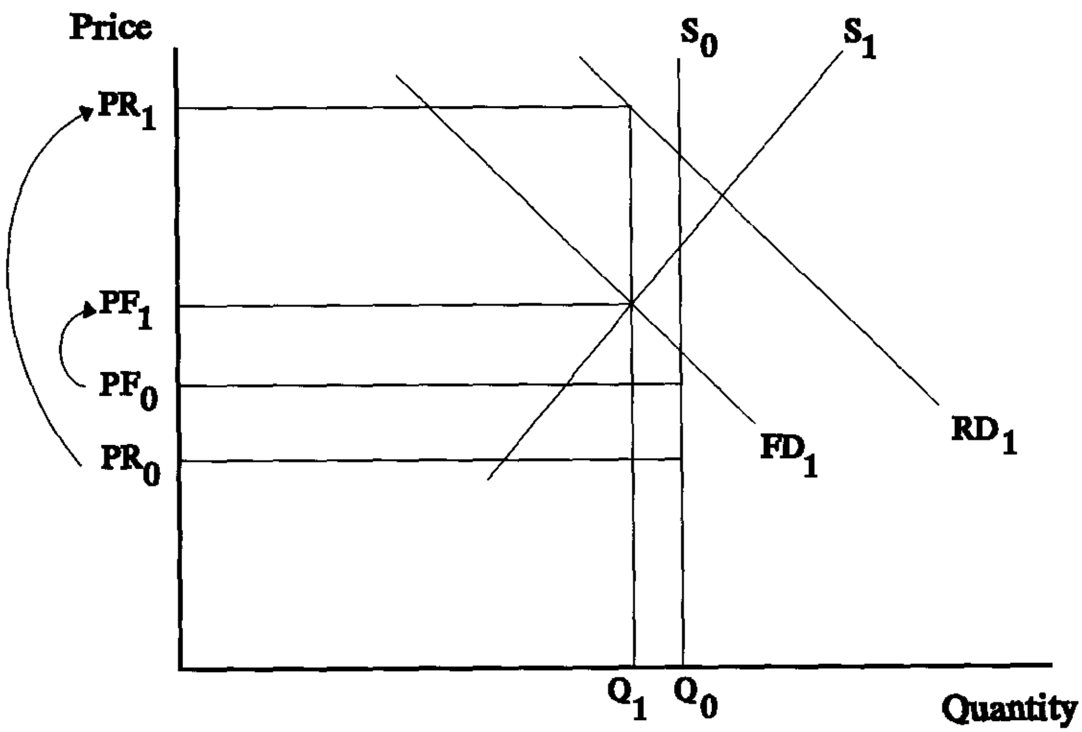

Figure 1. Price impacts of removing input and product subsidies

The first step in the price reform process, in fall 1990, was to partially deregulate input prices across the former republics of the Soviet Union. Further deregulation of input prices by Lithuania in 1991 resulted in their more rapid growth compared with producer prices (Table 1). In 1991 and the beginning of 1992, input and producer prices were still below, but progressively moving toward, world market prices.

The first radical increase in input prices occurred in January 1991, when prices for main inputs went up by 1.4 to 4.1 times. It was followed by procurement price increases for main agricultural commodities by 1.2 to 2.3 times. But such procurement price increases did not cover the increase in production costs caused by input price increases, which ranged from 1.7 times for beef to 2.6 times for grains. All input prices and some producer prices increased more than the general price index during the period.

During 1991, input prices as well as procurement prices continued to rise, but at a different rate. In January 1992 the input price index, compared with 1990, ranged from 5.1 for some agricultural machinery to 70.2 for diesel oil. At the same time the producer price index ranged from 3.0 for poultry to 7.4 for pork. Nearly all purchased input prices increased more than the general inflation rate, while the prices of most farm commodities increased less than inflation. The price ratios for urea-to-wheat, feed-to-hogs, and feed-to-poultry indicate that large resource allocation and product mix adjustment must occur for farm enterprises to remain viable. The direction of these adjustments is towards less use of energy-intensive inputs, such as chemicals and fertilizers, and shift from livestock dependent on purchased feed (hogs and poultry) toward pasture-dependent animals (dairy and beef cattle).

