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INFLATION, PRICE CONTROLS AND MARKETING MARGINS

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In August of 1971 the Government of the United States embarked upon a policy of wage and price controls from which it would not successfully disengage itself until April of 1974. An administration which had, during its first two years in power, left no doubt about its unequivocal opposition to increased governmental intervention in pricing in the economy on August 15, 1971, surrendered to what it believed to be a political imperative to "do something" about inflation prior to the election of 1972. In fairness to that administration, it must be noted that the Democrat-controlled congress had enacted enabling legislation for mandatory controls in August of 1970. Leading Democrats made it clear that they believed that if the President failed to use that authorization and the country experienced serious inflation they would have an excellent prospect of defeating the President in the 1972 election.

Close examination of the performance of the administrators of the various phases of wage and price controls suggests a peculiar schizophrenia. These administrators were very sensitive to the loss in economic efficiency that could be expected to follow from a rigid system of controls. In their efforts to structure extensive systems of price flexibility within the control system they made it impossible to achieve success in halting or dramatically reducing the rise in the various broad price indices, much less the real inflation that was occurring in the economy. The administrators were apparently unwilling to admit the impossibility of breaking, over any meaningful periods of time, the correlations between rigid controls and economic inefficiency on the one hand and flexible controls and lack of reduction in measured inflation on the other hand.

The overall experience of the controls program appears to have been a small reduction, or more accurately delay, in the measured inflation during the control period combined with some loss of economic efficiency. Any good economist would have predicted precisely what resulted from the program to control rising wages and prices.

REVIEW OF THE STRUCTURE OF THE CONTROLS

This section of this paper draws very heavily upon a very thorough discussion of the controls program in a manuscript titled, "Controls and Inflation: An Overview." The senior author of the manuscript is Marvin H. Kosters, Resident Scholar at the American Enterprise Institute for Public Policy Research and previously Associate Director of the Cost of Living Council with responsibility for economic policy and planning during the stabilization program. The junior author is J. Dawson Ahalt, currently Staff Economist, Agricultural Economics, Office of the Secretary, Department of Agriculture and previously Deputy Associate Director for Economic Policy with the Cost of Living Council. Quotations in this section are taken directly from that manuscript.

Table 1 summarizes the major characteristics of the controls program through its various phases. The public had difficulty tracking the control program as it passed through five primary phases and several subphases over a period of two years and eight months. Phase I was intended to bring price and wage increases to a halt for three months while the objectives, staff and procedures for the controls program could be organized. In a sense, the freeze was necessary during this organizational period so that wage and price increases could not pre-empt the controls program.

"One of the distinguishing features of Phase II which began on November 14, 1971 was its heavy reliance on self-administration. The formal coverage of the standards was broad relative to the reach of administrative intervention through formal review of individual wage and price adjustments. A system of differentiated administrative procedures based primarily on size of firms and employee units was devised to reconcile broad coverage with limited administrative involvement. Several aspects of the administration of the controls were influenced by the administration's goal of minimizing intrusion by a Federal bureaucracy into price and wage decisions."

"Price adjustments were permitted to reflect cost increases, subject to the proviso that these price increases did not lead to profit margins in relation to sales exceeding limits established by a base period. Both the cost pass-through and profit margin rules were applied on a firm-by-firm basis, an approach that made self-administration feasible. All firms except the largest could apply the regulations on a self-administered basis in making price adjustments. For the largest firms submission of

