Price Reform and the Consumer in Central and Eastern Europe

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The collapse of Communism in Poland, Hungary, and then-Czechoslovakia over the last several years has set the stage for the difficult beginning of free-market economies. In 1990, these countries started to wean consumers away from the government subsidies that had kept food prices artificially low for many years. After the subsidies stopped—and price controls were lifted—food prices soared at both producer and consumer levels. In quick succession, inflation rose and purchasing power dropped, reducing consumer demand—especially for meat and dairy products.

Three years later, however, food prices in these countries appear to have stabilized, despite some continuing contraction in demand. Following the reforms, income has fallen, but a broad range of new goods have appeared on the market, fundamentally changing the range of choices available to consumers.

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Reforms Liberalize Prices, Redirect Spending and Consumption

To assess how price liberalization and other reforms affected consumption trends in each Central and Eastern European (CEE) country, two issues must be examined. First, how much food prices increased relative to overall inflation and relative to real income. Second, how patterns of consumption and spending on food in these coun-

tries changed in response to the new prices.

Except in the first 2 to 3 months following the price liberalization, food-price inflation lagged behind overall rates of retail inflation in Poland, Hungary, and the Czech and Slovak Republics. Thus, the declines in food consumption were most acute immediately following the reform in each country as the people adjusted to initial food price increases relative to both incomes and other prices. Per capita consumption of meats, eggs, milk, and butter suffered the largest declines in Hungary, Czechoslovakia, and Poland (excepting meat consumption in Poland).

Poland's Abrupt Moves to Market Economy Spur Inflation

Poland's approach to introducing widespread market reform was initially the most abrupt and comprehensive of all CEE countries, most likely because its new Government knew that the Poles were already accustomed to a ubiquitous black market and high levels of inflation at different times throughout the 1980's. The Government's trust in Poles' patience and resilience was born out as the price liberalization quickly realigned domestic prices and promoted private sector activity in the food markets.

The first step in the Polish transition was the liberalization of prices in August 1989. The immediate effect was a brief period of high inflation unknown in Hungary and Czechoslovakia. During the 1980's, the Polish Government had significantly increased the budget deficit by giving in to demands for wage increases and by continuing subsidies to keep food prices low. Rather than gradually removing subsidies at the consumer and producer level, the Government froze these subsidies in late summer 1989 and liberalized food prices, allowing them to reach market-equilibrium levels.

This first stage of reform produced the most dramatic results. From June through December 1989, the overall inflation rate was 350 percent—while food-price inflation hit 500 percent. During this initial stage, food prices increased at almost double the rate of nonfood prices.

The second stage of reform took place with what became known as the "Big Bang" in January 1990, when subsidies were completely phased out and all prices remaining under control were liberalized. This time, however, the overall inflation produced was not nearly so severe—reaching 249 percent in 1990. Food-price inflation during this time, 217 percent, was lower than for nonfood prices and overall inflation.

The major contributing factor to the hyperinflation of the fall of 1989 was the wage indexation scheme introduced by the government in August 1989 to protect consumers from the initial shock. This scheme provided income supplements to compensate for 100 percent of food price increases and 80 percent of nonfood price increases for 2 months. After January 1990 (the second round of price reform), wage growth was tightly restricted in order to dampen further wage-push inflation.

Share of Income Spent on Food Rises, Then Drops to Pre-Reform Levels

Inflation in 1990 caused real income (adjusted for inflation) to fall 30 percent (based on 1989 zlotys). The shock to real income from rapidly increasing prices probably had a dramatic effect on consumption. In order to maintain food consumption in a situation of falling real income, Poles were forced to limit nonessential purchases, such as appliances, travel, and entertainment. As a result, the portion of Polish consumers' income spent on food increased, while spending on nonfood items decreased. A comparison of pre- and post-reform spending habits illustrates this point. In 1989 (before prices were liberalized), Poles spent approximately 40 percent of their income on food (compared with 11.6 percent in the United States). In 1990, the share of Polish income spent on food increased to 45 percent.

