

## **FAPRI U.S. Agricultural Sector Elasticities Volume II: Livestock, Poultry, and Dairy**

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*Technical Report 92-TR 26*  
October 1992

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This material is based on work supported by the Cooperative State Research Service, U.S. Department of Agriculture, under Agreement No. 89-38812-4480.

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture.

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## **FAPRI U.S. AGRICULTURAL SECTOR ELASTICITIES VOLUME II: LIVESTOCK, POULTRY, AND DAIRY**

This report presents estimates of supply, demand, and price transmission elasticities for the U.S. livestock, poultry, and dairy sectors. The estimates are derived from models maintained by the Food and Agricultural Policy Research Institute (FAPRI) and are prepared in accordance with procedures stipulated by the Organization for Economic Cooperation and Development (OECD).

This project arose from a need by the OECD to model major agricultural sectors in major producing and consuming countries. The set of elasticities presented here represents the U.S. component of that model. This method was chosen for several reasons. First, the project draws on the expertise of persons modeling the agricultural sectors of their own countries, providing maximum accuracy and detail in the models. Second, these elasticities are derived from structural modeling work that had already been completed, thereby saving time and expense. Finally, a model created from input from many countries is in keeping with the cooperation and development aspects of the OECD.

The first section of this report provides a general overview and describes the procedures used to perform the elasticity calculations. Each of the succeeding sections provides general information about the elasticity estimates for a particular commodity. Specific attention is given to those results that may not be intuitively clear and, in particular, to the elasticities that depend on the interaction of two or more equations in the FAPRI modeling system.

### **Overview and Procedures**

The procedures used to calculate elasticities for the U.S. livestock, poultry, and dairy sectors generally correspond to those used to calculate U.S. crop sector elasticities, as detailed in Volume I (Meyers et al. 1992). A subset of the endogenous variables in the FAPRI models are identified as variables of interest. Elasticities are computed with respect to exogenous variables in the FAPRI models and with respect to prices. With some exceptions, elasticities for intermediate endogenous variables in the model are not reported; rather, the tables report the net impacts on final variables of interest resulting from price shocks and exogenous variables included in intermediate equations. Exogenous variables and prices are set to their 1985-89 averages, and both 1 percent and 10 percent

shocks are used to test the linearity of the model. Results are reported in Tables 1 through 45. The following procedures are specific to this analysis.

1. In the beef, pork, and chicken sectors, endogenous variables of interest to the OECD are breeding herd, production, stocks, and consumption. For the dairy sector, variables of interest include cow numbers; production per cow; milk production; fluid and total milk consumption; and the production, consumption, and stocks of butter, cheese, and nonfat dry milk.
2. Elasticities are calculated for a number of intermediate endogenous variables that are retained in the model to simplify the analysis and better reflect the model structure in presenting the results. These intermediate variables include animal unit and livestock price indices (treated as exogenous variables in feed demand equations in the crops model), cattle placed on feed and nonfed slaughter (exogenous in price linkage equations), and third-quarter cattle on feed (exogenous in wheat and sorghum feed equations). In addition, production is treated as a right-hand-side (RHS) variable in several cases. The chain rule could be used to determine elasticities for variables of interest with respect to price and exogenous variables alone.
3. The livestock, poultry, and dairy models generally use more than one price for each commodity. Price transmission elasticities link the various model prices to retail prices for beef, pork, and chicken; manufacturing-grade milk prices; butter and cheese consumer price indices; and the wholesale price of nonfat dry milk.
4. The beef and pork models are much more dynamic than the models for crops, dairy, and poultry. The ten-year period used to assess long-run effects in the other sectors is insufficient for beef and pork. For pork, the effects of shocks in RHS variables are reported for years 1 through 15, and then for years 20, 30, and 40. Beef effects are reported for the same years as pork effects are, but beef effects are also reported for years 50, 60, and 70.
5. The dynamics of the beef and pork models have important implications for the baseline values of endogenous variables. Even though all exogenous variables and prices are set at 1985-89 levels, the model equilibrium levels of endogenous variables often differ substantially from their 1985-89 average levels. One explanation is that the observed 1985-89 levels of endogenous variables did not represent a long-run equilibrium; a competing explanation, of course, is that there may be problems with the model. The beef and pork models are allowed to run for many periods before shocks are introduced so that long-run equilibrium values are approached, but the reported annual variation in baseline endogenous variables indicates that equilibriums had not been reached for all variables.
6. Beef, pork, and chicken demand equations are specified in price-dependent form. A double-log demand system is used for beef and pork, whereas a linear demand system is used for chicken. In both cases, it is possible to invert the demand system to obtain the more familiar quantity-dependent specification. For beef and pork, the elasticities can be calculated directly from the equations because the double-log specification implies constant elasticities. In the case of chicken demand, however, it is necessary to invert the linear demand equation and shock the RHS variables because the levels of prices and quantities will affect the elasticity estimates.

### Pork

The swine breeding herd (Table 1) is the primary determinant of subsequent production. The model estimates both additions to the breeding herd and sow slaughter, and the breeding herd is determined by an identity. Both estimated equations are a function of barrow and gilt prices and a feed-ration value. Grain and meal prices are lagged by one period in determining the feed-ration value because grain prices are reported on a crop year basis (typically September-August or October-September), whereas pork variables are reported on a calendar year basis. Corn and meal price elasticities are larger than those for other feedstuffs, reflecting the dominance of corn and meal in typical swine feed rations. Corn production is included in the model as a proxy for available feed supplies on farms with mixed crop-livestock operations. Approximately half of the long-run effect on the breeding herd of a change in barrow and gilt prices occurs in the first three years.

In general, the same factors that affect the swine breeding herd affect pork production (Table 2). However, production is also a function of live hog imports, death loss, and the number of pigs per litter. The estimated elasticity for each of these variables has the expected sign. The short-run production elasticity with respect to barrow and gilt prices is negative as a buildup in the breeding herd reduces production in year 1. The own-price elasticity of supply is positive in year 2, and the long-run elasticity is approximately 1.3. The production elasticity with respect to pigs per litter is less than one, and the long-run production elasticity with respect to barrow and gilt prices is substantially less than the corresponding breeding herd elasticity. This result implies that a 1 percent increase in the pig crop results in a smaller proportional increase in pork production, representing a possible problem with the model that will bear closer examination.

The decision to hold pork stocks is affected by pork production, the retail pork price, and the interest rate (Table 3). Stock increases following production increases seem appropriate because production increases may cause transitory surpluses prior to price response. Retail price increases cause the expected reduction in stocks. Interest rate increases result in an increase in the cost of storage and thus reduce stocks.

Impacts on per capita pork consumption (Table 4) are calculated directly from the demand equations. The double-log specification results in constant elasticities, and the calculated elasticities are consistent with consumer theory. All commodities are gross substitutes for each other, and the own-price elasticity is negative for pork. Prices are deflated by the consumer price index, and income is calculated on a per capita basis. The elasticity of total consumption with respect to the total population is one (the tables report per capita consumption), but the elasticity with respect to the

population aged 60 and over is negative. As the population ages, pork demand declines, but the elasticity of -1.4 is larger than is reasonable (it implies that increasing the population over age 60 would reduce pork consumption, even if the population under age 60 remained constant). This problem in the model will need to be corrected.

Primary price determination occurs at the retail level; i.e., pork demand determines the price level, which in turn affects all other prices. In addition, supply variables and macroeconomic variables enter the determination of producer prices. An increase in per capita pork supplies reduces barrow and gilt prices as increased supplies widen the retail-liveweight margin (Table 5). An increase in the consumer price index (CPI) for fuels and utilities also increases the margin, whereas an increase in the value of pork byproducts reduces the margin and increases the barrow and gilt price. The wholesale price is used to deflate prices in the equation and, on net, has a small negative effect on barrow and gilt prices. Although all the elasticities have the expected sign, the absolute value of the retail price elasticity is smaller than might be expected and the per capita supply elasticity is larger than expected. This result may be attributable to the strong negative correlation between retail prices and per capita supplies that may result in a confusion of price-transmission and demand elasticities.

The sow price is not used in any of the supply or demand equations of the model, but price transmission elasticities are reported for the sake of completeness (Table 6). The estimated elasticities indicate that the sow price is more sensitive to the pork retail price than is the barrow and gilt price. Packer wages are used as a measure of processing costs rather than the CPI for fuels and utilities.

### **Beef**

As with pork, the primary determinant of subsequent beef production is the beef breeding herd (Table 7). And like the swine breeding herd, the beef breeding herd is determined in the model by an identity that takes into account additions to the breeding herd and cow slaughter, both of which are estimated equations. Factors affecting the beef breeding herd are characterized as output prices, input prices, and macroeconomic variables.

The output prices that affect the breeding herd are the prices of feeder steers and utility cows. An increase in the feeder steer price provides an incentive to producers to expand production, whereas an increase in the utility cow price provides an incentive to slaughter cows. The only input price is the corn price, which has the expected negative effect on the breeding herd. Higher interest rates also reduce the size of the breeding herd because the interest rate may be thought of as the input price of capital. The wholesale price index is used as a deflator in one of the equations and has little

net effect on the breeding herd. Longer biological lags in the beef sector mean that it takes many years for the full effects of shocks to be felt—only 50 percent of the long-run effect of an increase in feeder steer prices takes place in the first 15 years. There is some concern that the long run in the model may be too long.

Beef production is affected by input and output prices, macroeconomic variables, and imports and exports of live animals (Table 8). As expected, an increase in any input price results in a reduction in beef production in the long run, and an increase in the principal output prices results in an increase in beef production in the long run. Higher utility cow prices reduce beef production in the long run because of their effect on the breeding herd. Cattle imports and exports affect available supplies of beef animals and thus have corresponding effects on production.

Short-run effects sometimes differ from long-run effects. An increase in the feeder steer price causes a short-run production decline because it reduces cow slaughter and the number of cattle placed on feed. In the long run, an increase in the feeder steer price increases the size of the breeding herd and thus increases the number of calves born and, finally, beef production. An increase in the Omaha steer price increases cattle feeding and thus has a positive effect on production in the short run. This price effect does not directly enter the breeding herd decision, however, so animals are not available to sustain a large production increase and the production increase declines over time. A corn price increase has a small positive effect on beef production in years 2 and 3 because it increases cow slaughter and reduces heifer retention.

Beef ending stocks are affected by beef production, the CPI, the CPI for fuels and utilities, and the beef retail price (Table 9). The estimated elasticities have the expected signs, with the exception of the retail price. It is not clear why a retail price increase should result in higher ending stocks of beef; this result seems to be a flaw in the beef system that requires attention.

Per capita beef consumption elasticities are calculated directly from the beef demand equation (Table 10), which uses a double-log specification so that elasticities are constant. As expected, the own-price effect is negative and beef is found to be a gross substitute for pork and chicken. All prices are deflated by the CPI, and income is expressed in per capita terms. The elasticity of total beef consumption with respect to population is one.

The primary price in the beef system is the beef retail price. The Omaha steer price, feeder steer price, and utility cow prices are all determined directly or indirectly by the beef retail price. The Omaha steer price is a function of the retail price and several variables that affect the retail-liveweight margin (Table 11). As expected, increases in beef production and in the CPI for fuels and

utilities increase the margin and reduce the Omaha steer price. The wholesale price index is positively related to the Omaha price because it is used as a deflator for the other prices in the equation. The relative magnitudes of the retail price and production elasticities in the Omaha steer price equation seem more realistic than the corresponding elasticities in the barrow and gilt price equation.

The feeder steer price is a function of the Omaha steer price, feed prices, and the number of cattle placed on feed (Table 12). All impacts are intuitive except placements. One might expect that increasing placements would cause the feeder price to increase in response to the implicit increase in feeder steer demand. The estimated elasticity would be consistent with a supply-determined price of feeders. The utility cow price is a function of beef retail prices, the CPI for fuels and utilities, and nonfed cattle slaughter (Table 13). The interpretations of all impacts are straightforward.

Because the feeder steer price and the utility cow price were affected by cattle placements and nonfed slaughter, respectively, it was necessary to include the reduced-form impacts on these two variables. The interpretations of all impacts are relatively transparent and are similar to the production impacts (Tables 14 and 15). Third-quarter cattle on feed is included to provide the linkage to wheat and sorghum feed demand. The impacts are similar to cattle placements, as should be expected (Table 16).

### **Broilers**

Unlike pork and beef production, broiler production has no biological restrictions placed on the system because of the short production cycle of broilers. Thus, the broiler supply sector converges rapidly and does not fluctuate. Flock inventory (breeding herd) is not included as an explanatory variable, and production is estimated directly from the number of eggs hatched and as a function of input and output prices (Table 17). The 12-city wholesale price of chicken is used as the output price variable, and corn and soybean meal prices are the input price variables. As expected, an increase in eggs hatching results in a production increase.

The calculated production elasticities with respect to prices are very small. Hatchings should not be an exogenous variable, but attempts to make hatchings a function of economic variables have been unsuccessful. The strong upward trend in hatchings and broiler production has made it difficult to estimate chicken supply functions with realistic elasticities. In practice, broiler production is often adjusted when preparing baselines or conducting policy analysis in order to conform with expectations of reasonable supply behavior.

Broiler meat stocks (Table 18) are estimated as a function of chicken production, wholesale chicken prices, the CPI for fuels and utilities, and stocks of other chicken (primarily laying hens). Elasticities are consistent with expectations, except that it is not clear why stocks of other chicken should have a large positive effect on broiler meat stocks. However, it is important to note that reported broiler meat stocks are very small relative to production and consumption.

The chicken demand equation is estimated in its price-dependent form with a linear specification. Thus, the levels of quantities and prices at which the elasticities are calculated are important, unlike those for beef and pork. To obtain the elasticity estimates for broiler meat consumption (Table 19), the linear system was inverted to solve for quantity rather than price. The RHS variables are then shocked to determine their impacts on consumption. The own-price effect is negative, and chicken is a gross substitute for beef and pork. The income elasticity is positive and relatively small. All prices were deflated by the CPI, accounting for the positive elasticity with respect to the CPI.

All prices in the broiler system follow from the retail price because demand is the primary determinant of the prices. The 12-city wholesale price is a function of the retail price and variables expected to affect the retail-wholesale margin (Table 20). The retail chicken price, chicken production, and the wage rate for poultry processors all have the expected effects on the wholesale price. The CPI for fuels and utilities has an unexpected positive effect on wholesale prices. The sign may be reversed because of collinearity within the equation, and this result may require revision of this equation.