Table 1. Summary of regulations of the controls program

Periods	Prices	Exemptions
Phase I August 15 to November 14, 1971	Frozen	Prices of raw agricultural commodities
Phase II November 14, 1971 to January 11, 1973	Percentage pass-through of allowable cost increases since last price increase or January 1, 1971, adjusted for productivity and volume offsets. Term limit pricing option available. Prenotification required for all firms with annual sales above $100 million, 30 days before implementation, approval required.	Raw agricultural commodities, import prices, export prices, firms with 60 or fewer employees.
Phase III January 11, 1973 to June 13, 1973	Self-administered standards of Phase II. After May 2, 1973, prenotification required for all firms with sales above $250 million whose price increase has exceeded a weighted average of 1.5 percent.	Same as Phase II plus rents.
Freeze II June 13, 1973 to August 12, 1973	Frozen	Prices of raw agricultural commodities.
Phase IV August 12, 1973 to April 30, 1974	In most manufacturing and service industries dollar for dollar pass-through of allowable cost increase since last fiscal quarter ending prior to January 11, 1973. Prenotification same as Phase II except that prenotified price increase may be implemented in 30 days unless CLC requires otherwise.	Same as Phase III plus public utilities, lumber, copper scrap, and long-term coal contracts, initially with sector-by-sector decontrol of prices and wages until April 30, 1974.
Termination April 30, 1974	Legislation authorizing controls allowed to expire.	

Periods	Profits	Wages
Phase I August 15 to Novenber 14, 1971		Frozen
Phase II November 14, 1971 to January 11, 1973	Not to exceed margins of the best 2 of 3 fiscal years before August 15, 1971. Not applicable if prices were not increased above base level, or if firms "purified" themselves.	General standard of 5.5 percent. Exceptions made to correct gross inequities, as for workers whose pay had increased less than 7 percent a year for the last 3 years. Workers earning less than $2.75 per hour were exempt. Increases in qualified fringe benefits permitted raising standard to 6.2 percent.
Phase III January 11, 1973 to June 13, 1973	Not to exceed margins of the best 2 fiscal years completed after August 15, 1968. No limitation if average price increase does not exceed 1.5 percent.	General Phase II standard, self-administered. Some special limitations. More flexibility with respect to specific cases. Workers earning less than $3.50 per hour were exempt after May 1.
Freeze II June 12, 1973 to August 12, 1973		
Phase IV August 12, 1973 to April 30, 1974	Same years as Phase III, except that a firm that has not charged a price for any item above its base price, or adjusted freeze price, whichever is higher, is not subject to the limitation.	Self-administered standards of Phase III. Executive compensation limited.
Termination April 30, 1974	Legislation authorizing controls allowed to expire.	

Source: Adapted from table 2 of Kosters and Ahalt, *Controls and Inflation: An Overview.*

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requests for price increases and approval was required before price increases could be placed into effect. The cost pass-through regulations were applied to retail and wholesale operations by permitting maintenance of percentage markups on the cost of merchandise only, in contrast to the manufacturing and services sectors in which increases in all allowable costs incurred could be passed through on a percentage basis. Price increases to reflect increased merchandise costs for retailers and wholesalers were self-administered even in the largest firms, as were price adjustments for producers of products for which major input costs were exceptionally volatile, such as in meat packing operations."

Phase III was intended to be the device that would allow the termination of the controls program. "From the time they were initially imposed, wage and price controls had been viewed by the administration as a short-term approach and termination as soon as this was feasible was repeatedly announced as the goal." Special attention was to be given to sectors that had the most pressing inflation problems. The agricultural sector was to be given specialized controls and other policies to stimulate increased supplies.

During this five-month period the efforts to phase-out the controls failed as accelerating price increases, particularly in agricultural commodities, resulted in a retreat from flexibility and self-administration. The price of raw agricultural commodities were exempt from control throughout the various phases of price control, and in all phases but those involving general price freezes marketing firms were allowed to pass forward to retail prices either the percentage increases or dollar-for-dollar increases in prices of commodities purchased by them. It appears that the exemption of raw agricultural commodity prices was a primary factor contributing to the failure of Phase III to achieve its objective of allowing the termination of all controls. General public and Congressional pressure forced the administration to end Phase III with another general price freeze on June 13, 1973.

Freeze II was intended to not exceed 60 days, it covered prices only while wages were adjusted under previously established regulations. This period allowed the program administrators to return to a posture resembling Phase II which public sentiment generally considered a failure. "The freeze was lifted on a sectoral basis as sectors were placed under regulations similar to but somewhat more stringent than those of Phase II, beginning with the food sector on July 18 where market disruptions were most severe."