Effects of the price increases were more severe for some groups. Pensioners, for example, were hit especially hard because they spent a higher proportion of their income on food than did all other income groups. In 1990, almost 60 percent of pensioners' disposable income went to buy food, compared with 41 percent for employee households (which make up about 60 percent of the population).

The large fall in real income and the relatively small increase in share of income spent on food by the average Pole in 1990 meant that the real level of food expenditures fell in 1990. As food prices rose only slightly less than overall inflation in 1990, overall food consumption levels clearly declined. In 1991, real income improved, overall inflation rates slowed to 60 percent, and food inflation had fallen to 36 percent. Consequently, the consumer budget/spending situation for Poles also began to stabilize and recover. The share of income spent on food dropped back to pre-reform levels of 40 percent by 1991.

Higher Pork Consumption Offsets Steep Drops in Other Protein Sources

The general increase in food price levels and changes in relative prices of foodstuffs changed consumption patterns from the pre-reform period. The most notable adjustments were sharp reductions in consumption of dairy products

Table 1
Who's Eating What in Central and Eastern Europe

Annual per capita consumption	Poland 1991	Poland Change, 1989-91	Hungary 1990	Hungary Change, 1987-90
	*Kilograms**	*Percent*	*Kilograms**	*Percent*
Meat	73.2	6.7	75.8	-6.8
Beef	15.6	-4.3	6.5	-18.8
Pork	42.0	11.4	38.5	-11.9
Poultry	8.2	-2.4	22.8	.4
Fish	6.2	1.6	2.7	28.6
Butter	6.3	-28.4	1.7	-37.0
Milk (in liters)	231.0	-11.2	169.9	-14.7
Eggs (units)	162.0	-16.5	21.6	18.7
Cereals	116.0	-.9	110.4	-2.3
Potatoes	144.0	.7	61.0	20.8
Vegetables	126.0	8.6	83.3	4.1
Sugar	35.4	-24.5	38.2	-4.7
Beer (in liters)	37.2	18.8	105.3	3.8
Wine (in liters)	8.6	11.7	27.7	27.1
Annual per capita consumption	**Czech Republic 1990**	**Czech Republic Change, 1985-90**	**Slovak Republic 1990**	**Slovak Republic Change, 1985-90**
	*Kilograms**	*Percent*	*Kilograms**	*Percent*
Meat	96.5	8.1	84.0	6.2
Beef	28.4	-6.3	22.1	-.9
Pork	50.0	13.9	44.5	9.3
Poultry	13.6	28.3	15.2	10.9
Fish	5.4	-3.6	4.4	-6.4
Butter	8.7	-10.3	6.4	-8.6
Milk (in liters)	91.5	-11.3	107.6	-15.4
Eggs (units)	340.0	.9	348.0	-2.8
Cereal	162.0	.1	157.0	-3.4
Potatoes	77.9	-4.9	85.8	20.7
Vegetables	66.6	-2.2	100.6	13.9
Sugar	44.0	20.2	46.3	39.9
Beer (in liters)	155.2	5.7	95.6	-2.9
Wine (in liters)	14.8	-3.3	15.9	-8.1

Note: *Unless otherwise noted. Sources: *MagyarStatisztikai Evkonyv 1991, Statisticka Rocenka CSFR 1992, Rocznik Statisticzny 1992.*

and eggs, which were partially offset by increased pork consumption.

Removal of subsidies had the greatest effect on dairy and egg consumption, which saw the largest declines in 1989-91. Milk consumption in Poland decreased 11 percent from 1989, from 260 to 231 liters per capita; egg consumption fell 16 percent from 194 to 162 eggs per capita; and butter consumption fell 28 percent.

Milk, butter, and dairy products were highly subsidized at the consumer level compared with meat, on which people actually paid implicit taxes in the pre-reform period. Consequently, removal of subsidies substantially pushed up prices for these products. Prices for dairy products and eggs rose 550 percent in 1989-90 and another 92 percent in 1991. Butter prices increased 252 percent in 1989-90 and another 75 percent in 1991.