The broiler farm price is not used in the model, but price transmission elasticities are reported for the sake of completeness (Table 21). The farm price is closely tied to the wholesale price, and the wage rate for poultry processors has the expected negative effect on farm prices. The positive effects of the CPI for fuels and utilities and the wholesale price index are more difficult to justify.

#### **Animal Unit and Livestock Price Indices**

Feed demand equations in the FAPRI crops model utilize animal unit and livestock price indices as explanatory variables. Corn and wheat feed demand equations utilize grain-consuming animal units (GCAUs) and a livestock price index weighted by GCAU proportions. Soybean meal feed demand depends in part on high-protein-consuming animal units (HPAUs) and a livestock price index weighted by HPAU proportions. GCAUs are calculated as a weighted average of animal grain consumption. For example, cattle and hogs are heavy consumers of corn and thus provide a greater

weight than would broilers to GCAUs. Likewise, broilers and hogs are primary consumers of soybean meal and thus contribute a greater portion to HPAUs than do beef cattle.

The same factors that affect production in each sector also affect GCAUs and HPAUs (Tables 22 and 23). In general, higher feed prices reduce animal units and higher output prices increase animal numbers. Dairy cow numbers and production per cow are treated as RHS variables in the animal unit equations; their determinants are reported in Tables 26 and 27. Long-run price effects generally exceed short-run effects because of dynamic behavior in the beef and pork sectors. Only one price is reported for the beef sector because the feeder steer and utility cow prices are allowed to respond to changes in the Omaha steer price. Elasticities with respect to broiler prices are very small because supply elasticities in the broiler sector are small.

The livestock price indices are primarily a function of the prices of beef, pork, chicken, and milk (Tables 24 and 25). Other factors come into play because the weights associated with each price depend on the actual contribution of each sector to the total GCAU or HPAU. For example, changes in feed prices affect beef and pork production differently, so the weights associated with steer and barrow and gilt prices are also affected. The endogeneity of the weights explains the declining elasticity with respect to barrow and gilt prices and the increasing elasticity with respect to beef prices. Higher prices increase hog inventories, which in turn increase the share of pork in the total price index. All else being equal, increasing the pork share reduces the total price index because 1985-89 average pork prices are much lower than 1985-89 average beef prices. The opposite trend occurs for beef.

### Milk

Herd dynamics in the FAPRI dairy model are less complicated than those in the beef and pork models. A lagged dependent variable in the dairy cow equation has a coefficient of 0.8, implying that long-run elasticities are approximately five times as large as short-run elasticities. No significant dynamics enter other equations of the model, so all dairy tables (Tables 26 through 45) report impacts of shocks in prices and exogenous variables only for a ten-year period. Although the impacts of shocking variables that affect dairy cow numbers (and thus milk production) are not completely exhausted after ten years, the reported results are adequate to derive long-run behavior.

Dairy cow numbers depend on milk prices, utility cow prices, and a ration value. Corn and soybean meal prices have no effect on cow numbers in the first year because of differences in marketing years. Corn prices are reported on a September-August basis and soybean meal prices on

an October-September basis; alfalfa prices and all dairy variables are reported on a calendar year basis. The model therefore uses lagged corn and soybean meal prices but current alfalfa and milk prices to determine cow numbers. Utility cow prices are included in the equation to represent the opportunity cost to dairy producers of maintaining the breeding herd rather than slaughtering cows. The long-run own-price elasticity is 0.44, which is approximately 12 percent larger than the effect reported for year 10.

Milk production per cow (Table 27) depends on a lagged ratio of milk prices to the feed ration value. Total milk production (Table 28) is simply the product of cow numbers and production per cow. The long-run own-price production elasticity is approximately 0.55. The estimated supply elasticity in an earlier version of the model was even lower.

Fluid milk demand (Table 29) is estimated on a per capita basis. The CPI for whole milk, the CPI for nonalcoholic beverages, and real per capita disposable income all have the expected effects on fluid milk consumption. The proportion of the population under 20 years of age is included as an additional explanatory variable, and the elasticity is positive, as expected. The estimated elasticity of 1.09 is implausible, however, because it would imply that an increase in the population over the age of 20 would actually reduce fluid consumption, even if the population under the age of 20 were held constant (the negative effect of reducing the proportion of the population under the age of 20 would more than offset the increase in total population). This problem in the model will need to be corrected.

Total milk consumption (Table 30) is the sum of fluid consumption, manufacturing use, and a variety of miscellaneous categories. Increases in manufacturing-grade milk prices and dairy wage rates reduce the profitability of producing dairy products, whereas higher prices for butter, cheese, nonfat dry milk, and frozen dairy products increase profitability for manufacturing plants and therefore result in increased milk use. At a given set of prices, an increase in government dairy product removals provides manufacturing plants with an additional outlet for butter, cheese, and nonfat dry milk, and therefore results in a small increase in total milk utilization. The producer price index (PPI) is used to deflate dairy wage rates, which accounts for the positive effect of the PPI on manufacturing milk demand.

### **Butter**

Butter and nonfat dry milk are treated as joint products in the model, and a technical coefficient determines relative production levels. Thus, production elasticities for butter and nonfat dry milk are

identical (Tables 31 and 37). Elasticities with respect to milk, butter, and nonfat dry milk prices; the dairy wage rate; and government product removals are all of the expected sign. A positive elasticity is reported for the wholesale price index (WPI) for cheese. In the model, this result occurs because whey production is positively related to cheese production and butter/nonfat dry milk production is positively linked to whey production.

Per capita commercial butter consumption depends on real butter prices, real per capita disposable income, and government butter donations. The income elasticity is negative, and donations are a weak substitute for commercial consumption. Table 32 reports total domestic use; therefore, the donation elasticity is positive and the population elasticity is less than one.

Activities of the Commodity Credit Corporation (CCC) are the principal determinants of butter ending stocks (Table 33). Stocks are determined by a simple accounting identity: ending stocks equal commercial stocks plus beginning CCC stocks plus removals minus domestic donations minus CCC foreign sales and donations. Each of these variables is exogenous to the model; when the model is used to make projections or perform policy analysis, the model operator sets the values of these variables to maintain product prices at CCC support levels (or higher if there are no removals) and to keep government stocks from reaching excessive levels or falling below zero.

### **Cheese**

Cheese production is a function of the ratio of cheese prices to manufacturing-grade milk prices, cheese removals, and the real dairy wage rate (Table 34). The specification of the cheese demand equation is analogous to that for butter. Unlike that of butter, the income elasticity of demand is positive (Tables 35). Cheese ending stocks are determined by the same type of accounting identity as that for butter stocks. Commercial cheese stocks are proportionately larger than those for butter and nonfat dry milk, so the elasticity of total cheese stocks with respect to commercial stocks is proportionately larger as well (Table 36). Commercial cheese stocks are important enough that they should be estimated when the model is next revised.

### **Nonfat Dry Milk**

As discussed, nonfat dry milk production is jointly determined with butter production (Table 37). Domestic use is a function of the real prices of nonfat dry milk and whole milk, as well as real disposable income and government donations (Table 38). The absolute value of the cross-price elasticity with respect to whole milk is much larger than the absolute value of the own-price

elasticity. This result seems unlikely, at best, and may cause problems in simulating certain scenarios. Until new estimates are available, the cross-price elasticity in the model will be reduced to one-fourth its current level and an offsetting adjustment will be made in the intercept. Ending stocks of nonfat dry milk are determined in the same manner as those for butter (Table 39).

### Dairy Sector Price Transmissions

The all-milk farm price is a weighted average of manufacturing-grade milk prices and fluid milk prices (Table 40). The weights depend on the share of total production devoted to fluid and manufacturing uses. Increases in butter, cheese, and nonfat dry milk prices increase manufacturing use of milk and thus increase the share of the manufacturing-grade milk price and reduce the average milk price. The greater the fluid differential, the greater the fluid price relative to the manufacturing price (Table 41). The price transmission elasticity between farm milk prices and the CPI for fluid milk is relatively low; in fact, the elasticity with respect to a marketing cost index is actually larger than that with respect to the manufacturing-grade milk price (Table 42).

Butter wholesale prices are linked to the butter CPI and the marketing cost index (Table 43). Likewise, the wholesale price of 40-pound cheese blocks and the cheese wholesale price index are linked to the cheese CPI and the marketing cost index (Tables 44 and 45). In all cases, the elasticities with respect to the CPIs are greater than one, implying that wholesale prices are proportionally more volatile than are consumer prices. Such a result is consistent with the estimated price transmission elasticities for fluid milk.

The CCC support price for milk and the CCC purchase prices for butter, cheese, and nonfat dry milk do not appear explicitly in any of the model equations. As stated, the operator of the FAPRI dairy model must set the levels of government removals, donations, and CCC foreign sales in a manner that maintains prices in each of the markets at or above support levels. Because of import restrictions, U.S. market prices for dairy products are not linked (under normal conditions) to world prices, so any model of the U.S. dairy sector requires a price-determination mechanism. CCC behavior would need to be endogenized if the model is to be fully automated.

### Conclusions

The elasticities calculated in this paper represent the FAPRI U.S. livestock, poultry, and dairy models. Because the effects of some variables are contained in more than one equation, the cumulative effect is presented. In other words, these elasticities generally are not structural. They

are useful in describing the endogenous variable response to small or moderate changes in the right-hand-side variables.

Note that the elasticities calculated in this paper are based on 1985-89 averages of the exogenous variables. The elasticities calculated for that period will not necessarily match those calculated for other periods, except for elasticities taken from equations with double-log specifications. For this reason, using these elasticities in modeling periods other than those relatively similar to 1985-89 could produce substantially different results from those obtained from the structural models.

If the levels of the exogenous or endogenous variables are substantially different from those for 1985-89, the elasticities could again produce different results than would the structural models. The implication for this hazard is that these elasticities might not be suitable for assessing the impacts of large changes in any exogenous variable. This constraint is more severe here than for the structural models in which implied elasticities change with changes in levels of variables.

Although comparison of the 1 percent and 10 percent shocks show similar and often identical results for many equations, there are instances (particularly in the beef and pork models) where nonlinear responses would be misrepresented by selecting one set of elasticities or the other. Fortunately, the system is mostly linear.

The set of elasticities presented here gives an accurate representation of the response of the FAPRI livestock, poultry, and dairy models. These elasticities can be used to approximate the structural models in impact analyses involving any of the right-hand-side variables. Over small and moderate ranges of change in these variables, the elasticities versions will approximate the response of the structural models, resulting in a variety of analysis possibilities to which they are suited.

Table 1. Hog breeding herd: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline	Soybean						7-Market
	LHS <sup>a</sup> Variable (million head)	Sorghum Price	Corn Price	Barley Price	Meal Price	Oat Price	Corn Production	Barrow and Gilt Price
(percent)								
<b>1 Percent Increase</b>								
1	8.385	0.0000	0.0000	0.0000	0.0000	0.0000	0.0136	0.5188
2	8.380	-0.0087	-0.2677	-0.0039	-0.2459	-0.0117	0.0239	0.9705
3	8.375	-0.0153	-0.4701	-0.0068	-0.4317	-0.0205	0.0316	1.3122
4	8.369	-0.0203	-0.6232	-0.0090	-0.5723	-0.0272	0.0375	1.5706
5	8.364	-0.0241	-0.7390	-0.0107	-0.6787	-0.0323	0.0420	1.7662
6	8.359	-0.0269	-0.8267	-0.0120	-0.7592	-0.0361	0.0453	1.9143
7	8.354	-0.0291	-0.8931	-0.0129	-0.8202	-0.0390	0.0479	2.0266
8	8.349	-0.0307	-0.9434	-0.0137	-0.8664	-0.0412	0.0498	2.1118
9	8.343	-0.0320	-0.9816	-0.0142	-0.9014	-0.0429	0.0513	2.1765
10	8.338	-0.0329	-1.0106	-0.0146	-0.9281	-0.0441	0.0524	2.2258
11	8.333	-0.0337	-1.0327	-0.0150	-0.9484	-0.0451	0.0533	2.2633
12	8.328	-0.0342	-1.0496	-0.0152	-0.9639	-0.0458	0.0539	2.2921
13	8.322	-0.0346	-1.0625	-0.0154	-0.9757	-0.0464	0.0544	2.3142
14	8.317	-0.0349	-1.0724	-0.0155	-0.9848	-0.0468	0.0548	2.3312
15	8.312	-0.0352	-1.0801	-0.0156	-0.9918	-0.0472	0.0551	2.3445
20	8.286	-0.0358	-1.0998	-0.0159	-1.0100	-0.0480	0.0559	2.3794
30	8.233	-0.0362	-1.1118	-0.0161	-1.0210	-0.0485	0.0565	2.4029
40	8.181	-0.0365	-1.1192	-0.0162	-1.0278	-0.0489	0.0568	2.4188
Average <sup>b</sup>	6.894	1.87	2.11	2.12	189.27	1.62	7,331	47.01

Table 1. Continued

Year	Baseline LHS <sup>a</sup> Variable	Sorghum Price	Corn Price	Barley Price	Soybean Meal Price	Oat Price	Corn Production	7-Market Barrow and Gilt Price
	(million head)				(percent)			
<b>10 Percent Increase</b>								
1	8.385	0.0000	0.0000	0.0000	0.0000	0.0000	0.1359	5.1882
2	8.380	-0.0872	-2.6760	-0.0388	-2.4575	-0.1169	0.2386	9.7054
3	8.375	-0.1532	-4.6992	-0.0681	-4.3156	-0.2053	0.3163	13.1216
4	8.369	-0.2031	-6.2294	-0.0903	-5.7208	-0.2721	0.3751	15.7060
5	8.364	-0.2408	-7.3870	-0.1070	-6.7839	-0.3227	0.4196	17.6621
6	8.359	-0.2694	-8.2633	-0.1197	-7.5886	-0.3610	0.4533	19.1434
7	8.354	-0.2910	-8.9269	-0.1294	-8.1980	-0.3900	0.4789	20.2661
8	8.349	-0.3074	-9.4299	-0.1366	-8.6600	-0.4119	0.4983	21.1179
9	8.343	-0.3199	-9.8116	-0.1422	-9.0105	-0.4286	0.5130	21.7650
10	8.338	-0.3293	-10.1016	-0.1464	-9.2769	-0.4413	0.5242	22.2576
11	8.333	-0.3365	-10.3224	-0.1496	-9.4797	-0.4509	0.5328	22.6333
12	8.328	-0.3420	-10.4910	-0.1520	-9.6344	-0.4583	0.5393	22.9208
13	8.322	-0.3462	-10.6199	-0.1539	-9.7529	-0.4639	0.5443	23.1417
14	8.317	-0.3495	-10.7191	-0.1553	-9.8439	-0.4683	0.5482	23.3123
15	8.312	-0.3520	-10.7957	-0.1564	-9.9143	-0.4716	0.5513	23.4448
20	8.286	-0.3584	-10.9927	-0.1593	-10.0952	-0.4802	0.5592	23.7937
30	8.233	-0.3623	-11.1127	-0.1610	-10.2054	-0.4854	0.5647	24.0293
40	8.181	-0.3647	-11.1867	-0.1621	-10.2734	-0.4887	0.5685	24.1881
Average <sup>b</sup>	6.894	1.87	2.11	2.12	189.27	1.62	7,331	47.01