During 1992, input prices were increasing even more rapidly. Since most agricultural inputs used to be imported from countries of the former Soviet Union, Lithuania is still dependent on imported inputs but some of these now come from the West. A major reason for the rapid price increase in 1992 was the dramatic decline in quantities and rise in prices of energy resources. With prices of the main energy sources moving toward world market prices in 1992, dramatic increases occurred in prices of diesel fuel and gasoline (over 120 times compared with 1991), natural gas (over 300 times), electric energy (over 70 times), fertilizers (50 to 190 times), and concentrated feed (over 25 times). Such large increases in input prices caused decreases in their use and increases in production costs, creating a severe cost-price squeeze and increasing pressure on the government to increase producer prices or introduce subsidies.

Table 1. Changes in agricultural input and output price indices and price ratios in Lithuania, 1992

Commodities	1992 compared with previous quarter[a] I	II	III	IV	December 1992 compared with 1991	1990
Consumer Price Index[b]	2.58	1.32	1.89	1.92	12.36	90.60
			Inputs			
Fuel, Oil Products	9.86	2.99	1.77	2.45	39.41	1339.94
Electric Energy	3.64	1.57	2.47	3.84	17.14	171.40
Fertilizer						
Nitrogen	7.65	2.13	1.85	1.40	20.53	349.01
Phosphorus	5.16	0.86	4.75	1.55	11.26	252.79
Potassium	8.87	0.85	2.33	1.27	13.96	180.45
Mixed Concentrate Feed						
Cattle	2.99	2.10	1.48	2.49	8.70	87.87
Hogs	2.12	2.71	2.17	1.97	12.46	130.26
Poultry	2.25	2.23	1.79	1.48	11.62	114.84
			Outputs			
Grain (Wheat)	1.36	2.14	4.03	1.11	13.07	52.28
Beef	2.27	1.15	1.30	1.27	4.30	21.50
Pork	3.19	1.15	1.49	2.03	11.11	55.55
Poultry	1.04	1.91	1.78	1.64	5.80	17.40
Milk	3.65	1.89	1.41	1.81	17.53	87.65
			Price ratios			
Urea-to-Wheat	5.63	1.00	0.46	1.26	1.57	6.75
Feed-to-Beef	1.32	1.83	1.14	1.96	2.02	4.09
Feed-to-Hogs	0.66	2.36	1.46	0.97	1.12	1.34
Feed-to-Broilers	2.16	1.17	1.01	0.90	2.00	6.60
Feed-to-Milk	0.82	1.11	1.05	1.38	0.50	1.00

SOURCE: Compiled from unpublished data from the Ministry of Agriculture and the Lithuanian Institute of Agrarian Economics.

[a]The first quarter is compared with December 1991.
[b]CPI is based on monthly inflation rate, as published in *IMF Survey* and *The Baltic Independent.*

Farm Prices and Pricing Policy

When procurement prices were increased in January 1991, the complex system of bonus payments (from the Soviet period) was eliminated. This created a situation where the actual prices received by farmers (including bonuses) did not increase as much as the increases in procurement prices. Since bonus payments were highest in livestock and dairy production, the net price increase to producers of these commodities was significantly less than that for crop commodities.

As input prices continued to rise in 1991, the government responded with additional procurement price increases over time. In the case of crops harvested in the fall, announcements in January only indicated intentions. The actual procurement prices for the 1991 crops were the prices in October 1991. The fact that these were two to three times higher than procurement prices in late 1990 is indicative not only of the increase in input costs and general inflation, but also of the pressure of producer groups and competition among neighboring states to keep production within their borders (Table 2).