Phase IV was begun on August 12, 1973 with an accompanying announcement of intent to decontrol on a sector-by sector basis. "By April 30, 1974 more than half of the portion of the economy covered when Phase IV began had been decontrolled, with only 12 percent of the Consumer Price Index remaining under control compared to 44 percent before decontrol began. Congressional attitudes

had changed so markedly from the previous year that no action was taken to provide for the limited mandatory authority requested by the administration, or even to establish the basis for monitoring of the private sector and analysis and policy review within the executive branch explicitly directed toward longer term inflation concerns."

The dislocations in the food sector during Freeze II and the early part of Phase IV did a great deal to turn public sentiment against price controls. The petroleum crisis of the winter of 1973-74 was probably a major factor in diverting public attention away from inflation and the efforts to control it, and in this way the petroleum crisis facilitated the end of controls.

"The following distinctions highlight the differences in the various phases of the controls applicable to the food industry:

(a) Phase II - Rules were consistent with nonfood sector described earlier except that many food processors were able to qualify for violatile pricing agreements that waived prenotification requirements on raw material costs and limited the cost pass-through to dollar-for-dollar increases for categories or items.

(b) Phase III - Followed Phase II except retailers were allowed to apply percentage markups to items, categories or total food sales at the firm's option.

(c) Phase IV - Phase III rules continued for wholesalers and retailers. Prenotification requirements were dropped for processors in favor of a gross margin restraint on raw material costs for all processing firms. Firms were allowed flexibility in choosing base periods for gross margin computation."

In terms of intent, the phases can be aggregated into two rather parallel periods. Period I began with a freeze of prices and wages (Phase I), proceeded to flexible controls (Phase II) and decontrol (Phase III). Period II began with a price freeze (Freeze II) proceeded to flexible controls (early part of Phase IV) and decontrol (later part of Phase IV). Apparently the behavior of the food sector was an important element in the failure of Period I to achieve decontrol and in the success of Period II in achieving decontrol.

HISTORICAL RELATIONSHIPS BETWEEN CHANGES

The Market Basket statistics have been developed by the USDA for many years. These statistics are generally regarded as good indicators of the changing retail cost of food derived from U.S. agricultural production, the amount paid to farmers for equivalent quantities of food commodities sold by them and the residual amount referred to as the farm-retail spread.

In the analysis of this and the following section of this paper the Implicit Price Deflator for G.N.P. for the Private Sector is used as the indicator of the general price level. Table 2 shows the percentage year-to-year changes in the general price level indicator, retail cost, farm value and farm-

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retail spread for 1913-74. The technique used in computing the percentage changes was to take the first-differences of the natural logarithms of the various series. The result is equivalent to using a base for the percentage calculation that lies exactly halfway between the beginning and ending point of the change. Using the beginning point as the basis for the percentage calculations, in a sense, over-states percentage increases and understates percentage decreases.

The data of Table 2 show substantial drops in the general price level in 1921, 1931 and 1932. Minor drops in the price level occurred in 1922, 1924, 1927, 1929, 1930, 1933, 1936, 1938, 1939 and 1949. Double-digit inflation occurred in each of the years 1916-20, 1942, 1947 and 1974.

Table 3 shows the results of applying least-squares regression to the data of Table 2 with each of the market basket statistics as a function of the general price level. The slope coefficients of each of the equations indicates strong and consistent relationships between annual percentage changes in each of the pairs of variables included in the regressions. While the R^2 values are higher than the economist frequently encounters in his research, they reveal that there are important causes of changes in the market basket statistics other than changes in the general price level. This result is not surprising because it is reasonable to presume that the values of the market basket statistics are determined by the complex interplay of many variables.