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 2. Pork production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Sorghum Price						Corn Price			Barley Price		Soybean Meal Price		Oat Price	7-Market Corn Production		Barrow and Gilt Price		Hogs Imported	Pigs per Litter	Death Loss	
		(million pounds)	(percent)																				
<b>1 Percent Increase</b>																							
1	21,074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0336	-0.0141	0.0063	0.3880	0.0000											
2	21,119	0.0002	0.0060	0.0001	0.0055	0.0003	0.0060	0.2370	0.0063	0.7715	-0.0729												
3	21,165	-0.0039	-0.1199	-0.0017	-0.1101	-0.0052	0.0150	0.5101	0.0063	0.8000	-0.1005												
4	21,210	-0.0081	-0.2474	-0.0036	-0.2272	-0.0108	0.0202	0.7291	0.0063	0.8009	-0.1190												
5	21,256	-0.0113	-0.3456	-0.0050	-0.3174	-0.0151	0.0240	0.8944	0.0063	0.7998	-0.1327												
6	21,301	-0.0137	-0.4195	-0.0061	-0.3852	-0.0183	0.0268	1.0183	0.0062	0.7985	-0.1429												
7	21,347	-0.0155	-0.4748	-0.0069	-0.4360	-0.0207	0.0289	1.1110	0.0062	0.7972	-0.1505												
8	21,392	-0.0168	-0.5162	-0.0075	-0.4740	-0.0225	0.0305	1.1800	0.0062	0.7958	-0.1561												
9	21,438	-0.0178	-0.5470	-0.0079	-0.5023	-0.0239	0.0316	1.2313	0.0062	0.7945	-0.1602												
10	21,483	-0.0186	-0.5699	-0.0083	-0.5233	-0.0249	0.0325	1.2693	0.0062	0.7932	-0.1632												
11	21,529	-0.0191	-0.5868	-0.0085	-0.5388	-0.0256	0.0331	1.2971	0.0062	0.7919	-0.1653												
12	21,574	-0.0195	-0.5992	-0.0087	-0.5502	-0.0262	0.0336	1.3174	0.0062	0.7906	-0.1668												
13	21,620	-0.0198	-0.6082	-0.0088	-0.5585	-0.0266	0.0339	1.3320	0.0061	0.7893	-0.1678												
14	21,665	-0.0200	-0.6147	-0.0089	-0.5645	-0.0268	0.0341	1.3422	0.0061	0.7881	-0.1685												
15	21,711	-0.0202	-0.6192	-0.0090	-0.5686	-0.0270	0.0343	1.3492	0.0061	0.7868	-0.1689												
20	21,938	-0.0204	-0.6262	-0.0091	-0.5751	-0.0273	0.0344	1.3579	0.0061	0.7805	-0.1688												
30	22,393	-0.0201	-0.6175	-0.0089	-0.5671	-0.0270	0.0339	1.3371	0.0059	0.7683	-0.1654												
40	22,848	-0.0197	-0.6055	-0.0088	-0.5560	-0.0264	0.0332	1.3109	0.0058	0.7565	-0.1616												
Average <sup>b</sup>	14,948	1.87	2.11	2.12	189.27	1.62	7,331	47.01	0.817	7.68	0.05												

Table 2. Continued

Year	Baseline LHS <sup>a</sup> Variable	Sorghum Price	Corn Price	Barley Price	Soybean Meal Price	Oat Price	7-Market Corn Production	Barrow and Gilt Price	Hogs Imported	Pigs per Litter	Death Loss
	(million pounds)	(percent)									
<b>10 Percent Increase</b>											
1	21,074	0.0000	0.0000	0.0000	0.0000	0.0000	-0.3355	-0.1411	0.0631	3.8802	0.0000
2	21,119	0.0020	0.0469	0.0009	0.0441	0.0027	0.0600	2.3700	0.0629	7.7152	-0.7293
3	21,165	-0.0390	-1.2063	-0.0174	-1.1072	-0.0523	0.1505	5.1006	0.0628	7.9997	-1.0004
4	21,210	-0.0806	-2.4800	-0.0358	-2.2769	-0.1080	0.2024	7.2908	0.0627	8.0094	-1.1824
5	21,256	-0.1126	-3.4619	-0.0500	-3.1787	-0.1509	0.2401	8.9442	0.0625	7.9979	-1.3161
6	21,301	-0.1367	-4.2003	-0.0607	-3.8568	-0.1831	0.2682	10.1834	0.0624	7.9847	-1.4150
7	21,347	-0.1547	-4.7533	-0.0688	-4.3646	-0.2073	0.2892	11.1097	0.0623	7.9715	-1.4879
8	21,392	-0.1682	-5.1666	-0.0747	-4.7442	-0.2254	0.3048	11.8002	0.0621	7.9584	-1.5415
9	21,438	-0.1782	-5.4746	-0.0792	-5.0270	-0.2388	0.3164	12.3133	0.0620	7.9453	-1.5805
10	21,483	-0.1857	-5.7033	-0.0825	-5.2371	-0.2488	0.3250	12.6926	0.0619	7.9323	-1.6087
11	21,529	-0.1912	-5.8723	-0.0850	-5.3923	-0.2562	0.3312	12.9711	0.0617	7.9193	-1.6287
12	21,574	-0.1952	-5.9963	-0.0868	-5.5062	-0.2616	0.3358	13.1739	0.0616	7.9063	-1.6427
13	21,620	-0.1982	-6.0865	-0.0881	-5.5890	-0.2655	0.3390	13.3195	0.0615	7.8935	-1.6522
14	21,665	-0.2003	-6.1511	-0.0890	-5.6483	-0.2684	0.3412	13.4221	0.0614	7.8806	-1.6582
15	21,711	-0.2018	-6.1966	-0.0897	-5.6901	-0.2704	0.3428	13.4924	0.0612	7.8679	-1.6617
20	21,938	-0.2040	-6.2666	-0.0907	-5.7543	-0.2734	0.3444	13.5790	0.0606	7.8048	-1.6588
30	22,393	-0.2012	-6.1794	-0.0894	-5.6744	-0.2696	0.3389	13.3709	0.0594	7.6826	-1.6248
40	22,848	-0.1973	-6.0588	-0.0877	-5.5636	-0.2644	0.3323	13.1087	0.0582	7.5652	-1.5875
Average <sup>b</sup>	14,948	1.87	2.11	2.12	189.27	1.62	7,331	47.01	0.817	7.68	0.05

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 3. Total pork ending stocks: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Pork Production (million pounds)	Pork Retail Price (percent)	Prime Interest Rate
<b>1 Percent Increase</b>				
1	431	1.2005	-0.0246	-0.0246
2	432	1.2277	-0.0245	-0.0245
3	433	1.2278	-0.0245	-0.0245
4	434	1.2273	-0.0244	-0.0244
5	435	1.2268	-0.0243	-0.0243
6	436	1.2263	-0.0243	-0.0243
7	437	1.2258	-0.0242	-0.0242
8	438	1.2253	-0.0242	-0.0242
9	439	1.2248	-0.0241	-0.0241
10	440	1.2244	-0.0240	-0.0240
11	442	1.2239	-0.0240	-0.0240
12	443	1.2234	-0.0239	-0.0239
13	444	1.2229	-0.0239	-0.0239
14	445	1.2224	-0.0238	-0.0238
15	446	1.2220	-0.0238	-0.0238
20	451	1.2196	-0.0235	-0.0235
30	462	1.2151	-0.0229	-0.0229
40	472	1.2108	-0.0224	-0.0224
Average <sup>b</sup>	329	16,373	1.79	7.54
<b>10 Percent Increase</b>				
1	431	12.0048	-0.2458	-0.2458
2	432	12.3014	-0.2452	-0.2452
3	433	12.3039	-0.2446	-0.2446
4	434	12.2991	-0.2440	-0.2440
5	435	12.2941	-0.2434	-0.2434
6	436	12.2891	-0.2428	-0.2428
7	437	12.2841	-0.2422	-0.2422
8	438	12.2792	-0.2416	-0.2416
9	439	12.2743	-0.2410	-0.2410
10	440	12.2694	-0.2404	-0.2404
11	442	12.2646	-0.2399	-0.2399
12	443	12.2598	-0.2393	-0.2393
13	444	12.2550	-0.2387	-0.2387
14	445	12.2502	-0.2381	-0.2381
15	446	12.2454	-0.2376	-0.2376
20	451	12.2219	-0.2348	-0.2348
30	462	12.1766	-0.2293	-0.2293
40	472	12.1334	-0.2242	-0.2242
Average <sup>b</sup>	329	16,373	1.79	7.54

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 4. Pork consumption: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Pork Retail Price	Beef Retail Price	Chicken Retail Price	Per Capita Disposable Income	Civilian Population 60+ Years of Age
	(million pounds)	(percent)				
<b>1 Percent Increase</b>						
1	22,012	-0.8804	0.4671	0.0585	0.3480	-1.3954
2	22,058	-0.8804	0.4671	0.0585	0.3480	-1.3954
3	22,103	-0.8804	0.4671	0.0585	0.3480	-1.3954
4	22,149	-0.8804	0.4671	0.0585	0.3480	-1.3954
5	22,194	-0.8804	0.4671	0.0585	0.3480	-1.3954
6	22,240	-0.8804	0.4671	0.0585	0.3480	-1.3954
7	22,285	-0.8804	0.4671	0.0585	0.3480	-1.3954
8	22,331	-0.8804	0.4671	0.0585	0.3480	-1.3954
9	22,376	-0.8804	0.4671	0.0585	0.3480	-1.3954
10	22,422	-0.8804	0.4671	0.0585	0.3480	-1.3954
11	22,467	-0.8804	0.4671	0.0585	0.3480	-1.3954
12	22,513	-0.8804	0.4671	0.0585	0.3480	-1.3954
13	22,558	-0.8804	0.4671	0.0585	0.3480	-1.3954
14	22,604	-0.8804	0.4671	0.0585	0.3480	-1.3954
15	22,649	-0.8804	0.4671	0.0585	0.3480	-1.3954
20	22,876	-0.8804	0.4671	0.0585	0.3480	-1.3954
30	22,331	-0.8804	0.4671	0.0585	0.3480	-1.3954
40	23,786	-0.8804	0.4671	0.0585	0.3480	-1.3954
Average <sup>b</sup>	15,900	1.79	2.46	83.28	10.32	10.18
<b>10 Percent Increase</b>						
1	22,012	-8.8040	4.6710	0.5850	3.4799	-13.9540
2	22,058	-8.8040	4.6710	0.5850	3.4799	-13.9540
3	22,103	-8.8040	4.6710	0.5850	3.4799	-13.9540
4	22,149	-8.8040	4.6710	0.5850	3.4799	-13.9540
5	22,194	-8.8040	4.6710	0.5850	3.4799	-13.9540
6	22,240	-8.8040	4.6710	0.5850	3.4799	-13.9540
7	22,285	-8.8040	4.6710	0.5850	3.4799	-13.9540
8	22,331	-8.8040	4.6710	0.5850	3.4799	-13.9540
9	22,376	-8.8040	4.6710	0.5850	3.4799	-13.9540
10	22,422	-8.8040	4.6710	0.5850	3.4799	-13.9540
11	22,467	-8.8040	4.6710	0.5850	3.4799	-13.9540
12	22,513	-8.8040	4.6710	0.5850	3.4799	-13.9540
13	22,558	-8.8040	4.6710	0.5850	3.4799	-13.9540
14	22,604	-8.8040	4.6710	0.5850	3.4799	-13.9540
15	22,649	-8.8040	4.6710	0.5850	3.4799	-13.9540
20	22,876	-8.8040	4.6710	0.5850	3.4799	-13.9540
30	23,331	-8.8040	4.6710	0.5850	3.4799	-13.9540
40	23,786	-8.8040	4.6710	0.5850	3.4799	-13.9540
Average <sup>b</sup>	15,900	1.79	2.46	83.28	10.32	10.18

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 5. Seven-market barrow and gilt price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	CPI <sup>b</sup> Fuel and Utilities	Civilian Population	Pork Production	Wholesale Price Index	Pork Byproduct Value	Retail Pork Price
(dollars per hundredweight)		(percent)					
<b>1 Percent Increase</b>							
1	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
2	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
3	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
4	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
5	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
6	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
7	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
8	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
9	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
10	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
11	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
12	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
13	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
14	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
15	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
20	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
30	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
40	53.70	-0.8551	1.4570	-1.4389	-0.0460	0.1531	0.7538
Average <sup>c</sup>	47.01	3.03	244.04	16,373	314.49	4.82	1.79

Table 5. Continued

Year	Baseline LHS <sup>a</sup> Variable	CPI <sup>b</sup> Fuel and Utilities	Civilian Population	Pork Production	Wholesale Price Index	Pork Byproduct Value	Retail Pork Price
(dollars per hundredweight)		(percent)					
<b>10 Percent Increase</b>							
1	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
2	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
3	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
4	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
5	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
6	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
7	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
8	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
9	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
10	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
11	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
12	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
13	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
14	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
15	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
20	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
30	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
40	53.70	-7.9365	14.7322	-13.0713	-0.4398	1.4745	7.4247
<b>Average<sup>c</sup></b>	<b>47.01</b>	<b>3.03</b>	<b>244.04</b>	<b>16,373</b>	<b>314.49</b>	<b>4.82</b>	<b>1.79</b>

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>CPI is consumer price index.<sup>c</sup>1985-89 average level.