Table 2. Producer prices in Lithuania, 1990-93

	1990	1991	1992				1993
Products	Dec.	Dec.	Feb.	August	Sept.	Nov.	March
Current Prices	(rubles or talonas per metric ton)						
Cattle[a]	3,001	8,170	21,890	33,000	33,000	35,000	200,000
Hogs[a]	2,855	8,600	30,000	61,000	65,000	120,000	300,000
Poultry[a]	2442	7700	13800	40000	45000	55000	160000
Milk	553	800	3400	10000	11400	16500	33000
Eggs[b]	93	625	n.a.	2800	7760	7200	n.a.
Wheat	410	1000	2500	13000	13000	16000	n.a.
Barley	410	900	2000	12200	12200	14000	n.a.
Sugar Beets	59	350	n.a.	4000	4000	6000	n.a.
Potatoes	264	800	n.a.	8000	18000	18000	n.a.
Real Prices	(December 1990 = 1)						
Cattle[a]	3001	1716	2102	1400	1085	756	2575
Hogs[a]	2855	1806	2881	2588	2138	2591	3863
Poultry[a]	2442	1617	1325	1697	1480	1188	2060
Milk	553	168	327	424	375	356	425
Eggs[b]	93	131	n.a.	119	255	155	n.a.
Wheat	410	210	240	552	428	345	n.a.
Barley	410	189	192	518	401	302	n.a.
Sugar Beets	59	74	n.a.	170	132	130	n.a.
Potatoes	264	168	n.a.	339	592	389	n.a.

SOURCE: Unpublished data, Lithuanian Ministry of Agriculture.

Notes: Talonas became the sole legal tender on October 1, 1992; prices before then are in rubles. n.a. means not available.

[a]Liveweight.
[b]1000 units.

The increases in livestock and dairy product prices were influenced both by increased production costs and by the need of the government to obtain products through the state procurement system (whose share in total production was gradually declining) to exchange for inputs and other products, from other countries of the former Soviet Union, that had been committed in interstate contracts. A portion of these price increases was offset by new taxes on producer profits.

In the beginning of 1992, Lithuania replaced its previous system of state procurement prices with a system of producer support prices and retail markup restrictions that allowed the market to function with less government intervention. Producer prices were to be set through regional negotiations between producers and processors. However, reported prices from plants in different regions indicate only small variations in prices across regions for meat and somewhat greater variation for milk.

Producer prices increased much more rapidly in 1992, driven primarily by high inflation rates. In April 1992, realizing that growing inflation was driving production cost up and that the support prices announced in January 1992 were far below actual prices, the government increased support prices and introduced a support price indexing mechanism based on inflation and an input price index that became effective in May 1992. By November 1992, prices were higher by 4 times for cattle, 20 times for milk, 15.6 times for feed grains, and 22.5 times for potatoes compared with prices in December 1991.

Real prices of farm products, however, generally declined throughout the 1990 to 1992 period. Real producer prices declined by 77 percent for beef, 52 percent for poultry, 37 percent for milk, 28 percent for barley, and 18 percent for wheat. The exceptions were eggs, sugar beets, and potatoes. Real prices of live animals increased sharply in the early months of 1993, but all except hogs remained below 1990 prices.

Producer pricing policies have differed somewhat for different agricultural products. Support prices for cattle (Table 3) and hogs were increased in May, and government subsidies introduced for these products were to be used if actual producer prices were lower than the announced support price. In July, the government increased producer subsidies for cattle and hogs. These were increased again in August and subsidies were added for poultry, eggs, and milk. By November 1992, subsidies were less than 4 percent of the farm price for poultry, 10 percent for eggs, 32 percent for cattle and milk, and 17 percent for hogs. In late November 1992 the government announced the elimination of these subsidies as a further step in price liberalization.