The intercept values of the regressions of Table 3 suggest that the farm value of the market basket would decline by 2.2 percent in a year of zero inflation. Also, the retail cost of the market basket would be expected to decline 1.2 percent in a year of zero inflation. The farm-retail spread would probably also decline with zero inflation, but the rate of expected decline can not be specified precisely since the intercept value for that equation differs significantly from zero only at the .43

Table 2. Annual percentage changes in the general price level and market basket statistics for 1913-1974

Year	Percent Change from Previous Year				
	General Price-Level	Retail Cost	Farm Value	Farm-Retail Spread	Predicted Farm-Retail Spread
	(1)	(2)	(3)	(4)	(5)
1914	.1	3.0	.9	4.9	- .3
1915	1.7	- 1.5	- 4.2	.7	1.6
1916	10.2	18.2	19.3	17.3	11.9
1917	19.1	32.1	37.0	28.0	22.6
1918	12.0	3.4	11.5	- 4.3	14.1
1919	11.5	11.4	6.3	16.4	13.4
1920	12.9	10.4	- 1.3	20.1	15.2
1921	-17.5	-28.4	-36.2	-23.0	-21.6
1922	- 6.0	- 4.6	- 4.9	- 4.4	- 7.7
1923	3.1	1.3	1.3	1.3	3.3
1924	- .9	- 1.8	- .7	- 2.5	- 1.6
1925	.9	8.5	13.2	5.3	.6
1926	1.1	1.4	.1	2.4	.9
1927	- 3.0	- 3.2	- 5.0	- 2.0	- 4.1
1928	1.1	.5	3.9	- 2.0	.9
1929	- 1.7	.1	- .6	.4	- 2.5
1930	- 2.4	- 3.3	-11.6	2.3	- 3.4
1931	-10.0	-21.7	-30.7	-16.4	-12.6
1932	-11.1	-17.7	-28.8	-12.2	-13.9
1933	- 2.5	- 2.9	.1	- 4.2	- 3.5
1934	7.5	11.9	16.4	9.7	8.6
1935	1.2	10.7	23.5	3.5	1.0
1936	- .3	.9	5.1	- 1.9	- .8
1937	4.3	3.7	6.9	1.5	4.7
1938	- 1.6	- 9.9	-17.4	- 4.9	- 2.4
1939	- 1.6	- 3.5	- 4.1	- 3.1	- 2.4
1940	1.8	.4	4.1	- 2.1	1.7
1941	8.6	9.0	19.3	1.7	9.9
1942	13.2	15.9	23.7	9.4	15.5
1943	9.2	11.6	19.1	4.3	10.7
1944	2.0	- 1.8	- 1.3	- 2.3	2.0
1945	1.0	1.8	5.5	- 2.3	.8
1946	8.7	14.1	12.6	15.6	10.1
1947	11.2	20.0	18.3	21.8	13.1

Table 2. (Continued)

Year	General Price-Level (1)	Retail Cost (2)	Percent Change from Previous Year Farm Value (3)	Farm-Retail Spread (4)	Predicted Farm-Retail Spread (5)
1948	6.6	7.5	6.3	8.7	7.5
1949	- 1.0	- 5.7	-13.3	1.8	- 1.7
1950	1.0	- .7	- .8	- .7	.8
1951	7.1	10.5	14.0	7.3	8.1
1952	1.9	1.1	- 3.0	4.8	1.8
1953	.8	- 3.0	- 7.9	1.2	.5
1954	1.3	- 1.8	- 5.6	1.2	1.1
1955	.9	- 1.8	- 6.7	1.9	.6
1956	3.2	.4	- 1.1	1.3	3.4
1957	3.6	3.7	3.5	3.8	3.9
1958	2.2	5.6	7.5	4.3	2.2
1959	1.5	- 2.4	- 8.3	1.5	1.4
1960	1.4	.6	2.1	- .5	1.2
1961	1.0	.4	- 1.8	1.7	.8
1962	1.0	1.0	2.4	.2	.8
1963	1.1	- .3	- 4.5	2.5	.9
1964	1.2	.2	- .3	.5	1.0
1965	1.7	2.8	9.8	- 1.7	1.6
1966	2.5	5.2	6.9	4.1	2.6
1967	2.9	- 1.1	- 6.1	2.3	3.0
1968	3.6	3.5	5.1	2.4	3.9
1969	4.5	5.1	8.6	2.7	5.0
1970	4.8	4.4	- .5	7.6	5.4
1971	4.1	1.8	.4	2.7	4.5
1972	2.9	4.8	8.9	2.1	3.0
1973	5.6	16.0	29.1	6.2	6.3
1974	10.2	13.0	6.1	18.4	11.9

Source: Column 1, computed by procedures described in text on Implicit Price Deflator for GNP for the private sector. This data is from The Economic Report of the President.