**Table 6. Seven-market sow price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase  
In RHS<sup>a</sup> variables**

Year	Baseline LHS <sup>a</sup> Variable	Hog Slaughter	Packer Wage Rate	Wholesale Price Index	Pork Retail Price
(dollars per hundredweight)		(percent)			
<b>1 Percent Increase</b>					
1	44.44	-1.0251	-0.0413	-1.5818	1.6388
2	44.44	-1.0251	-0.0413	-1.5818	1.6388
3	44.44	-1.0251	-0.0413	-1.5818	1.6388
4	44.44	-1.0251	-0.0413	-1.5818	1.6388
5	44.44	-1.0251	-0.0413	-1.5818	1.6388
6	44.44	-1.0251	-0.0413	-1.5818	1.6388
7	44.44	-1.0251	-0.0413	-1.5818	1.6388
8	44.44	-1.0251	-0.0413	-1.5818	1.6388
9	44.44	-1.0251	-0.0413	-1.5818	1.6388
10	44.44	-1.0251	-0.0413	-1.5818	1.6388
11	44.44	-1.0251	-0.0413	-1.5818	1.6388
12	44.44	-1.0251	-0.0413	-1.5818	1.6388
13	44.44	-1.0251	-0.0413	-1.5818	1.6388
14	44.44	-1.0251	-0.0413	-1.5818	1.6388
15	44.44	-1.0251	-0.0413	-1.5818	1.6388
20	44.44	-1.0251	-0.0413	-1.5818	1.6388
30	44.44	-1.0251	-0.0413	-1.5818	1.6388
40	44.44	-1.0251	-0.0413	-1.5818	1.6388
Average <sup>b</sup>	39.77	84.331	244.04	314.49	1.79
<b>10 Percent Increase</b>					
1	44.44	-10.2514	-0.4125	-14.5235	16.3884
2	44.44	-10.2514	-0.4125	-14.5235	16.3884
3	44.44	-10.2514	-0.4125	-14.5235	16.3884
4	44.44	-10.2514	-0.4125	-14.5235	16.3884
5	44.44	-10.2514	-0.4125	-14.5235	16.3884
6	44.44	-10.2514	-0.4125	-14.5235	16.3884
7	44.44	-10.2514	-0.4125	-14.5235	16.3884
8	44.44	-10.2514	-0.4125	-14.5235	16.3884
9	44.44	-10.2514	-0.4125	-14.5235	16.3884
10	44.44	-10.2514	-0.4125	-14.5235	16.3884
11	44.44	-10.2514	-0.4125	-14.5235	16.3884
12	44.44	-10.2514	-0.4125	-14.5235	16.3884
13	44.44	-10.2514	-0.4125	-14.5235	16.3884
14	44.44	-10.2514	-0.4125	-14.5235	16.3884
15	44.44	-10.2514	-0.4125	-14.5235	16.3884
20	44.44	-10.2514	-0.4125	-14.5235	16.3884
30	44.44	-10.2514	-0.4125	-14.5235	16.3884
40	44.44	-10.2514	-0.4125	-14.5235	16.3884
Average <sup>b</sup>	39.77	84.331	244.04	314.49	1.79

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 7. Beef breeding herd: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Prime Interest Rate	Wholesale Price Index	Feeder Steer Price	Utility Cow Price
	(million head)			(percent)		
<b>1 Percent Increase</b>						
1	46.05	0.0000	0.0000	0.0000	0.0000	0.0000
2	46.11	0.0000	-0.0357	0.0046	0.0009	-0.0357
3	46.17	-0.0009	-0.0695	0.0089	0.1885	-0.0695
4	46.22	-0.1864	-0.1015	0.0130	0.3663	-0.1015
5	46.27	-0.3623	-0.1319	0.0169	0.5350	-0.1319
6	46.32	-0.5292	-0.1608	0.0206	0.6950	-0.1608
7	46.36	-0.6874	-0.1881	0.0242	0.8468	-0.1881
8	46.40	-0.8376	-0.2141	0.0275	0.9908	-0.2141
9	46.44	-0.9801	-0.2387	0.0307	1.1274	-0.2387
10	46.48	-1.1153	-0.2621	0.0337	1.2571	-0.2621
11	46.52	-1.2436	-0.2842	0.0365	1.3801	-0.2842
12	46.55	-1.3654	-0.3053	0.0392	1.4969	-0.3053
13	46.59	-1.4810	-0.3253	0.0418	1.6077	-0.3253
14	46.62	-1.5907	-0.3442	0.0442	1.7129	-0.3442
15	46.65	-1.6949	-0.3622	0.0465	1.8128	-0.3622
20	46.78	-2.1417	-0.4395	0.0564	2.2412	-0.4395
30	46.96	-2.7534	-0.5452	0.0700	2.8278	-0.5452
40	47.07	-3.1195	-0.6084	0.0781	3.1788	-0.6084
50	47.13	-3.3391	-0.6464	0.0830	3.3894	-0.6464
60	47.17	-3.4710	-0.6692	0.0859	3.5159	-0.6692
70	47.19	-3.5503	-0.6829	0.0877	3.5920	-0.6829
Average <sup>b</sup>	33.96	2.11	7.54	314.49	74.50	43.28
<b>10 Percent Increase</b>						
1	46.05	0.0000	0.0000	0.0000	0.0000	0.0000
2	46.11	0.0000	-0.3565	0.0420	0.0090	-0.3565
3	46.17	-0.0082	-0.6946	0.0819	1.8845	-0.6946
4	46.22	-1.7113	-1.0151	0.1197	3.6631	-1.0151
5	46.27	-3.3265	-1.3192	0.1556	5.3500	-1.3192
6	46.32	-4.8586	-1.6076	0.1896	6.9500	-1.6076
7	46.36	-6.3120	-1.8812	0.2218	8.4678	-1.8812
8	46.40	-7.6909	-2.1407	0.2524	9.9079	-2.1407
9	46.44	-8.9992	-2.3870	0.2815	11.2742	-2.3870
10	46.48	-10.2407	-2.6207	0.3090	12.5707	-2.6207

Table 7. Continued

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Prime Interest Rate	Wholesale Price Index	Feeder Steer Price	Utility Cow Price	
(million head)		(percent)					
<b>10 Percent Increase</b>							
11	46.52	-11.4188	-2.8424	0.3352	13.8011	-2.8424	
12	46.55	-12.5370	-3.0529	0.3600	14.9687	-3.0529	
13	46.59	-13.5982	-3.2526	0.3835	16.0770	-3.2526	
14	46.62	-14.6056	-3.4423	0.4059	17.1291	-3.4423	
15	46.65	-15.5618	-3.6223	0.4271	18.1277	-3.6223	
20	46.78	-19.6646	-4.3945	0.5182	22.4123	-4.3945	
30	46.96	-25.2812	-5.4517	0.6429	28.2779	-5.4517	
40	47.07	-28.6424	-6.0844	0.7175	31.7881	-6.0844	
50	47.13	-30.6587	-6.4640	0.7622	33.8938	-6.4640	
60	47.17	-31.8701	-6.6920	0.7891	35.1589	-6.6920	
70	47.19	-32.5985	-6.8291	0.8053	35.9196	-6.8291	
Average <sup>b</sup>	33.96	2.11	7.54	314.49	74.50	43.28	

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 8. Beef production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup>	Corn Price	Soybean Meal Price	Prime Interest Rate	Wholesale Price Index	Cattle Imports	Cattle Exports	Nonfeed Cost of Fed Cattle	Omaha Steer Price	Feeder Steer Price	Utility Cow Price
	(million pounds)	(percent)									
<b>1 Percent Increase</b>											
1	29,430	-0.0237	-0.0034	0.0019	-0.0083	0.0000	0.0000	-0.0124	0.0810	-0.0795	0.0144
2	29,454	0.0822	-0.0090	-0.0043	-0.0277	0.0045	-0.0006	-0.0295	0.3931	-0.3188	0.0091
3	29,477	0.0682	-0.0150	-0.0190	-0.0395	0.0083	-0.0012	-0.0474	0.6082	-0.4020	-0.0047
4	29,499	-0.0217	-0.0188	-0.0396	-0.0445	0.0116	-0.0016	-0.0589	0.7350	-0.3870	-0.0248
5	29,520	-0.1378	-0.0208	-0.0639	-0.0446	0.0145	-0.0020	-0.0650	0.7969	-0.3000	-0.0488
6	29,540	-0.2729	-0.0216	-0.0901	-0.0414	0.0169	-0.0023	-0.0672	0.8138	-0.1662	-0.0749
7	29,558	-0.4185	-0.0214	-0.1169	-0.0362	0.0189	-0.0026	-0.0667	0.8010	-0.0044	-0.1018
8	29,576	-0.5679	-0.0207	-0.1436	-0.0298	0.0207	-0.0029	-0.0645	0.7691	0.1718	-0.1286
9	29,593	-0.7164	-0.0196	-0.1696	-0.0227	0.0222	-0.0031	-0.0612	0.7260	0.3530	-0.1547
10	29,609	-0.8608	-0.0183	-0.1945	-0.0155	0.0235	-0.0032	-0.0574	0.6771	0.5329	-0.1798
11	29,624	-0.9993	-0.0170	-0.2181	-0.0084	0.0246	-0.0034	-0.0534	0.6261	0.7072	-0.2036
12	29,639	-1.1306	-0.0156	-0.2404	-0.0015	0.0256	-0.0035	-0.0493	0.5754	0.8733	-0.2261
13	29,652	-1.2542	-0.0143	-0.2612	0.0050	0.0264	-0.0036	-0.0454	0.5268	1.0298	-0.2471
14	29,665	-1.3699	-0.0131	-0.2806	0.0110	0.0271	-0.0037	-0.0417	0.4811	1.1759	-0.2667
15	29,678	-1.4778	-0.0120	-0.2987	0.0166	0.0277	-0.0038	-0.0383	0.4389	1.3115	-0.2850
20	29,731	-1.9118	-0.0077	-0.3713	0.0379	0.0296	-0.0041	-0.0255	0.2826	1.8451	-0.3582
30	29,804	-2.4190	-0.0042	-0.4569	0.0583	0.0308	-0.0043	-0.0151	0.1567	2.4243	-0.4443
40	29,847	-2.6807	-0.0034	-0.5016	0.0663	0.0311	-0.0043	-0.0126	0.1270	2.6971	-0.4892
50	29,874	-2.8278	-0.0032	-0.5269	0.0701	0.0311	-0.0043	-0.0120	0.1203	2.8429	-0.5145
60	29,889	-2.9140	-0.0032	-0.5418	0.0721	0.0311	-0.0043	-0.0119	0.1189	2.9267	-0.5294
70	29,899	-2.9654	-0.0032	-0.5507	0.0732	0.0311	-0.0043	-0.0119	0.1185	2.9762	-0.5383
Average <sup>b</sup>	23,668	2.11	189.27	7.54	314.49	1.23	0.17	54.80	64.66	74.50	43.28

Table 8. Continued

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Prime Interest Rate	Wholesale Price Index	Cattle Imports	Cattle Exports	Nonfeed Cost of Fed Cattle	Omaha Steer Price	Feeder Steer Price	Utility Cow Price
(million pounds)											
(percent)											
<b>10 Percent Increase</b>											
1	29,430	-0.2365	-0.0336	0.0192	-0.0759	0.0000	0.0000	-0.1244	0.8092	-0.7951	0.1447
2	29,454	0.7030	-0.0905	-0.0429	-0.2546	0.0449	-0.0062	-0.2955	3.9370	-3.1864	0.0906
3	29,477	0.5431	-0.1497	-0.1898	-0.3630	0.0834	-0.0115	-0.4736	6.0920	-4.0191	-0.0478
4	29,499	-0.3053	-0.1881	-0.3962	-0.4088	0.1163	-0.0161	-0.5890	7.3613	-3.8699	-0.2486
5	29,520	-1.3830	-0.2083	-0.6389	-0.4097	0.1445	-0.0200	-0.6499	7.9805	-3.0006	-0.4885
6	29,540	-2.6288	-0.2155	-0.9007	-0.3806	0.1687	-0.0233	-0.6716	8.1505	-1.6621	-0.7493
7	29,558	-3.9655	-0.2139	-1.1692	-0.3325	0.1893	-0.0261	-0.6668	8.0217	-0.0439	-1.0182
8	29,576	-5.3335	-0.2066	-1.4362	-0.2733	0.2070	-0.0286	-0.6448	7.7028	1.7183	-1.2862
9	29,593	-6.6911	-0.0020	-1.6959	-0.2086	0.2222	-0.0307	-0.6124	7.2714	3.5304	-1.5476
10	29,609	-8.0109	-0.1832	-1.9449	-0.1423	0.2351	-0.0325	-0.5743	6.7815	5.3287	-1.7986
11	29,624	-9.2752	-0.1698	-2.1812	-0.0767	0.2462	-0.0340	-0.5339	6.2705	7.0712	-2.0369
12	29,639	-10.4740	-0.1563	-2.4036	-0.0137	0.2557	-0.0353	-0.4934	5.7633	8.7319	-2.2613
13	29,652	-11.6020	-0.1432	-2.6119	0.0458	0.2638	-0.0364	-0.4541	5.2760	10.2962	-2.4716
14	29,665	-12.6579	-0.1309	-2.8062	0.1013	0.2708	-0.0374	-0.4171	4.8185	11.7570	-2.6678
15	29,678	-13.6425	-0.1195	-2.9870	0.1525	0.2767	-0.0382	-0.3827	4.3960	13.1127	-2.8503
20	29,731	-17.6053	-0.0769	-3.7132	0.3477	0.2957	-0.0408	-0.2546	2.8301	18.4454	-3.5831
30	29,804	-22.2437	-0.0423	-4.5684	0.5357	0.3082	-0.0426	-0.1506	1.5683	24.2358	-4.4439
40	29,847	-24.6421	-0.0341	-5.0158	0.6089	0.3106	-0.0429	-0.1260	1.2700	26.9643	-4.8928
50	29,874	-25.9908	-0.0323	-5.2690	0.6432	0.3109	-0.0429	-0.1205	1.2035	28.4241	-5.1466
60	29,889	-26.7813	-0.0319	-5.4178	0.6617	0.3109	-0.0429	-0.1192	1.1886	29.2620	-5.2956
70	29,899	-27.2524	-0.0318	-5.5066	0.6724	0.3108	-0.0429	-0.1189	1.1851	29.7575	-5.3845
<b>Average<sup>b</sup></b>		23,668	2.11	189.27	7.54	314.49	1.23	0.17	54.80	64.66	74.50
											43.28