Meat consumption in Poland increased 7 percent from 1989 to 1991. Yearly per capita consumption of meat and offals increased from 68.6 kilograms (kg) to 73.2 kg. Increased consumption of fish (1.6 percent) and pork (11 percent) more than offset the declines in beef (4 percent) and poultry (2 percent). Pork—a preferred meat in Poland and throughout Central and Eastern Europe—made up 57 percent of total meat consumption in Poland. In 1991, Poles consumed 42 kg of pork, 15.6 kg of beef, and 8.2 kg of poultry per capita.

The increased meat consumption is contrary to what one might expect in a situation of rapidly rising food prices and falling real incomes. However, prices for meat in Poland rose more slowly than for other foods. Moreover, consumption of meat has substituted for dairy products whose prices rose even more. In Poland, milk and soft cheeses are consumed mainly for their protein value.

Consumption of vegetables rose 7 percent in 1989-91, from 116 kg to 126 kg per capita. Per capita consumption of bread—a staple and a small item in the consumer's budget—remained stable at 116 kg in 1991. Potato consumption increased less than 1 percent from 1989 to 1991.

The relative decreases in Polish food consumption apparently were in response to new price levels and declining real income. The declining share of income spent on food in 1991, as well as lower rates of inflation for food than for nonfood items, suggests that within 2 years of reform, Polish consumers have regained some stability in food consumption habits.

Hungary's Gradual Reforms Cushion Impacts to Consumers

Hungary did not take a "Big Bang" approach, but its more gradual economic reforms and price liberalization also prompted changes in consumption patterns in the

1990's. Price liberalization for food, consumer durables, and services were announced at different times, giving Hungarian consumers more time to adjust to price increases.

Rising Food Prices Outpace Other Prices and Income—But Not for Long

As price ceilings were raised and subsidies phased out, food prices in Hungary rose substantially, outpacing overall inflation in each year from 1987 to 1990. Prices on foodstuffs were 101 percent higher in December 1990 than in January 1987, while the total Consumer Price Index (CPI) rose only 89 percent during the same period.

However, this trend changed from 1991 to 1992. Price reform and liberalization focused on agricultural and food prices first and then shifted to liberalization of energy, fuel, and other nonfood prices. Therefore, food prices rose only 46 percent in 1991-92, while the total CPI rose 66 percent. By the end of 1992, almost all prices had been liberalized and were based solely on the interaction of supply and demand. Imposition of a value-added tax (VAT) in January 1993 caused food prices to rise sharply again, by 9.8 percent, compared with an overall increase in the CPI of 6.8 percent for the month.

Consumption Falls, and Shifts

Meanwhile, income did not keep pace with the overall CPI. This was especially true in 1990 and 1991 when real income decreased 1.5 percent and 3.6 percent, respectively.

Consumers' buying habits changed in response to drops in real income. Changes in consumption have been manifest more as declines than as anything else. But, there also were shifts between goods and increases in consumption of specialty products.

Three main changes in consumption patterns have taken place. The first is substitution of fish, eggs, and vegetables for red meats and dairy products. The second, following increases in new, previously unavailable consumer goods on the market, is a shift to more luxury goods, especially tropical fruit. The third is increased consumption of alcoholic beverages.

Consumption of meats, meat products, and fish, for example, declined 7 percent from 81 kg per person in 1987 to 76 kg in 1990. Among meats, pork consumption declined 11 percent to 39 kg per person and beef and veal consumption decreased 19 percent to 6 kg. Consumption of poultry and fish, less expensive sources of protein, increased during the period by 0.4 percent and 29 percent, respectively. Hungarians now consume 23 kg of poultry meat and 3 kg of fish per person per year.