Columns 2-4, computed by procedures described in text on data supplied by Mr. Henry Badger, National Economic Analysis Division, Economic Research Service, USDA.

Column 5, predicted from percentage changes in general price level using Equation III of Table 3.

probability level. However, the value of the decline in farm-retail spread that can be inferred from the retail cost and farm value equations agrees closely with the .5 percent decline indicated by the farm-retail equation.

The information in Table 3 suggests that for each one percent change in the general price level there would be in the same year a change in the same direction of 1.4 percent in the retail cost, 1.7 percent in the farm value and 1.2 percent in the farm-retail spread. These results agree closely with economists' general beliefs that, at least in terms of percentage changes, the farm prices are more responsive to changes in the general price level than retail prices. However, the farm-retail spread has averaged approximately 60 percent of the retail cost of the market basket. If this is taken into consideration, the equations in Table 3 imply that changes in the general price level will result in essentially equal dollar changes in farm value and farm-retail spread.

The equations in Table 3 imply that with an annual rate of inflation less than .8 percent the retail cost of the market basket would decline. An annual rate of inflation less than 1.25 percent would result in a decline in the farm value, and an annual rate of inflation less than .4 percent would yield a decline in the farm-retail spread.

Equation III in Table 3 was used to predict the percentage changes that would be expected to occur in the farm-retail spread as a result of the percentage changes that occurred in the general price level in each of the years, and this data is in column 5 of Table 2. Comparison of the predicted changes in the farm-retail spread with changes that actually occurred should allow some insight into the effects of government price control programs during World War II, the Korean War and the 1971-74 period. The O.P.A. apparently was successful in holding the increases in the farm-retail spread substantially below what might have been expected from the general inflation that occurred

Equation I: % Δ Retail Cost = -1.1641 + 1.4362 % Δ Price Level
    ^a(.5430) (.0846) R^2 = .8302
    ^b[.0362] [.00001]

Equation II: % Δ Farm Value= -2.1927 + 1.7711 % Δ Price Level
    (1.0817) (.1685) R^2 = .6520
    [.0472] [.00001]

Equation III: % Δ Farm-retail Spread = -.4583+ 1.2098 % Δ Price Level
    (.5803) (.0904) R^2 = .7523
    [.4329] [.00001]

^aThe number in parentheses is the standard error of the coeffi-
cient immediately above it.
^bThe number in brackets is the probability level at which the co-
efficient can be accepted as differing significantly from zero.

in 1942-45. However, actual increases in the farm-retail
spread in 1946 and 1947 substantially exceeded what
would have been expected from the general inflation
that occurred in those years. In terms of Equation III
in Table 3 the O.P.A. program had the effect of pulling
the 1942-47 data points away from the regression line
and thus reducing the R^2. The O.P.A. probably had little
or no effect on the estimated slope coefficient of that
equation. The O.P.A. Program of the Korean War period
was less rigid, less comprehensive and shorter in duration
than the O.P.A. program. The increase in the farm-retail
spread in 1951 was slightly less than would have been
expected for the general inflation while the opposite was
true in 1952. At least from annual data, it appears that the
O.P.A. had little or no effect in holding the increases in
the farm-retail spread below the levels that would have
otherwise occurred. The increase in the farm-retail spread
was slightly less than would have been expected from the
inflation that occurred during 1971-73, but the farm-retail
spread increased far more than expected in 1974. Because
of the short duration of some of the phases of the controls
program of 1971-74 it seems desirable that this period be
studied using quarterly data.