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 9. Beef ending stocks: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable (million pounds)	Beef Production	CPI <sup>b</sup>	CPI Fuel and Utilities	Beef Retail Price
(percent)					
<b>1 Percent Increase</b>					
1	418.58	1.0176	-0.4439	-0.2696	0.7179
2	418.94	1.0176	-0.4435	-0.2694	0.7173
3	419.27	1.0176	-0.4432	-0.2692	0.7168
4	419.59	1.0176	-0.4428	-0.2690	0.7162
5	419.89	1.0176	-0.4425	-0.2688	0.7157
6	420.18	1.0176	-0.4422	-0.2686	0.7152
7	420.45	1.0176	-0.4419	-0.2684	0.7148
8	420.70	1.0175	-0.4417	-0.2682	0.7143
9	420.95	1.0175	-0.4414	-0.2681	0.7139
10	421.18	1.0175	-0.4412	-0.2679	0.7135
11	421.40	1.0175	-0.4409	-0.2678	0.7131
12	421.61	1.0175	-0.4407	-0.2677	0.7128
13	421.81	1.0175	-0.4405	-0.2675	0.7125
14	421.99	1.0175	-0.4403	-0.2674	0.7121
15	422.17	1.0175	-0.4401	-0.2673	0.7118
20	422.94	1.0175	-0.4393	-0.2668	0.7105
30	423.99	1.0174	-0.4382	-0.2662	0.7088
40	424.63	1.0174	-0.4376	-0.2658	0.7077
50	425.01	1.0174	-0.4372	-0.2655	0.7071
60	425.24	1.0174	-0.4370	-0.2654	0.7067
70	425.38	1.0174	-0.4368	-0.2653	0.7065
Average <sup>c</sup>	395.00	23,668	2.99	3.03	2.46
<b>10 Percent Increase</b>					
1	418.58	10.1763	-4.0759	-2.6960	7.1794
2	418.94	10.1762	-4.0724	-2.6937	7.1733
3	419.27	10.1761	-4.0691	-2.6915	7.1676
4	419.59	10.1759	-4.0661	-2.6895	7.1622
5	419.89	10.1758	-4.0631	-2.6876	7.1570
6	420.18	10.1757	-4.0604	-2.6857	7.1522
7	420.45	10.1756	-4.0578	-2.6840	7.1476
8	420.70	10.1755	-4.0553	-2.6824	7.1432
9	420.95	10.1754	-4.0529	-2.6808	7.1391
10	421.18	10.1753	-4.0507	-2.6793	7.1351

Table 9. Continued

Year	Baseline LHS <sup>a</sup> Variable (million pounds)	Beef Production	CPI <sup>b</sup>	CPI Fuel and Utilities	Beef Retail Price
<b>10 Percent Increase</b>					
11	421.40	10.1752	-4.0486	-2.6780	7.1314
12	421.61	10.1751	-4.0466	-2.6766	7.1279
13	421.81	10.1750	-4.0447	-2.6754	7.1245
14	421.99	10.1749	-4.0429	-2.6742	7.1214
15	422.17	10.1748	-4.0412	-2.6730	7.1183
20	422.94	10.1745	-4.0338	-2.6682	7.1054
30	423.99	10.1741	-4.0238	-2.6616	7.0878
40	424.63	10.1738	-4.0178	-2.6576	7.0772
50	425.01	10.1737	-4.0142	-2.6552	7.0708
60	425.24	10.1736	-4.0121	-2.6538	7.0670
70	425.38	10.1735	-4.0107	-2.6529	7.0647
Average <sup>c</sup>	395	23,668	2.99	3.03	2.46

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>CPI is consumer price index.<sup>c</sup>1985-89 average level.

Table 10. Beef consumption: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Retail Beef Price	Retail Pork Price	Retail Chicken Price	Per Capita Disposable Income
	(million pounds)	(percent)			
<b>1 Percent Increase</b>					
1	31,634	-0.5930	0.0954	0.2521	0.9329
2	31,658	-0.5930	0.0954	0.2521	0.9329
3	31,681	-0.5930	0.0954	0.2521	0.9329
4	31,703	-0.5930	0.0954	0.2521	0.9329
5	31,724	-0.5930	0.0954	0.2521	0.9329
6	31,744	-0.5930	0.0954	0.2521	0.9329
7	31,763	-0.5930	0.0954	0.2521	0.9329
8	31,781	-0.5930	0.0954	0.2521	0.9329
9	31,797	-0.5930	0.0954	0.2521	0.9329
10	31,813	-0.5930	0.0954	0.2521	0.9329
11	31,829	-0.5930	0.0954	0.2521	0.9329
12	31,843	-0.5930	0.0954	0.2521	0.9329
13	31,857	-0.5930	0.0954	0.2521	0.9329
14	31,870	-0.5930	0.0954	0.2521	0.9329
15	31,882	-0.5930	0.0954	0.2521	0.9329
20	31,935	-0.5930	0.0954	0.2521	0.9329
30	32,008	-0.5930	0.0954	0.2521	0.9329
40	32,052	-0.5930	0.0954	0.2521	0.9329
50	32,078	-0.5930	0.0954	0.2521	0.9329
60	32,094	-0.5930	0.0954	0.2521	0.9329
70	32,104	-0.5930	0.0954	0.2521	0.9329
Average <sup>b</sup>	25,900	2.46	1.79	83.28	10.32
<b>10 Percent Increase</b>					
1	31,634	-5.9298	0.9543	2.5209	9.3293
2	31,658	-5.9298	0.9543	2.5209	9.3293
3	31,681	-5.9298	0.9543	2.5209	9.3293
4	31,703	-5.9298	0.9543	2.5209	9.3293
5	31,724	-5.9298	0.9543	2.5209	9.3293
6	31,744	-5.9298	0.9543	2.5209	9.3293
7	31,763	-5.9298	0.9543	2.5209	9.3293
8	31,781	-5.9298	0.9543	2.5209	9.3293
9	31,797	-5.9298	0.9543	2.5209	9.3293
10	31,813	-5.9298	0.9543	2.5209	9.3293

Table 10. Continued

Year	Baseline LHS <sup>a</sup> Variable	Retail Beef Price	Retail Pork Price	Retail Chicken Price	Per Capita Disposable Income
	(million pounds)			(percent)	
10 Percent Increase					
11	31,829	-5.9298	0.9543	2.5209	9.3293
12	31,843	-5.9298	0.9543	2.5209	9.3293
13	31,857	-5.9298	0.9543	2.5209	9.3293
14	31,870	-5.9298	0.9543	2.5209	9.3293
15	31,882	-5.9298	0.9543	2.5209	9.3293
20	31,935	-5.9298	0.9543	2.5209	9.3293
30	32,008	-5.9298	0.9543	2.5209	9.3293
40	32,052	-5.9298	0.9543	2.5209	9.3293
50	32,078	-5.9298	0.9543	2.5209	9.3293
60	32,094	-5.9298	0.9543	2.5209	9.3293
70	32,104	-5.9298	0.9543	2.5209	9.3293
Average <sup>b</sup>	25,900	2.46	1.79	83.28	10.32

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 11. Omaha fed steer price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Prime Interest Rate	Wholesale Price Index	CPI <sup>b</sup> Fuel and Utility	Beef Retail Price	Beef Production
(dollars per hundredweight)						
<b>1 Percent Increase</b>						
1	69.14	-0.0642	0.4210	-0.5881	1.2914	-0.3685
2	69.12	-0.0606	0.4270	-0.5883	1.2918	-0.3689
3	69.09	-0.0543	0.4306	-0.5884	1.2922	-0.3699
4	69.07	-0.0462	0.4319	-0.5886	1.2926	-0.3701
5	69.05	-0.0368	0.4316	-0.5888	1.2929	-0.3702
6	69.04	-0.0270	0.4302	-0.5889	1.2933	-0.3701
7	69.02	-0.0169	0.4282	-0.5891	1.2936	-0.3700
8	69.00	-0.0069	0.4258	-0.5892	1.2939	-0.3698
9	68.99	0.0028	0.4232	-0.5894	0.2942	-0.3697
10	68.97	0.0121	0.4205	-0.5895	1.2945	-0.3695
11	68.96	0.0209	0.4179	-0.5896	1.2947	-0.3693
12	68.94	0.0292	0.4154	-0.5897	1.2950	-0.3691
13	68.93	0.0371	0.4130	-0.5898	1.2952	-0.3690
14	68.92	0.0444	0.4107	-0.5899	1.2955	-0.3688
15	68.91	0.0512	0.4087	-0.5900	1.2957	-0.3687
20	68.86	0.0790	0.4007	-0.5905	1.2966	-0.3681
30	68.79	0.1127	0.3925	-0.5910	1.2979	-0.3677
40	68.75	0.1309	0.3891	-0.5914	1.2986	-0.3676
50	68.73	0.1413	0.3873	-0.5916	1.2991	-0.3676
60	68.71	0.1474	0.3864	-0.5917	1.2994	-0.3676
70	68.70	0.1511	0.3858	-0.5918	1.2996	-0.3676
Average <sup>c</sup>	64.66	7.54	314.49	3.03	2.46	35.16
<b>10 Percent Increase</b>						
1	69.14	-0.6423	4.2100	-5.8807	12.9136	-3.6845
2	69.12	-0.6064	4.2704	-5.8826	12.9179	-3.6890
3	69.09	-0.5435	4.3058	-5.8845	12.9219	-3.6498
4	69.07	-0.4617	4.3189	-5.8862	12.9257	-3.6697
5	69.05	-0.3685	4.3160	-5.8878	12.9293	-3.6971
6	69.04	-0.2695	4.3024	-5.8894	12.9327	-3.7300
7	69.02	-0.1689	4.2820	-5.8909	12.9360	-3.7659
8	69.00	-0.0692	4.2578	-5.8923	12.9391	-3.8032
9	68.99	0.0277	4.2317	-5.8936	12.9420	-3.8405
10	68.97	0.1207	4.2051	-5.8949	12.9448	-3.8771

Table 11. Continued

Year	Baseline LHS <sup>a</sup> Variable	Prime Interest Rate	Wholesale Price Index	CPI <sup>b</sup> Fuel and Utility	Beef Retail Price	Beef Production
	(dollars per hundredweight)			(percent)		
10 Percent Increase						
11	68.96	0.2090	4.1788	-5.8961	12.9474	-3.9123
12	68.94	0.2923	4.1536	-5.8973	12.9499	-3.9459
13	68.93	0.3706	4.1297	-5.8983	12.9523	-3.9777
14	68.92	0.4438	4.1074	-5.8994	12.9546	-4.0076
15	68.91	0.5122	4.0867	-5.9004	12.9568	-4.0356
20	68.86	0.7904	4.0066	-5.9046	12.9660	-4.1497
30	68.79	1.1273	3.9253	-5.9104	12.9788	-4.2862
40	68.75	1.3086	3.8908	-5.9139	12.9865	-4.3584
50	68.73	1.4127	3.8735	-5.9160	12.9911	-4.3995
60	68.71	1.4742	3.8639	-5.9173	12.9939	-4.4236
70	68.70	1.5111	3.8583	-5.9180	12.9956	-4.4380
Average <sup>c</sup>	64.66	7.54	314.49	3.03	2.46	35.16

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>CPI is consumer price index.<sup>c</sup>1985-89 average level.

Table 12. Feeder steer price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Wholesale Price Index	Omaha Steer Price	Cattle Placed on Feed
(dollars per hundredweight) _____ (percent) _____						
<b>1 Percent Increase</b>						
1	62.71	-0.3117	-0.0602	0.2000	1.2088	-0.5949
2	62.63	-0.3121	-0.0603	0.2196	1.2103	-0.5969
3	62.55	-0.3125	-0.0603	0.2334	1.2118	-0.5988
4	62.48	-0.3128	-0.0604	0.2430	1.2132	-0.6007
5	62.41	-0.3132	-0.0605	0.2492	1.2146	-0.6025
6	62.35	-0.3135	-0.0605	0.2530	1.2158	-0.6041
7	62.29	-0.3138	-0.0606	0.2551	1.2170	-0.6057
8	62.23	-0.3141	-0.0607	0.2558	1.2182	-0.6073
9	62.17	-0.3144	-0.0607	0.2555	1.2193	-0.6087
10	62.12	-0.3147	-0.0608	0.2545	1.2203	-0.6101
11	62.07	-0.3149	-0.0608	0.2531	1.2213	-0.6114
12	62.02	-0.3152	-0.0609	0.2513	1.2223	-0.6126
13	61.97	-0.3154	-0.0609	0.2493	1.2232	-0.6138
14	61.93	-0.3156	-0.0609	0.2471	1.2240	-0.6150
15	61.89	-0.3158	-0.0610	0.2449	1.2249	-0.6161
20	61.71	-0.3168	-0.0612	0.2338	1.2284	-0.6207
30	61.46	-0.3180	-0.0614	0.2166	1.2333	-0.6272
40	61.32	-0.3188	-0.0616	0.2060	1.2363	-0.6311
50	61.23	-0.3192	-0.0616	0.1995	1.2381	-0.6335
60	61.17	-0.3195	-0.0617	0.1956	1.2392	-0.6349
70	61.14	-0.3197	-0.0617	0.1932	1.2398	-0.6358
Average <sup>b</sup>	74.50	2.11	189.27	314.49	64.66	24.27
<b>10 Percent Increase</b>						
1	62.71	-3.1170	-0.6018	1.9999	12.0880	-5.9487
2	62.63	-3.1210	-0.6026	2.1960	12.1035	-5.9690
3	62.55	-3.1248	-0.6033	2.3345	12.1182	-5.9884
4	62.48	-3.1284	-0.6040	2.4295	12.1322	-6.0069
5	62.41	-3.1318	-0.6047	2.4920	12.1456	-6.0245
6	62.35	-3.1351	-0.6053	2.5303	12.1583	-6.0413
7	62.29	-3.1382	-0.6059	2.5506	12.1704	-6.0573
8	62.23	-3.1412	-0.6065	2.5576	12.1819	-6.0725
9	62.17	-3.1440	-0.6070	2.5550	12.1929	-6.0870
10	62.12	-3.1467	-0.6076	2.5454	12.2034	-6.1008