Milk and dairy product consumption (on a milk-equivalent basis) declined 15 percent to 170 kg per capita. Likewise, cereal, sugar, cocoa powder, and coffee consumption declined, by between 2 and 15 percent. Per capita consumption of eggs increased, as did consumption of fats and oils, potatoes, vegetables, citrus fruit, wine, beer, and other alcoholic beverages (table 1).

As real income dropped in Hungary, consumers were forced to make more careful choices about foods. Consequently, we can see shifts among substitutes taking place in reaction to relative price changes. With meats, consumer preferences turned from beef and pork to fish, eggs, and poultry. Likewise with fats and oils, consumption of butter and animal fat decreased in favor of margarine and edible oil.

The price of potatoes rose more slowly or even fell relative to other starches between 1987 and 1990. Potatoes registered a large increase in consumption (up 21 percent) from 50.5 kg per person in 1987 to 60.9 kg in 1990. Consumption of vegetables increased 4 percent over the period. Vegetable prices did not adjust sharply after price liberalization because most vegetables were produced and sold privately before reform began. Although total fruit consumption declined in the period, consumption of tropical fruit rose 20 percent, a dramatic increase since these fruit are considered luxury goods in Hungary.

Consumption of wine, beer, and other alcoholic beverages rose modestly, due to lower real prices. The increase in consumption of wine was especially large in 1987-90, rising 27 percent to 27.7 liters per capita per year. Wine prices have fallen in real terms since 1987 due to the loss of much of the Soviet market, creating large stocks in Hungary. Beer consumption continued a steady rise, which has been the trend for more than a decade. Consumption now stands at 105.3 liters per person per year, compared with 130.2 liters per person per year in the United States. The most striking increase in consumption is in distilled spirits. Having fallen 10 percent from 1980 to 1988, consumption of distilled beverages jumped 8 percent in 1989 and then leveled out in 1990—despite the fact that prices have increased at a rate comparable with that of other beverages. Therefore, the higher consumption could be partly attributed to difficult economic times.

Little Change in Share of Income Spent on Food

Although the percentage of income spent on food has changed relatively little in the last few years, the share spent on individual food categories has shifted. Hungarians spent 40.3 percent of their income on food, tobacco, and beverages in 1990. The share spent on meat rose from 5.8 percent in 1988 to 6.3 percent in 1990. Likewise, expenditures on milk, dairy products, and eggs increased from 2.7 percent of income in 1988 to 3.9 percent in 1990.

Butter and buttercream's share of spending declined from 0.3 percent of income to 0.2 percent in 1988-90, while edible oil and margarine increased from 0.5 percent to 0.7 percent. As expected, the price of butter and buttercream rose much more quickly (136 percent) than that of margarine and edible oil (56 percent).

The proportion of income spent on fruit and vegetables remained nearly constant during the reform period at 2.0 to 2.1 percent.

While wine consumption increased dramatically, spending on wine as a share of income decreased. It accounted for 1.7 percent of total income in 1988, but only 1.5 percent by 1990—which points out that the price of wine not only has lagged behind inflation, but also behind real income growth.

Price Reform Comes Later in the Czech and Slovak Republics

The former Czechoslovakia began price reforms in late 1990, some time after Hungary and Poland had begun to free prices. Consumer subsidies were removed in three rounds of administrative price increases from mid-1990 through early 1991. Inflation in the Czech and Slovak Republics immediately following reforms was not nearly as severe as that experienced by Poland but was higher than in Hungary.

Only in 1990, when the cumulative rate of inflation for food prices hit 25 percent, did food inflation surpass the overall inflation rate of 16 percent. With removal of price controls in January 1991, overall inflation rose to 54 percent in 1991, with food prices increasing 35 percent.

Removing consumer subsidies in 1991 contributed to the 25-percent fall in real income during the first half of 1991. Despite being spared rapid inflation, Czech and Slovak consumption fell sharply from the markedly reduced income. In 1992, retail inflation slowed to about 11 percent. However, with the formal separation into Czech and Slovak Republics and the devaluation of the Slovak Crown against the Czech Crown, inflation in the Slovak Republic is expected to increase much more than in the Czech Republic, possibly resulting in further decreases in food consumption.