THE RECENT EXPERIENCE IN CONTROLLING MARKETING MARGINS FOR FOOD

Table 4 reports quarterly percentage changes in the
Implicit Price Deflator for G.N.P. for the Private Sector and
the farm-retail spread for the period from the second quarter
of 1970 through the first quarter of 1975. The calculations
were carried out in the same manner as in the previous
section of this paper except that the original data were
quarterly estimates rather than annual estimates. In this

table certain quarters are identified as representing the vari-
ous phases of the controls program. Obviously, this classifi-
cation does not exactly match the phases of the control
program since most of these phases did not begin or end at
the beginning of a calendar quarter. The first six quarters in
Table 4 are identified as a precontrol period, and the last
four quarters are identified as a post-control period.

Estimates of economic data of the type studied here are
generally considered more reliable on annual rather than
quarterly estimates, and quarterly estimates are regarded as
being more reliable than monthly data. It was decided that
quarterly estimates would represent the best possible basis
for tracking the performance of the controls program.

Equation 3 of Table 3 was used to estimate the expected
changes in the farm-retail spread that would occur relative
to the changes in the general price level for each quarter.
These data are reported in column 2 of Table 4.

Table 5 aggregates the quarterly data of Table 4 into
the phases and periods discussed earlier in this paper and
translates the data into annual rates of change. The
actual procedure used was to compute an average of
the quarterly data for each of the defined periods and
multiply the average by 4.

Each of the phases of the controls program identified
in Table 5 experienced a higher rate of general inflation
than the preceding phase. The annual rate of inflation
advanced from .8 in Phase I to 10.2 percent in Phase IV.
The measured rate of inflation was fairly obviously below
the precontrol period rates during Phases I and II and
above that rate during Phase III, Freeze II and Phase IV.
Since the predicted rate of increase of the farm-retail
spread is a direct, linear function of the rate of general
inflation it also increased with each successive phase of
the controls program advancing from a .5 percent annual
rate in Phase I to 11.9 percent in Phase IV.

The analytical approach used here allows judgments
only with regard to whether the controls program had
a differential impact on the farm-retail spread relative
to its impact on the measured rate of general inflation.
The evidence presented in this paper does not provide
a basis for judging the extent to which the controls
program reduced the measured rate of general inflation
below what it would have been without the program
during the period from the fourth quarter of 1971
through the first quarter of 1974.

The controls program had its most dramatic impact
on the farm-retail spread during Phase I and Freeze II.
During the first period retail prices were frozen for
three months while raw agricultural commodity prices
were exempt from control and rising. The result was
that the farm-retail spread might have been expected
to rise at an annual rate of .5 percent. Instead it dropped
at a 4.8 percent rate. During Freeze II, which lasted for
one month for some food commodities and two months
for others, retail prices were again frozen and raw agri-
cultural commodity prices free of control and rising.

Table 4. Quarterly percentage changes in the general price level, predicted farm-retail spread and farm-retail spread, 1970-1974

Period and Phase	Year & Quarter	General Price Level	Predicted Farm-Retail Spread	Farm-Retail Spread
		. . . percent change from previous quarter . . .		
		(1)	(2)	(3)
Pre-Control	1970-2	.9	1.0	3.0
	1970-3	.9	1.0	1.2
	1970-4	1.5	1.7	1.4
	1971-1	1.1	1.2	-2.1
	1971-2	1.2	1.3	2.8
	1971-3	.7	.7	1.2
Period I				
Phase I	1971-4	.2	.1	-1.2
Phase II	1972-1	1.0	1.1	1.3
	1972-2	.4	.4	.1
	1972-3	.7	.7	.1
	1972-4	.9	1.0	1.0
Phase III	1973-1	1.4	1.6	- .7
	1973-2	1.9	2.2	4.4
Period II				
Freeze II	1973-3	2.1	2.4	.1
Phase IV	1973-4	2.1	2.4	10.0
	1974-1	3.0	3.5	2.8
Post-Control	1974-2	2.4	2.8	8.7
	1974-3	3.0	3.5	-1.0
	1974-4	3.4	4.0	3.1
	1975-1	2.0	2.3	5.7

Source: Same as table 2.