Table 3. Dynamics of producer prices and policies for cattle in Lithuania, 1990-93

Date		Farm price	Subsidy	Farm price + subsidy	Intervention price
		(rubles or talonas[a] per metric ton)			
1989	Average	2,871		2,871	1,860[a]
1990	Average	3,001		3,001	2,816[a]
	October	3,300		3,300	3,300[a]
1991	January	4,000		4,000	3,300[a]
	April	5,010		5,010	3,300[a]
	May	7,200		7,200	3,300[a]
	October	7,200		7,200	4,000[a]
	November	7,933		7,933	4,000[a]
	December	8,170		8,170	4,000[a]
1992	January	16,000		16,000	8,640[b]
	February	21,890		21,890	8,640[b]
	April	22,000		22,000	8,640[b]
	May	20,500	2,500	23,000	22,100[b]
	June	19,500	3,500	23,000	22,100[b]
	July	23,000	4,400	27,400	
	August	25,000	8,000	33,000	
	September	25,000	8,000	33,000	
	October	25,000	8,000	33,000	
	November	25,000	8,000	33,000	
	December	54,000		54,000	
1993	January	105,000		105,000	
	February	110,000		110,000	
	March	200,000		200,000	

SOURCE: Compiled from unpublished data from the Lithuanian Ministry of Agriculture.
Note: Talonas became the sole legal tender on October 1, 1992; prices before then are in rubles.

[a]Base procurement price.
[b]Support price.

Producer price policies for milk differed somewhat from policies for other livestock products. Milk was the last commodity subject to price deregulation, being subsidized longer, together with grain and bread products. The support price for milk was introduced in January 1992 and came into effect in February; but a month later, seeking to keep the retail price for milk and milk products at a lower level, the government introduced a maximum producer price that processors could pay to agricultural producers. In August 1992 government subsidies for milk were introduced and were continued until all subsidies were abolished in November.

Several reasons caused the government to introduce producer subsidies for livestock products, among which were to offset production cost growth, to moderate consumer price increases, and to moderate the rapid decrease in livestock numbers and output that was accelerated by the summer drought of 1992. Subsidies were paid to agricultural producers by processing enterprises, who were directly compensated from the state budget.

Policies for producer grain prices evolved along a path similar to that of livestock price policies in the 1990 to July 1992 period, except that support prices always remained well below farm prices. Unlike livestock, subsidy payments for grain and other crop producers were never introduced. Instead, the government increased farm price levels.

While farm prices are not liberalized to the same extent as input prices, the government has followed a gradual path to liberalization with periodic experiments, hesitations, and setbacks. Markets and prices are still in the realignment process and need more time to absorb the numerous shocks that have come from agrarian reforms, price reforms, loss of export markets in the East, decline in domestic real incomes, and a severe drought in 1992.

Marketing Margins and Retail Pricing

Lithuania, as elsewhere in the former Soviet Union, actually had two parallel retail markets outside the state market for many food commodities. One was the cooperative retail market, where farms and cooperatives could sell products outside the state market, and the other was the private market, which was legally sanctioned for food products to be sold by cooperative and individual producers. In the period from 1986 to 1989, cooperative market prices were generally higher than state prices, and private market prices were much higher than both. From 1986 to 1989 the ratios between market and state prices for meat, potatoes, and vegetables increased slowly and in 1989 varied from 3.2 times for meat to 5.7 times for vegetables. Market prices increased substantially in 1990 and 1991 as inflation and relative scarcity of goods increased, further widening the gap between state and market prices.

Highly subsidized consumer prices in the Soviet period increased pressure on the state budget, encouraging the government to undertake significant retail price increases. Lithuania preempted the April 1991 retail food price increases in the rest of the former Soviet Union by an earlier announcement of its own retail price increases. New retail prices were three to four times higher than the old prices. These higher retail prices were accompanied by income subsidies and wage increases to partially offset the higher cost of food. In Lithuania wage increases preceded price increases and generally kept pace with price inflation. Since these price increases were still in the framework of state pricing and retail systems, the free market prices of food continued to remain substantially above the state prices.

Lithuania continued the process of increasing state retail prices of foodstuffs in October and November 1991 and deregulated prices in early 1992, thus narrowing the gap between state retail and free market prices. In November 1991 the ratio of average market price to state retail price was 1.24 for beef, 2.10 for pork, 3.87 for chicken, 1.68 for eggs, and 1.18 for potatoes. By October 1992, prices in state stores and private markets were virtually the same, but at different times either one could be higher; product quality was generally higher in the private market.