Table 12. Continued

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Wholesale Price Index	Omaha Steer Price	Cattle Placed on Feed
10 Percent Increase		(dollars per hundredweight) _____ (percent) _____				
11	62.07	-3.1493	-0.6081	2.5308	12.2133	-6.1140
12	62.02	-3.1517	-0.6085	2.5128	12.2228	-6.1265
13	61.97	-3.1541	-0.6090	2.4926	12.2318	-6.1384
14	61.93	-3.1563	-0.6094	2.4710	12.2404	-6.1497
15	61.89	-3.1584	-0.6098	2.4486	12.2486	-6.1605
20	61.71	-3.1675	-0.6116	2.3380	12.2840	-6.2072
30	61.46	-3.1802	-0.6140	2.1664	12.3330	-6.2719
40	61.32	-3.1878	-0.6155	2.0596	12.3627	-6.3111
50	61.23	-3.1925	-0.6164	1.9949	12.3807	-6.3348
60	61.17	-3.1952	-0.6169	1.9558	12.3915	-6.3491
70	61.14	-3.1969	-0.6173	1.9322	12.3980	-6.3577
Average <sup>b</sup>	74.50	2.11	189.27	314.49	64.66	24.27

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 13. Utility cow price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Retail Beef Price	CPI <sup>b</sup> Fuel and Utility	Wholesale Price Index	Nonfed Cattle Slaughter
(dollars per hundredweight)		(percent)			
<b>1 Percent Increase</b>					
1	54.73	0.7170	-0.8103	1.1677	-0.2471
2	54.79	0.7162	-0.8094	1.1531	-0.2457
3	54.84	0.7154	-0.8085	1.1370	-0.2444
4	54.90	0.7147	-0.8077	1.1208	-0.2432
5	54.95	0.7141	-0.8070	1.1053	-0.2420
6	55.00	0.7134	-0.8062	1.0907	-0.2409
7	55.05	0.7128	-0.8055	1.0773	-0.2398
8	55.09	0.7122	-0.8049	1.0653	-0.2388
9	55.13	0.7117	-0.8042	1.0545	-0.2378
10	55.17	0.7111	-0.8037	1.0451	-0.2369
11	55.21	0.7106	-0.8031	1.0369	-0.2360
12	55.25	0.7102	-0.8026	1.0298	-0.2352
13	55.29	0.7097	-0.8020	1.0237	-0.2344
14	55.32	0.7093	-0.8016	1.0186	-0.2337
15	55.35	0.7089	-0.8011	1.0142	-0.2330
20	55.49	0.7071	-0.7991	1.0017	-0.2299
30	55.68	0.7047	-0.7964	0.9987	-0.2257
40	55.79	0.7033	-0.7948	1.0028	-0.2232
50	55.86	0.7024	-0.7938	1.0065	-0.2217
60	55.90	0.7019	-0.7932	1.0091	-0.2208
70	55.93	0.7016	-0.7928	1.0107	-0.2203
Average <sup>c</sup>	43.28	2.46	3.03	314.49	9.27
<b>10 Percent Increase</b>					
1	54.73	7.1698	-8.1026	11.6767	-2.4706
2	54.79	7.1619	-8.0937	11.5311	-2.4569
3	54.84	7.1544	-8.0852	11.3703	-2.4439
4	54.90	7.1473	-8.0772	11.2084	-2.4315
5	54.95	7.1405	-8.0695	11.0525	-2.4197
6	55.00	7.1341	-8.0622	10.9067	-2.4085
7	55.05	7.1280	-8.0553	10.7731	-2.3979
8	55.09	7.1221	-8.0487	10.6526	-2.3878
9	55.13	7.1166	-8.0425	10.5455	-2.3782
10	55.17	7.1114	-8.0366	10.4512	-2.3690

Table 13. Continued

Year	Baseline LHS <sup>a</sup> Variable	Beef Retail Price	CPI <sup>b</sup> Fuel and Utility	Wholesale Price Index	Nonfed Cattle Slaughter
(dollars per hundredweight)		(percent)			
<b>10 Percent Increase</b>					
11	55.21	7.1064	-8.0309	10.3690	-2.3603
12	55.25	7.1016	-8.0255	10.2981	-2.3521
13	55.29	7.0971	-8.0204	10.2374	-2.3442
14	55.32	7.0928	-8.0156	10.1859	-2.3368
15	55.35	7.0887	-8.0110	10.1425	-2.3297
20	55.49	7.0712	-7.9912	10.0168	-2.2992
30	55.68	7.0472	-7.9640	9.9868	-2.2573
40	55.79	7.0327	-7.9477	10.0276	-2.2322
50	55.86	7.0240	-7.9379	10.0653	-2.2171
60	55.90	7.0188	-7.9320	10.0909	-2.2081
70	55.93	7.0157	-7.9284	10.1069	-2.2026
Average <sup>c</sup>	43.28	2.46	3.03	314.49	9.27

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>CPI is consumer price index.<sup>c</sup>1985-89 average level.

Table 14. Cattle placed on feed: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Prime Interest Rate	Corn Price	Nonfeed Cost of Fed Cattle	Soybean Meal Price	Wholesale Price Index	Utility Cow Price	Omaha Steer Price	Feeder Steer Price
	(million head)	(percent)							
<b>1 Percent Increase</b>									
1	35.06	-0.0005	-0.0242	-0.0103	-0.0034	-0.0261	0.0000	0.3697	-0.2432
2	35.14	-0.0108	-0.1056	-0.0451	-0.0150	-0.0603	-0.0086	0.8687	-0.5712
3	35.21	-0.0305	-0.1816	-0.0774	-0.0258	-0.0846	-0.0266	1.2457	-0.7737
4	35.28	-0.0562	-0.2838	-0.1019	-0.0339	-0.1016	-0.0512	1.5303	-0.8660
5	35.34	-0.0861	-0.4209	-0.1204	-0.0400	-0.1131	-0.0801	1.7450	-0.8779
6	35.40	-0.1185	-0.5814	-0.1343	-0.0447	-0.1204	-0.1119	1.9069	-0.8320
7	35.46	-0.1524	-0.7566	-0.1448	-0.0481	-0.1248	-0.1452	2.0288	-0.7452
8	35.52	-0.1868	-0.9402	-0.1527	-0.0508	-0.1269	-0.1793	2.1204	-0.6301
9	35.57	-0.2213	-1.1275	-0.1586	-0.0527	-0.1273	-0.2134	2.1891	-0.4961
10	35.62	-0.2553	-1.3151	-0.1630	-0.0542	-0.1266	-0.2472	2.2405	-0.3502
11	35.67	-0.2885	-1.5006	-0.1664	-0.0553	-0.1251	-0.2803	2.2788	-0.1976
12	35.71	-0.3209	-1.6823	-0.1688	-0.0561	-0.1230	-0.3125	2.3072	-0.0420
13	35.76	-0.3521	-1.8590	-0.1707	-0.0568	-0.1204	-0.3437	2.3282	0.1137
14	35.80	-0.3822	-2.0300	-0.1720	-0.0572	-0.1177	-0.3737	2.3436	0.2676
15	35.84	-0.4111	-2.1946	-0.1730	-0.0575	-0.1148	-0.4025	2.3547	0.4181
20	36.00	-0.5373	-2.9188	-0.1750	-0.0582	-0.1001	-0.5286	2.3758	1.1000
30	36.23	-0.7127	-3.9307	-0.1747	-0.0581	-0.0772	-0.7040	2.3708	2.0756
40	36.37	-0.8178	-4.5378	-0.1741	-0.0579	-0.0631	-0.8092	2.3624	2.6644
50	36.46	-0.8807	-4.9013	-0.1737	-0.0578	-0.0546	-0.8721	2.3570	3.0173
60	36.51	-0.9184	-5.1194	-0.1735	-0.0577	-0.0495	-0.9098	2.3537	3.2290
70	36.54	-0.9411	-5.2505	-0.1733	-0.0576	-0.0465	-0.9325	2.3518	3.3562
Average <sup>b</sup>	24.27	7.54	2.11	54.80	189.27	314.49	43.28	64.66	74.50

Table 14. Continued

Year	Baseline LHS <sup>a</sup> (million head)	Prime Interest Rate	Corn Price	Nonfeed Cost of Fed Cattle	Soybean Meal Price	Wholesale Price Index	Utility Cow Price	Omaha Steer Price	Feeder Steer Price
(percent)									
10 Percent Increase									
1	35.06	-0.0051	-0.2416	-0.1031	-0.0343	-0.2400	0.0000	3.6968	-2.4316
2	35.14	-0.1083	-1.0555	-0.4506	-0.1498	-0.5537	-0.0859	8.6870	-5.7118
3	35.21	-0.3046	-1.8159	-0.7743	-0.2575	-0.7771	-0.2663	12.4567	-7.7372
4	35.28	-0.5624	-2.8009	-1.0189	-0.3388	-0.9329	-0.5120	15.3030	-8.6595
5	35.34	-0.8611	-4.0953	-1.2035	-0.4002	-1.0381	-0.8015	17.4504	-8.7787
6	35.40	-1.1853	-5.5954	-1.3428	-0.4465	-1.1058	-1.1188	19.0691	-8.3198
7	35.46	-1.5237	-7.2242	-1.4477	-0.4814	-1.1456	-1.4520	20.2877	-7.4517
8	35.52	-1.8681	-8.9250	-1.5267	-0.5077	-1.1649	-1.7925	21.2036	-6.3006
9	35.57	-2.2125	-10.6562	-1.5860	-0.5274	-1.1692	-2.1340	21.8907	-4.9606
10	35.62	-2.5526	-12.3876	-1.6305	-0.5422	-1.1627	-2.4718	22.4046	-3.5017
11	35.67	-2.8853	-14.0975	-1.6637	-0.5533	-1.1486	-2.8029	22.7878	-1.9756
12	35.71	-3.2085	-15.7706	-1.6885	-0.5615	-1.1291	-3.1249	23.0722	-0.4201
13	35.76	-3.5210	-17.3965	-1.7068	-0.5676	-1.1059	-3.4365	23.2820	1.1372
14	35.80	-3.8218	-18.9684	-1.7203	-0.5721	-1.0805	-3.7367	23.4356	2.6764
15	35.84	-4.1106	-20.4818	-1.7301	-0.5753	-1.0537	-4.0249	23.5468	4.1836
20	36.00	-5.3729	-27.1350	-1.7496	-0.5818	-0.9187	-5.2863	23.7582	10.9999
30	36.23	-7.1270	-36.4260	-1.7471	-0.5810	-0.7086	-7.0405	23.7078	20.7558
40	36.37	-8.1777	-41.9989	-1.7410	-0.5789	-0.5792	-8.0915	23.6236	26.6445
50	36.46	-8.8069	-45.3361	-1.7370	-0.5776	-0.5015	-8.7209	23.5699	30.1731
60	36.51	-9.1843	-47.3381	-1.7346	-0.5768	-0.4549	-9.0984	23.5374	32.2902
70	36.54	-9.4110	-48.5409	-1.7332	-0.5764	-0.4269	-9.3252	23.5179	33.5620
Average <sup>b</sup>	24.27	7.54	2.11	54.80	189.27	314.49	43.28	64.66	74.50

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 15. Nonfed slaughter: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup>	Prime Interest Rate	Corn Price	Nonfeed Cost of Fed Cattle	Soybean Meal Price	Wholesale Price Index	Utility Cow Price	Omaha Steer Price	Feeder Steer Price
	(million head)	(percent)							
<b>1 Percent Increase</b>									
1	7.87	0.0275	0.0175	0.0075	0.0025	-0.0052	0.0271	-0.9135	-0.0776
2	7.83	0.0041	0.9932	0.0476	0.0158	0.0527	0.0017	-1.5564	-0.1629
3	7.80	-0.0218	1.6032	0.1047	0.0348	0.1174	-0.0270	-2.3078	0.6105
4	7.77	-0.0458	1.4455	0.1665	0.0554	0.1833	-0.0541	-3.0935	1.4042
5	7.74	-0.0655	1.2948	0.2288	0.0761	0.2473	-0.0769	-3.8747	2.1687
6	7.71	-0.0796	1.1688	0.2893	0.0962	0.3078	-0.0939	-4.6275	2.8769
7	7.68	-0.0875	1.0756	0.3466	0.1153	0.3637	-0.1047	-5.3376	3.5140
8	7.66	-0.0892	1.0182	0.4000	0.1330	0.4147	-0.1090	-5.9968	4.0731
9	7.63	-0.0849	0.9969	0.4492	0.1494	0.4604	-0.1071	-6.6017	4.5528
10	7.61	-0.0750	1.0103	0.4939	0.1643	0.5011	-0.0994	-7.1514	4.9552
11	7.59	-0.0601	1.0558	0.5344	0.1777	0.5369	-0.0866	-7.6473	5.2847
12	7.56	-0.0408	1.1302	0.5707	0.1898	0.5682	-0.0691	-8.0922	5.5469
13	7.54	-0.0178	1.2299	0.6031	0.2006	0.5953	-0.0477	-8.4893	5.7483
14	7.52	0.0084	1.3513	0.6320	0.2102	0.6186	-0.0229	-8.8425	5.8953
15	7.51	0.0372	1.4911	0.6576	0.2187	0.6385	0.0046	-9.1556	5.9945
20	7.43	0.2034	2.3605	0.7469	0.2484	0.6994	0.1664	-10.2493	5.9733
30	7.32	0.5331	4.2024	0.8186	0.2722	0.7230	0.4926	-11.1344	4.8649
40	7.25	0.7752	5.5917	0.8398	0.2793	0.7116	0.7336	-11.4012	3.7330
50	7.21	0.9317	6.4978	0.8475	0.2818	0.6987	0.8898	-11.5006	2.9400
60	7.18	1.0288	7.0608	0.8510	0.2830	0.6896	0.9866	-11.5470	2.4361
70	7.17	1.0879	7.4042	0.8528	0.2836	0.6837	1.0457	-11.5721	2.1262
Average <sup>b</sup>	24.27	7.54	2.11	54.80	189.27	314.49	43.28	64.66	74.50