The result was that in the third quarter of 1973 the farm-retail spread would have been expected to rise at an annual rate of 9.7 percent, but instead it rose at only a .4 percent rate.

During Phases II, III and IV wholesaling and re-tailing firms were allowed to pass-through only the rising cost of commodities that they purchased. This implied that rising wages and other costs that rose at rates ex-ceeding the rise in price of goods purchased would have to be absorbed rather than being passed forward by raising selling prices. The rise in the farm-retail spread at an annual rate of 2.5 percent in contrast with an expected rate of 3.2 percent suggests the possibility that some rise in wage and other costs were absorbed during Phase II. It must be remembered that wholesale and retail margins account for only a portion of the total farm-retail spread.

Since the farm-retail spread rose at almost exactly the expected annual rate of 7.5 percent during Phase III it must be concluded that the controls program had lost its ability to impose a differential slowing of the rise of the farm-retail spread during the first half of 1973. During Phase IV the farm-retail spread rose at an annual rate of

25.6 percent in contrast with an expected rate of increase of only 11.9 percent. With this large a discrepancy it must be concluded that the controls program had little or no effect in restraining the farm-retail spread during Phase IV. While Phase IV was intended to be a period of sector-by-sector decontrol, Table 4 indicates that the explosion in the farm-retail spread occurred in the early part of Phase IV rather than the later portion. During the post control period (second quarter 1974 through the first quarter of 1975) the rise in the farm-retail spread slowed to a 16.5 percent annual rate while the expected advance rose slightly to a 12.6 percent rate.

During Period I which represented the first cycle of the controls program discussed previously in this paper the farm-retail spread advanced at a 2.9 percent annual rate while the rate of general inflation implied a 4.0 percent rate of increase. Period II which was the second but shorter cycle of controls traced a 17.2 percent annual increase in the marketing margin while the predicted rate for this period was only 11.2 percent. Periods I and II combined, or thus the entire period of controls, shows the marketing margin advance at one percentage point greater annual rate than would have been expected from

the inflation that occurred during the entire period of controls.

Since prices are likely to rise following the termination of a price control program the ultimate effects of the controls program cannot be evaluated unless a period of time following the end of the program is included in the analysis. The bottom row of Table 5 shows that the general price level rose at a 7.0 percent annual rate from the start of the controls program through the first quarter of 1975. This implies that the farm-retail spread would have been expected to rise at an 8.0 percent annual rate during this period, but instead it rose at a 9.8 percent rate. From this evidence it would be difficult to argue that the controls program did anything more than delay the increases that would have occurred in the marketing margin without any controls program. While the evidence does not allow a definitive answer, the question of whether the inefficiencies and uncertainties caused by the controls program may have caused the marketing margins for food to rise more than if there had been no controls program is certainly consistent with the data.

Table 5. Annual percentage changes in the general price level, predicted farm-retail spread and farm-retail spread for various subperiods of 1970-1974

| | Annual Percentage Rates of Change | | |
Period	General Price Level	Predicted Farm-Retail Spread	Actual Farm-Retail Spread
	(1)	(2)	(3)
Precontrol			
1970-1-1971-3	4.2	4.6	5.0
Phase I			
1971-4	.8	.5	-4.8
Phase II			
1972-1-1972-4	3.0	3.2	2.5
Phase III			
1973-1-1973-2	6.6	7.5	7.4
Freeze II			
1973-3	8.4	9.7	.4
Phase IV			
1973-4-1974-1	10.2	11.9	25.6
Post-Control			
1974-2-1975-1	10.8	12.6	16.5
Period I			
1971-4-1973-2	3.7	4.0	2.9
Period II			
1973-3-1974-1	9.6	11.2	17.2
Control Period			
1971-4-1974-1	5.6	6.2	7.2
Since Start of Controls			
1971-4-1975-1	7.0	8.0	9.8

Source: Average of Quarterly Percentage changes of Table 4 multiplied by 4.