When retail prices were deregulated in January 1992, the government replaced fixed retail prices with regulations on marketing margins. In an attempt to constrain the exercise of market power by the highly concentrated processing enterprises, the government introduced a maximum processing markup, which was determined for each commodity by the Ministry of Economics. Retail markup was set at a maximum of 10 percent, and increased later to 20 percent. Rationing of butter, sugar, and flour was introduced to prevent unreasonable accumulation of these products in households and to protect the domestic market. Except for milk, subsidies to the food sector were eliminated from the state budget by the end of 1991.

As a consequence of deregulating retail prices, high inflation rates and the removal of state subsidies, consumer prices have increased dramatically, even in real terms (Table 4). From December 1990 to March 1993 real retail prices increased by 120 percent for pork, 130 percent for milk, 210 percent for sugar, 70 percent for beef, 100 percent for butter, 40 percent for eggs, 87 percent for bread, and 110 percent for potatoes. Only rye bread, which was still subsidized, did not increase. Although real prices of these and other foods generally increased, there were significant month-to-month price variations as supply and demand conditions and policies changed. At the individual consumer level, the price deregulation was also seen in price variation from day to day and from store to store, even among state-owned stores.

The retail price increases were accompanied by new income support policies, resulting in indexing of personal savings accounts and increases in wages and welfare benefits. In the early stages of price reforms, wage increases exceeded inflation rates, but the rapid inflation of 1992

Table 4. Consumer prices in Lithuania, 1990-93

Products	1990 Dec.	1991 Dec.	1992 Feb.	1992 August	1992 Sept.	1992 Nov.	1993 March
Current Prices	(rubles or talonas per kilogram)						
Beef (I cat.)	2.02	18.66	54.00	98.90	112.30	150.00	269.01
Pork (I cat.)	2.26	18.23	52.00	139.40	183.00	250.00	380.12
Chicken	3.15	19.19	54.00	124.00	120.00	180.00	383.77
Milk (1.5 - 2.5%)	0.23	1.08	5.08	10.50	13.50	26.00	41.75
Butter	3.50	19.03	80.63	156.00	203.00	307.00	548.93
Eggs (10 units)	1.40	9.75	15.60	28.50	97.00	98.00	149.37
Rye Bread	0.33	1.99	2.80	6.00	12.50	15.44	23.31
Wheat Bread	0.46	3.51	7.10	18.00	24.00	35.00	67.05
Wheat Flour	0.41	2.48	3.95	13.50	15.00	36.00	65.54
Sugar	0.79	7.29	10.80	107.00	97.00	120.56	191.08
Potato	0.19	2.06	1.50	20.00	30.00	22.00	32.96
Real Prices	(December 1990 = 1)						
Beef (I cat.)	2.02	3.92	5.19	4.20	3.69	3.24	3.46
Pork (I cat.)	2.26	3.83	4.99	5.91	6.02	5.40	4.89
Chicken	3.15	4.03	5.19	5.26	3.95	3.89	4.94
Milk (1.5 - 2.5%)	0.23	0.23	0.49	0.45	0.44	0.56	0.54
Butter	3.50	4.00	7.74	6.62	6.68	6.63	7.07
Eggs (10 units)	1.40	2.05	1.50	1.21	3.19	2.12	1.92
Rye Bread	0.33	0.42	0.27	0.25	0.41	0.33	0.30
Wheat Bread	0.46	0.74	0.68	0.76	0.79	0.76	0.86
Wheat Flour	0.41	0.52	0.38	0.57	0.49	0.78	0.84
Sugar	0.79	1.53	1.04	4.54	3.19	2.60	2.46
Potato	0.19	0.43	0.14	0.85	0.99	0.48	0.42

SOURCE: CPI is based on monthly inflation rate published in *IMF Survey*, January 11, 1993. Prices are from *Statistinis biulentenis* 1993.

Note: Talonas became the sole legal tender on October 1, 1992; prices befor then are in rubles.

quickly eroded earlier gains (Table 5). By November 1992, real wages had fallen by nearly 50 percent compared with December 1990.