Table 15. Continued

Year	Baseline LHS <sup>a</sup> Variable (million head)	Prime Interest Rate	Corn Price	Nonfeed Cost of Fed Cattle	Soybean Meal Price	Wholesale Price Index	Utility Cow Price	Omaha Steer Price	Feeder Steer Price
(percent)									
<b>10 Percent Increase</b>									
1	7.8697	0.2746	0.1749	0.0746	0.0248	-0.0477	0.2710	-9.1350	-0.7764
2	7.8347	0.0408	9.2107	0.4765	0.1585	0.4838	0.0172	-15.5644	-1.6290
3	7.8014	-0.2183	14.9211	1.0466	0.3481	1.0782	-0.2702	-23.0779	6.1049
4	7.7696	-0.4585	13.5918	1.6648	0.5536	1.6828	-0.5409	-30.9355	14.0419
5	7.7393	-0.6554	12.3269	2.2878	0.7608	2.2708	-0.7687	-38.7468	21.6871
6	7.7104	-0.7962	11.2863	2.8926	0.9619	2.8261	-0.9394	-46.2749	28.7691
7	7.6829	-0.8753	10.5399	3.4660	1.1526	3.3399	-1.0469	-53.3756	35.1397
8	7.6567	-0.8920	10.1152	4.0003	1.3303	3.8075	-1.0900	-59.9684	40.7308
9	7.6318	-0.8487	10.0143	4.4918	1.4937	4.2276	-1.0711	-66.0166	45.5278
10	7.6081	-0.7498	10.2234	4.9393	1.6425	4.6010	-0.9944	-71.5138	49.5520
11	7.5855	-0.6010	10.7186	5.3437	1.7770	4.9299	-0.8656	-76.4734	52.8469
12	7.5640	-0.4084	11.4708	5.7068	1.8977	5.2170	-0.6909	-80.9219	55.4695
13	7.5436	-0.1780	12.4482	6.0311	2.0056	5.4659	-0.4766	-84.8931	57.4831
14	7.5242	0.0840	13.6189	6.3197	2.1016	5.6800	-0.2289	-88.4247	58.9534
15	7.5057	0.3719	14.9516	6.5756	2.1867	5.8629	0.0463	-91.5558	59.9452
20	7.4258	2.0342	23.1052	7.4687	2.4837	6.4214	1.6645	-102.4926	59.7335
30	7.3155	5.3309	40.1544	8.1864	2.7223	6.6386	4.9256	-111.3440	48.6486
40	7.2490	7.7515	52.9520	8.3981	2.7927	6.5335	7.3357	-114.0119	37.3297
50	7.2089	9.3175	61.2862	8.4746	2.8182	6.4151	8.8979	-115.0059	29.3998
60	7.1847	10.2878	66.4416	8.5096	2.8298	6.3313	9.8664	-115.4703	24.3607
70	7.1702	10.8792	69.6189	8.5282	2.8360	6.2780	10.4570	-115.7213	21.2624
Average <sup>b</sup>	24.27	7.54	2.11	54.80	189.27	314.49	43.28	64.66	74.50

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 16. Cattle on feed, third quarter: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Nonfeed Cost of Fed Cattle	Prime Interest Rate	Wholesale Price Index	Utility Cow Price	Omaha Steer Price	Feeder Steer Price
	(million head)	(percent)							
<b>1 Percent Increase</b>									
1	13.57	0.0000	0.0000	0.0000	0.0000	-0.0070	0.0000	0.0987	-0.0649
2	13.61	-0.0716	-0.0102	-0.0306	-0.0074	-0.0498	-0.0059	0.7157	-0.4706
3	13.64	-0.1678	-0.0238	-0.0716	-0.0255	-0.0847	-0.0219	1.2383	-0.7833
4	13.68	-0.2783	-0.0351	-0.1056	-0.0524	-0.1100	-0.0472	1.6423	-0.9644
5	13.71	-0.4233	-0.0438	-0.1319	-0.0856	-0.1276	-0.0791	1.9486	-1.0329
6	13.74	-0.6013	-0.0504	-0.1517	-0.1230	-0.1393	-0.1154	2.1796	-1.0169
7	13.77	-0.8023	-0.0554	-0.1667	-0.1627	-0.1465	-0.1545	2.3534	-0.9401
8	13.79	-1.0175	-0.0592	-0.1779	-0.2038	-0.1506	-0.1950	2.4840	-0.8206
9	13.82	-1.2404	-0.0620	-0.1864	-0.2452	-0.1522	-0.2360	2.5818	-0.6719
10	13.84	-1.4658	-0.0641	-0.1927	-0.2864	-0.1521	-0.2769	2.6549	-0.5041
11	13.86	-1.6903	-0.0657	-0.1974	-0.3269	-0.1508	-0.3171	2.7093	-0.3248
12	13.89	-1.9113	-0.0668	-0.2010	-0.3664	-0.1486	-0.3565	2.7497	-0.1395
13	13.91	-2.1270	-0.0677	-0.2035	-0.4047	-0.1458	-0.3946	2.7794	0.0479
14	13.93	-2.3362	-0.0683	-0.2055	-0.4416	-0.1426	-0.4314	2.8011	0.2344
15	13.95	-2.5380	-0.0688	-0.2068	-0.4771	-0.1392	-0.4668	2.8168	0.4179
20	14.03	-3.4287	-0.0697	-0.2096	-0.6324	-0.1213	-0.6221	2.8462	1.2540
30	14.14	-4.6748	-0.0695	-0.2091	-0.8484	-0.0930	-0.8381	2.8381	2.4568
40	14.20	-5.4213	-0.0692	-0.2082	-0.9776	-0.0755	-0.9673	2.8256	3.1825
50	14.25	-5.8678	-0.0691	-0.2076	-1.0549	-0.0650	-1.0446	2.8176	3.6167
60	14.27	-6.1354	-0.0689	-0.2073	-1.1011	-0.0587	-1.0909	2.8128	3.8771
70	14.28	-6.2960	-0.0689	-0.2071	-1.1289	-0.0550	-1.1187	2.8100	4.0334
Average <sup>b</sup>	8.78	7.54	2.11	54.80	189.27	314.49	43.28	64.66	74.50

Table 16. Continued

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Nonfeed Cost of Fed Cattle	Prime Interest Rate	Wholesale Price Index	Utility Cow Price	Omaha Steer Price	Feeder Steer Price
	(million head)	(percent)							
<b>10 Percent Increase</b>									
1	13.57	0.0000	0.0000	0.0000	0.0000	-0.0641	0.0000	0.9869	-0.6491
2	13.61	-0.7157	-0.1016	-0.3055	-0.0738	-0.4576	-0.0587	7.1570	-4.7061
3	13.64	-1.6780	-0.2380	-0.7157	-0.2547	-0.7779	-0.2192	12.3828	-7.8326
4	13.68	-2.7577	-0.3513	-1.0563	-0.5242	-1.0103	-0.4719	16.4233	-9.6440
5	13.71	-4.1395	-0.4385	-1.3185	-0.8564	-1.1715	-0.7911	19.4863	-10.3286
6	13.74	-5.8114	-0.5045	-1.5171	-1.2295	-1.2786	-1.1544	21.7962	-10.1689
7	13.77	-7.6857	-0.5543	-1.6668	-1.6274	-1.3454	-1.5448	23.5343	-9.4009
8	13.79	-9.6839	-0.5917	-1.7794	-2.0379	-1.3824	-1.9498	24.8398	-8.2056
9	13.82	-11.7462	-0.6198	-1.8639	-2.4523	-1.3975	-2.3600	25.8180	-6.7187
10	13.84	-13.8285	-0.6409	-1.9271	-2.8642	-1.3967	-2.7688	26.5491	-5.0413
11	13.86	-15.8988	-0.6566	-1.9744	-3.2692	-1.3846	-3.1714	27.0935	-3.2482
12	13.89	-17.9345	-0.6682	-2.0095	-3.6640	-1.3644	-3.5645	27.4969	-1.3948
13	13.91	-19.9198	-0.6769	-2.0355	-4.0467	-1.3387	-3.9459	27.7940	0.4789
14	13.93	-21.8440	-0.6832	-2.0546	-4.4158	-1.3094	-4.3141	28.0111	2.3436
15	13.95	-23.7003	-0.6879	-2.0685	-4.7705	-1.2778	-4.6681	28.1678	4.1785
20	14.03	-31.8835	-0.6969	-2.0957	-6.3244	-1.1138	-6.2206	28.4616	12.5404
30	14.14	-43.3243	-0.6955	-2.0914	-8.4843	-0.8538	-8.3808	26.3805	24.5681
40	14.20	-50.1767	-0.6925	-2.0823	-9.7761	-0.6934	-9.6730	28.2557	31.8245
50	14.25	-54.2747	-0.6905	-2.0765	-10.5485	-0.5971	-10.4457	28.1763	36.1673
60	14.27	-56.7311	-0.6893	-2.0730	-11.0115	-0.5394	-10.9089	28.1283	38.7707
70	14.28	-58.2060	-0.6886	-2.0708	-11.2895	-0.5047	-11.1870	28.0996	40.3339
<b>Average<sup>b</sup></b>	<b>8.78</b>	<b>7.54</b>	<b>2.11</b>	<b>54.80</b>	<b>189.27</b>	<b>314.49</b>	<b>43.28</b>	<b>64.66</b>	<b>74.50</b>

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 17. Chicken production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Wholesale Chicken Price	Eggs Hatching
	(million pounds)			(percent)	
<b>1 Percent Increase</b>					
1	14,708	0.0000	0.0000	0.0514	0.8305
2	14,708	-0.0034	-0.0316	0.0515	0.8305
3	14,708	-0.0034	-0.0316	0.0515	0.8305
4	14,708	-0.0034	-0.0315	0.0514	0.8305
5	14,708	-0.0034	-0.0315	0.0514	0.8305
6	14,708	-0.0034	-0.0315	0.0514	0.8305
7	14,708	-0.0034	-0.0316	0.0515	0.8305
8	14,708	-0.0034	-0.0316	0.0515	0.8305
9	14,708	-0.0034	-0.0315	0.0514	0.8305
10	14,708	-0.0034	-0.0315	0.0514	0.8305
Average <sup>b</sup>	15,457	2.11	189.27	55.22	592.30
<b>10 Percent Increase</b>					
1	14,708	0.0000	0.0000	0.5141	8.3052
2	14,708	-0.0343	-0.3156	0.5147	8.3053
3	14,708	-0.0343	-0.3157	0.5148	8.3053
4	14,708	-0.0343	-0.3154	0.5145	8.3053
5	14,708	-0.0343	-0.3154	0.5144	8.3053
6	14,708	-0.0343	-0.3155	0.5145	8.3053
7	14,708	-0.0343	-0.3155	0.5146	8.3053
8	14,708	-0.0343	-0.3155	0.5145	8.3053
9	14,708	-0.0343	-0.3155	0.5145	8.3053
10	14,708	-0.0343	-0.3155	0.5145	8.3053
Average <sup>b</sup>	15,457	2.11	189.27	55.22	592.30

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 18. Chicken total stocks: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Chicken Production	Wholesale Chicken Price	CPI <sup>b</sup> Fuel and Utilities	Other Chicken Stocks
	(million pounds)	(percent)			
<b>1 Percent Increase</b>					
1	47.56	3.7486	-0.5978	-0.5230	1.8439
2	47.57	3.7482	-0.5977	-0.5230	1.8438
3	47.57	3.7481	-0.5977	-0.5230	1.8438
4	47.57	3.7484	-0.5978	-0.5230	1.8439
5	47.57	3.7484	-0.5978	-0.5230	1.8439
6	47.57	3.7483	-0.5977	-0.5230	1.8439
7	47.57	3.7483	-0.5977	-0.5230	1.8438
8	47.57	3.7483	-0.5977	-0.5230	1.8439
9	47.57	3.7483	-0.5977	-0.5230	1.8439
10	47.57	3.7483	-0.5977	-0.5230	1.8439
<b>Average<sup>c</sup></b>	<b>29.84</b>	<b>15,457</b>	<b>55.22</b>	<b>3.03</b>	<b>164.89</b>
<b>10 Percent Increase</b>					
1	47.56	37.4856	-5.9779	-5.2299	19.3637
2	47.57	37.4824	-5.9773	-5.2294	19.3626
3	47.57	37.4813	-5.9771	-5.2292	19.3623
4	47.57	37.4835	-5.9775	-5.2296	19.3630
5	47.57	37.4839	-5.9775	-5.2296	19.3631
6	47.57	37.4833	-5.9774	-5.2295	19.3629
7	47.57	37.4829	-5.9774	-5.2294	19.3628
8	47.57	37.4830	-5.9774	-5.2295	19.3628
9	47.57	37.4833	-5.9774	-5.2295	19.3629
10	47.57	37.4833	-5.9774	-5.2295	19.3629
<b>Average<sup>c</sup></b>	<b>29.84</b>	<b>15,457</b>	<b>55.22</b>	<b>3.03</b>	<b>164.89</b>

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 19. Chicken consumption: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Retail Chicken Price	Retail Beef Price	Retail Pork Price	Per Capita Income	Consumer Price Index	Civilian Population
	(million pounds)			(percent)			
<b>1 Percent Increase</b>							
1	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
2	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
3	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
4	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
5	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
6	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
7	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
8	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
9	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
10	14,665	-0.6373	0.2686	0.3443	0.1154	0.0684	1.0000
Average <sup>b</sup>	14,791	83.28	2.88	2.79	10.32	2.99	244.04
<b>10 Percent Increase</b>							
1	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
2	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
3	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
4	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
5	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
6	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
7	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
8	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
9	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
10	14,665	-6.3732	2.6859	3.4434	1.1541	0.6280	10.0000
Average <sup>b</sup>	14,791	83.28	14.72	2.79	587.58	35.56	244.04

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 20. Twelve-city wholesale price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Retail Chicken Price	Wholesale Price Index	Wage Rate Poultry Processors	CPI <sup>b</sup> Fuel and Utilities	Chicken Production
	(cents per pound)			(percent)		
<b>1 Percent Increase</b>						
1	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
2	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
3	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
4	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
5	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
6	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
7	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
8	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
9	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
10	55.99	1.2716	-0.3428	-0.1513	0.1389	-0.2164
Average <sup>c</sup>	55.22	83.28	314.49	6.82	3.03	15,457
<b>10 Percent Increase</b>						
1	55.99	12.7158	-3.4279	-1.5131	1.3894	-2.1643
2	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
3	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1644
4	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
5	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
6	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
7	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
8	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
9	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
10	55.99	12.7159	-3.4280	-1.5131	1.3894	-2.1643
Average <sup>c</sup>	55.22	2.11	314.49	6.82	3.03	15,457