Changes in Czech and Slovak Consumption

From 1985 to 1990, the Czech and Slovak Republics' consumption of milk and dairy products decreased markedly. These declines were more pronounced in the Slovak Republic, where demand was weaker and the unemployment rate was five times that in the Czech Republic.

Declines in the consumption of dairy products were evident in both republics as early as 1990. Consumption of milk and butter in the Czech and Slovak Republics, as in both Poland and Hungary, was hit hard by the removal of consumer subsidies in late 1990. From 1985 to 1990, total Czech and Slovak consumption of butter dropped 10 percent. The drop in butter consumption was more acute in the Czech (10.3 percent) than in the Slovak Republic (8.5 percent). Milk consumption, on the other hand, suffered more in Slovakia (15 percent) than in the Czech Republic (11 percent).

Bread, potato, and vegetable consumption increased in Slovakia during this same period. Vegetable consumption in Slovakia increased 14 percent from 1985 to 1990 and fell 2 percent in the Czech Republic. Potato consumption also increased in Slovakia from 1985 to 1990 (21 percent) and decreased in the Czech Republic (5 percent).

The 17-percent decline in meat consumption in the Czech and Slovak Republics together was less than in Hungary and other CEE countries (except Poland).

Consumption of sugar, mostly produced in the Czech Republic with the excess exported to the Slovak Republic, increased 40 percent

Table 2
Reforms Send Prices Skyward

Prices	1989	1990	1991	1992
		Annual percent increase		
Poland:				
Retail	357.8	249.3	60.3	47.2
Food	503.4	217.3	35.5	43.9
Nonfood	212.3	301.7	102.3	52.5
Hungary:				
Retail	NA	26.7	33.8	21.8
Food	NA	17.8	9.9	27.3
Nonfood	NA	34.8	40.6	11.8
Czechoslovakia:				
Retail	NA	15.7	53.7	11.5
Food	NA	24.6	34.6	11.2
Nonfood	NA	11.8	68.9	9.6

Note: NA = Not available. Sources: *MagyarStatisztikai Evkonyv 1991, Statisticka Rocenka CSFR 1992, Rocznik Statisticzny 1992,* and monthly bulletins from each country.

in Slovakia from 1985 to 1990 and 20 percent in the Czech Republic.

In 1990 and 1991, food prices increased more slowly than prices of other goods. Therefore, the cost to Czech and Slovak consumers of food relative to other goods has not increased with reform. With one of the lowest inflation rates in Central and Eastern Europe—and a relatively smooth path to reform—the transition for the Czech and Slovak Republics may not prove to be as painful as the separation from one another.

Patterns of consumption in Slovakia in 1990 (particularly the increased bread, potato, and vegetable consumption) show some initial signs of the substitution patterns observed in other transition economies, with other foods being substituted for meat. In 1991, Slovakia experienced a somewhat larger decline in real income (21 percent from January through October 1991), than did the Czech Republic (17 percent). As the economic situation of Slovakia continues to deteriorate with the split, we might expect this pattern of substitution away from meat consumption to become more pronounced.

Food Prices Lead the Way in Price Reform

The liberalization of food and other prices in Poland, Hungary, and the Czech and Slovak Republics were important steps toward correcting past price distortions, providing clearer signals to consumers and producers, and allowing the interaction of supply and demand to determine market prices. Allowing food prices to increase sent strong signals to consumers. Relative price changes for foods caused CEE consumers to alter their decisions regarding expenditures between food and nonfood items, and within categories of food, thereby changing the mix of goods consumed. Excess demand created by artificially low food prices disappeared, and income was reallocated to other new and previously unavailable goods on the market. In the post-reform period in Poland, Hungary, and the Czech and Slovak Republics, *prices*—rather than government decree or long food lines—direct consumer decisions. ■