The great disparities in income and retail price changes resulted in a general decrease in consumption of major food products in 1991 and 1992 compared with the 1986-1990 period of subsidized, stable retail prices. In 1992 the estimated food consumption compared with the average for 1986-90 declined more than 10 percent for meat and meat products, more than 20 percent for milk and milk products and eggs, and more than 40 percent for sugar (because of the price increase for this commodity and consumption rationing). Significant shifts to comparatively less expensive

Table 5. Average monthly wages in Lithuania, 1990-93

	1990	1991	1992				1993
	Dec.	Dec.	Feb.	August	Sept.	Nov.	March
	(rubles or talonas per metric ton)						
Nominal Wage	335	2,279	2,798	6,800	7,900	8,292	14,380
Consumer Price Index	100.0	476.2	1,041.4	2,357.0	3,040.5	4,631.3	7,767.0
Real Wage	335.0	478.6	268.7	288.5	259.8	179.0	185.1

SOURCE: *The Baltic Independent*, January 1992-May 1993 issues.
Notes: Nominal average wage for November 1992 and March 1993 are estimated from data reported in U.S. dollars using the official exchange rate for these months. Talonas became the sole legal tender on October 1, 1992; prices before then are in rubles.

products caused increases in potato and vegetable consumption (about 9 percent) and bread and grain products (about 30 percent). As a consequence of the price increases and income decline the share of income spent on food, which was 30 to 40 percent in the 1986-90 period, rose to more than 60 percent in 1991; and we estimate it will be more than 70 percent for 1992.

In response to these conditions and in connection with the removal of subsidies to farmers, in December 1992 the government introduced new maximum processing and retail margins for major food commodities, as well as announcing increases in wages and benefits by 20 to 30 percent in early 1993. After government subsidies to agricultural producers were abolished in late November 1992, prices for meat and dairy products nearly doubled. Such price increases were deemed unjustified since the subsidies were, at most, 32 percent of the farm price. The government decided to reinforce margin restrictions as a means of limiting the market power of the processing and retail system.

Processing margins of 10 to 15 percent were introduced for meat, milk, grain, and fish processing enterprises, regardless of their form of ownership (with exception for small business). Also, from December 15, 1992, until July 1, 1993, markup margins by retail trade outlets (no matter what the form of ownership) for meat and milk products should not exceed 12 percent in the 7 largest cities, 15 percent in regional centers, and 18 percent in rural areas. If these restrictions on processing and retail margins are enforced, the total marketing margin from farm to retail will range from 23.2 to 35.7 percent. Data for 1990-92 indicate that this regulation would lower current marketing margins for the main food commodities significantly (Table 6). As of November 1992, just before the introduction of government-regulated marketing margins, they reached levels of 78,

Table 6. Consumer-to-producer price ratios for main agricultural commodities in Lithuania, 1990-93, including producer subsidies

Products	1990 Dec.	1991 Dec.	1992 Feb.	1992 August	1992 Sept.	1992 Nov.	1993 March
Beef	0.67	2.28	2.47	3.00	3.40	4.29	1.35
Pork	0.79	2.12	1.73	2.29	2.82	2.08	1.27
Chicken	1.29	2.49	3.91	3.10	2.67	3.27	2.40
Milk (1.5-2.5%)	0.42	1.35	1.49	1.05	1.18	1.58	1.27
Eggs (10 units)	1.51	1.56	n.a.	1.02	1.25	1.36	n.a.
Sugar	1.34	2.08	n.a.	2.68	2.43	2.01	n.a.
Potato	0.72	2.58	n.a.	2.50	1.67	1.22	n.a.
Wheat Bread	1.12	3.51	2.84	1.38	1.85	2.19	n.a.
Wheat Flour	1.00	2.48	1.58	1.04	1.15	2.25	n.a.

Note: Calculations are made from Tables 2 and 4 without taking into account conversions from input weight to final product weight, except for sugar.

90, 109, and 100 percent for beef, chicken, milk, and sugar. Such government intervention in retail pricing is aimed at keeping consumer prices at reasonable levels and is being viewed as a temporarymeasure for the transition period. The limited data that are available for March 1993 indicate that margins for meat and milk products have declined significantly.

Although there are still selective interventions by the government, substantial progress has been achieved in price deregulation and the virtual elimination of government subsidies in the processing and distribution sector. Price liberalization has brought with it severe social and political problems, especially since real incomes were declining while real food prices were increasing. Increases in food product prices were accompanied by increases in prices for nonfood commodities and services, making the situation extremely difficult for large groups of the Lithuanian population. The situation was aggravated since the income "freeze" in October with the compliance of the Economic Policy Memorandum with the International Monetary Fund, adopted by the Lithuanian government. However, a recent measure designed to ease the situation was to increase wages and social security benefits starting in January 1993.

Future Policy Choices and Implications

Although Lithuania has taken a number of important steps in the transition reforms for food and agriculture, the government has not yet decided what are to be the domestic market and foreign trade policy regimes that will guide future decisions by government and private decision makers. Fortunately, the government has not significantly constrained its future policy choices by past decisions, so a range of choices remains open. It is important to evaluate the implications of alternative directions, although our exploration of these alternatives is very limited.

There are several factors that constrain these policy decisions, at least in the medium term. Although Lithuania, like the other Baltic states, exported 40 to 50 percent of its meat and dairy products to other republics during the Soviet period, this market is now very small and future prospects are extremely uncertain for both economic and political reasons. Alternative markets for these products are very limited because of quality requirements, continuing surpluses in the European Community (EC), and strong competition from other Central and East European countries. These market conditions, along with the severe drought of 1992 and the inability to finance imported feeds, have already led to reductions in animal numbers of up to 50 percent. For the foreseeable future the state budget will not have resources to support agriculture in any significant way, and foreign currency constraints will continue to limit the importing of feeds and other essential inputs.

Despite the internal price liberalization that has already occurred, most commodity prices in Lithuania are still well below world market prices. Comparisons of current internal prices to world market prices are tenuous because of quality differences and are still obscured by uncertainty about the exchange value of the Lithuanian currency; but using market rates and prices in November 1992, we found that grain and pork prices were about 60 percent of U.S. prices and beef, poultry, and milk were less than 30 percent of U.S. levels. By March 1993, Lithuanian poultry prices rose to 45 percent of U.S. prices, but beef and milk were still less than 30 percent. Thus, even an open market policy would imply significant further increases in farm and retail prices. Given the reform of the Common Agricultural Policy (CAP) by the European Community in May 1992, market prices for many products in the European Community may also be at world market levels before the next decade. However, harmonizing policies with the CAP, which now has direct producer payments, would still be more costly to the state budget and possibly to consumers than would an open market policy.

Another strategy that has been widely discussed in Lithuania, as well as other Baltic states, is self-reliance. The main thrust of this strategy is to let the livestock product output decline to the level needed in the domestic market, but it also implies that output should not fall so low as to require imports of these products. The imports of feed ingredients would also be minimized by shifting the structure of animal production away from hogs and poultry, which are more dependent on imported feeds, toward cattle, which are more dependent on domestically produced forage and feeds. This option would most likely require a return to more government regulation and could be costly to the economy either in terms of foregone export earnings or in terms of higher food costs, when compared with the open economy case. Which kind of loss would occur depends on whether or not the livestock industry can be competitive.

Regardless of the price and trade policies selected for food and agricultural products, a number of other measures will be important. Among these are measures to develop a stable macroeconomic environment and well-functioning financial institutions, to encourage foreign investment, to provide a social safety net that reduces tensions associated with employment and price adjustments, and to reduce processing and distribution costs, including privatization of processing, wholesale, and retail enterprises. Adjustments in the food and agricultural sector will be less difficult and the policy constraints less severe, if the general economic environment is more benign. As has often been the case in other countries, policies in other sectors of the economy can be as or more important than policies in the sector itself.

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