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 21. Broiler farm price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Wholesale Chicken Price	Wholesale Price Index	Wage Rate Poultry Processors	CPI <sup>b</sup> Fuel and Utilities
(cents per pound)		(percent)			
<b>1 Percent Increase</b>					
1	30.49	0.9586	0.2907	-0.3147	0.0654
2	30.49	0.9586	0.2907	-0.3147	0.0654
3	30.49	0.9586	0.2907	-0.3147	0.0654
4	30.49	0.9586	0.2907	-0.3147	0.0654
5	30.49	0.9586	0.2907	-0.3147	0.0654
6	30.49	0.9586	0.2907	-0.3147	0.0654
7	30.49	0.9586	0.2907	-0.3147	0.0654
6	30.49	0.9586	0.2907	-0.3147	0.0654
9	30.49	0.9586	0.2907	-0.3147	0.0654
10	30.49	0.9586	0.2907	-0.3147	0.0654
Average <sup>c</sup>	30.49	55.22	314.49	6.82	3.03
<b>10 Percent Increase</b>					
1	30.49	9.5860	2.9070	-3.1474	0.6545
2	30.49	9.5860	2.9070	-3.1474	0.6545
3	30.49	9.5860	2.9070	-3.1474	0.6545
4	30.49	9.5860	2.9070	-3.1474	0.6545
5	30.49	9.5860	2.9070	-3.1474	0.6545
6	30.49	9.5860	2.9070	-3.1474	0.6545
7	30.49	9.5860	2.9070	-3.1474	0.6545
6	30.49	9.5860	2.9070	-3.1474	0.6545
9	30.49	9.5860	2.9070	-3.1474	0.6545
10	30.49	9.5860	2.9070	-3.1474	0.6545
Average <sup>c</sup>	30.49	55.22	314.49	6.82	3.03

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 22. Grain-consuming animal units: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> (million GCAU) <sup>b</sup>	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow
(percent)													
<b>1 Percent Increase</b>													
1	127.48	0.0000	0.0000	0.0000	0.0000	0.0118	0.0336	0.0003	0.1145	0.0000	0.0041	0.0170	0.1417
2	127.74	-0.0198	-0.0180	-0.0006	-0.0003	0.0149	0.1355	0.0005	0.3105	-0.0027	-0.0013	0.0169	0.1416
3	127.96	-0.0721	-0.0676	-0.0022	-0.0010	0.0169	0.2214	0.0006	0.4675	-0.0088	-0.0061	0.0169	0.1415
4	128.15	-0.1260	-0.1059	-0.0035	-0.0015	0.0184	0.2863	0.0007	0.5879	-0.0177	-0.0098	0.0169	0.1413
5	128.31	-0.1881	-0.1351	-0.0044	-0.0020	0.0195	0.3353	0.0007	0.6794	-0.0286	-0.0124	0.0169	0.1412
6	128.45	-0.2573	-0.1575	-0.0051	-0.0023	0.0203	0.3721	0.0008	0.7487	-0.0407	-0.0141	0.0169	0.1411
7	128.57	-0.3309	-0.1748	-0.0057	-0.0025	0.0209	0.3999	0.0008	0.8011	-0.0536	-0.0151	0.0169	0.1410
8	128.67	-0.4069	-0.1883	-0.0061	-0.0027	0.0214	0.4207	0.0008	0.8408	-0.0669	-0.0154	0.0169	0.1410
9	128.76	-0.4838	-0.1988	-0.0064	-0.0028	0.0217	0.4364	0.0008	0.8709	-0.0803	-0.0154	0.0169	0.1409
10	128.85	-0.5604	-0.2072	-0.0066	-0.0029	0.0220	0.4482	0.0008	0.8935	-0.0937	-0.0149	0.0169	0.1408
11	128.92	-0.6358	-0.2139	-0.0068	-0.0030	0.0222	0.4570	0.0008	0.9107	-0.1068	-0.0142	0.0168	0.1407
12	128.99	-0.7096	-0.2194	-0.0069	-0.0031	0.0223	0.4637	0.0008	0.9236	-0.1196	-0.0134	0.0168	0.1407
13	129.05	-0.7812	-0.2239	-0.0070	-0.0031	0.0224	0.4686	0.0009	0.9333	-0.1320	-0.0124	0.0168	0.1406
14	129.11	-0.8505	-0.2277	-0.0071	-0.0031	0.0225	0.4724	0.0009	0.9406	-0.1441	-0.0113	0.0168	0.1406
15	129.16	-0.9172	-0.2309	-0.0071	-0.0032	0.0226	0.4751	0.0009	0.9461	-0.1556	-0.0101	0.0168	0.1405
20	129.37	-1.2112	-0.2427	-0.0072	-0.0032	0.0227	0.4812	0.0009	0.9584	-0.2065	-0.0045	0.0168	0.1403
30	129.59	-1.6251	-0.2590	-0.0073	-0.0032	0.0227	0.4825	0.0009	0.9610	-0.2780	0.0045	0.0168	0.1400
40	129.67	-1.8765	-0.2730	-0.0073	-0.0032	0.0227	0.4823	0.0009	0.9607	-0.3213	0.0100	0.0168	0.1400
Average <sup>c</sup>	104.65	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703

Table 22. Continued

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow
(million GCAU) <sup>b</sup>													
(percent)													
<b>10 Percent Increase</b>													
1	127.48	0.0000	0.0000	0.0000	0.0000	0.1179	0.3355	0.0028	1.1453	0.0000	0.0372	0.1696	1.4172
2	127.74	-0.1983	-0.1801	-0.0056	-0.0025	0.1489	1.3548	0.0047	3.1055	-0.0267	-0.0119	0.1695	1.4159
3	127.96	-0.7214	-0.6747	-0.0221	-0.0098	0.1688	2.2139	0.0060	4.6755	-0.0883	-0.0563	0.1693	1.4146
4	128.15	-1.2479	-1.0557	-0.0346	-0.0154	0.1835	2.8634	0.0068	5.8795	-0.1775	-0.0902	0.1692	1.4134
5	128.31	-1.8433	-1.3465	-0.0441	-0.0196	0.1946	3.3527	0.0074	6.7940	-0.2860	-0.1141	0.1690	1.4124
6	128.45	-2.4964	-1.5693	-0.0512	-0.0228	0.2029	3.7212	0.0078	7.4869	-0.4073	-0.1297	0.1689	1.4114
7	128.57	-3.1861	-1.7409	-0.0566	-0.0252	0.2091	3.9985	0.0081	8.0115	-0.5362	-0.1384	0.1688	1.4104
8	128.67	-3.8946	-1.8740	-0.0607	-0.0270	0.2138	4.2072	0.0082	8.4084	-0.6690	-0.1418	0.1687	1.4096
9	128.76	-4.6084	-1.9780	-0.0637	-0.0283	0.2173	4.3641	0.0083	8.7086	-0.8032	-0.1409	0.1686	1.4088
10	128.85	-5.3176	-2.0601	-0.0660	-0.0293	0.2199	4.4820	0.0084	8.9354	-0.9366	-0.1370	0.1685	1.4080
11	128.92	-6.0150	-2.1258	-0.0677	-0.0301	0.2219	4.5705	0.0085	9.1066	-1.0679	-0.1307	0.1684	1.4073
12	128.99	-6.6955	-2.1791	-0.0690	-0.0307	0.2233	4.6368	0.0085	9.2357	-1.1960	-0.1227	0.1684	1.4067
13	129.05	-7.3558	-2.2229	-0.0700	-0.0311	0.2244	4.6865	0.0085	9.3329	-1.3204	-0.1135	0.1683	1.4061
14	129.11	-7.9937	-2.2596	-0.0707	-0.0314	0.2252	4.7236	0.0085	9.4059	-1.4405	-0.1036	0.1682	1.4055
15	129.16	-8.6077	-2.2909	-0.0712	-0.0317	0.2258	4.7512	0.0085	9.4606	-1.5562	-0.0932	0.1682	1.4050
20	129.37	-11.3106	-2.4026	-0.0724	-0.0322	0.2270	4.8123	0.0085	9.5835	-2.0649	-0.0409	0.1679	1.4029
30	129.59	-15.1134	-2.5539	-0.0727	-0.0323	0.2271	4.8249	0.0085	9.6104	-2.7796	0.0412	0.1676	1.4004
40	129.67	-17.4227	-2.6832	-0.0727	-0.0323	0.2270	4.8233	0.0085	9.6074	-3.2126	0.0922	0.1675	1.3996
Average <sup>c</sup>	104.65	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>GCAU is a grain-consuming animal unit.<sup>c</sup>1985-89 average level.

Table 23. High-protein consuming animal units: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable (million HPAU) <sup>b</sup>	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow
(percent)													
1 Percent Increase													
1	121.91	0.0000	0.0000	0.0000	0.0000	0.0099	0.0290	0.0003	0.0640	0.0000	0.0073	0.0217	0.1813
2	122.03	-0.0174	-0.0158	-0.0005	-0.0002	0.0126	0.1204	0.0005	0.1601	-0.0015	0.0087	0.0217	0.1812
3	122.14	-0.0649	-0.0639	-0.0020	-0.0009	0.0144	0.1975	0.0006	0.2350	-0.0048	0.0092	0.0217	0.1812
4	122.22	-0.1090	-0.1018	-0.0031	-0.0014	0.0157	0.2559	0.0007	0.2921	-0.0093	0.0094	0.0217	0.1812
5	122.27	-0.1535	-0.1316	-0.0039	-0.0018	0.0167	0.3000	0.0007	0.3356	-0.0148	0.0094	0.0217	0.1812
6	122.31	-0.1982	-0.1552	-0.0046	-0.0020	0.0175	0.3333	0.0008	0.3686	-0.0209	0.0095	0.0217	0.1812
7	122.34	-0.2426	-0.1742	-0.0051	-0.0023	0.0180	0.3585	0.0008	0.3937	-0.0273	0.0097	0.0217	0.1812
8	122.35	-0.2864	-0.1897	-0.0054	-0.0024	0.0185	0.3775	0.0008	0.4128	-0.0339	0.0099	0.0217	0.1812
9	122.36	-0.3292	-0.2026	-0.0057	-0.0025	0.0188	0.3918	0.0008	0.4273	-0.0406	0.0102	0.0217	0.1812
10	122.36	-0.3707	-0.2134	-0.0059	-0.0026	0.0190	0.4027	0.0008	0.4383	-0.0472	0.0106	0.0217	0.1813
11	122.36	-0.4110	-0.2228	-0.0061	-0.0027	0.0192	0.4109	0.0008	0.4467	-0.0538	0.0111	0.0217	0.1813
12	122.35	-0.4498	-0.2310	-0.0062	-0.0028	0.0194	0.4171	0.0008	0.4531	-0.0601	0.0116	0.0217	0.1813
13	122.34	-0.4871	-0.2383	-0.0063	-0.0028	0.0195	0.4219	0.0008	0.4580	-0.0663	0.0122	0.0217	0.1813
14	122.32	-0.5230	-0.2450	-0.0064	-0.0028	0.0196	0.4254	0.0008	0.4617	-0.0723	0.0128	0.0217	0.1814
15	122.31	-0.5574	-0.2511	-0.0064	-0.0029	0.0196	0.4282	0.0008	0.4645	-0.0780	0.0134	0.0217	0.1814
20	122.20	-0.7078	-0.2773	-0.0065	-0.0029	0.0198	0.4347	0.0008	0.4715	-0.1034	0.0162	0.0217	0.1816
30	122.93	-0.9201	-0.3208	-0.0066	-0.0029	0.0199	0.4376	0.0008	0.4747	-0.1392	0.0207	0.0218	0.1820
40	121.62	-1.0515	-0.3597	-0.0066	-0.0029	0.0199	0.4388	0.0008	0.4760	-0.1612	0.0235	0.0218	0.1824
Average <sup>c</sup>	107.95	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703

Table 23. Continued

Year	Baseline LHS <sup>a</sup> Variable	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow
	(million HPAU) <sup>b</sup>												
(percent)													
10 Percent Increase													
1	121.91	0.0000	0.0000	0.0000	0.0000	0.0986	0.2899	0.0028	0.6403	0.0000	0.0673	0.2170	1.8125
2	122.03	-0.1747	-0.1584	-0.0049	-0.0022	0.1258	1.2043	0.0046	1.6010	-0.0149	0.0800	0.2170	1.8123
3	122.14	-0.6493	-0.6358	-0.0196	-0.0087	0.1437	1.9753	0.0059	2.3496	-0.0476	0.0845	0.2169	1.8122
4	122.22	-1.0834	-1.0104	-0.0309	-0.0137	0.1570	2.5592	0.0067	2.9214	-0.0934	0.0860	0.2169	1.8121
5	122.27	-1.5144	-1.3040	-0.0394	-0.0175	0.1671	3.0002	0.0073	3.3561	-0.1482	0.0865	0.2169	1.8121
6	122.31	-1.9418	-1.5364	-0.0459	-0.0204	0.1746	3.3332	0.0076	3.6864	-0.2090	0.0873	0.2169	1.8121
7	122.34	-2.3626	-1.7226	-0.0507	-0.0225	0.1804	3.5847	0.0079	3.9373	-0.2733	0.0887	0.2169	1.8122
8	122.35	-2.7741	-1.8739	-0.0544	-0.0242	0.1847	3.7748	0.0081	4.1280	-0.3394	0.0909	0.2170	1.8123
9	122.36	-3.1742	-1.9989	-0.0572	-0.0254	0.1880	3.9184	0.0082	4.2729	-0.4061	0.0940	0.2170	1.8124
10	122.36	-3.5617	-2.1040	-0.0593	-0.0263	0.1904	4.0270	0.0083	4.3831	-0.4723	0.0977	0.2170	1.8126
11	122.36	-3.9356	-2.1940	-0.0609	-0.0270	0.1923	4.1092	0.0083	4.4670	-0.5375	0.1021	0.2170	1.8128
12	122.35	-4.2955	-2.2725	-0.0621	-0.0276	0.1937	4.1714	0.0084	4.5309	-0.6011	0.1069	0.2170	1.8130
13	122.34	-4.6410	-2.3422	-0.0630	-0.0280	0.1948	4.2185	0.0084	4.5796	-0.6629	0.1120	0.2171	1.8133
14	122.32	-4.9723	-2.4052	-0.0637	-0.0283	0.1957	4.2543	0.0084	4.6168	-0.7226	0.1173	0.2171	1.8135
15	122.31	-5.2895	-2.4632	-0.0642	-0.0285	0.1963	4.2816	0.0084	4.6453	-0.7801	0.1227	0.2171	1.8138
20	122.20	-6.6754	-2.7079	-0.0654	-0.0291	0.1979	4.3474	0.0084	4.7151	-1.0336	0.1491	0.2173	1.8155
30	121.93	-8.6299	-3.1122	-0.0659	-0.0293	0.1988	4.3762	0.0085	4.7465	-1.3924	0.1903	0.2178	1.8196
40	121.62	-9.8397	-3.4723	-0.0661	-0.0294	0.1993	4.3884	0.0085	4.7599	-1.6123	0.2162	0.2184	1.8243
Average <sup>c</sup>	107.95	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>HPAU is a high-protein-consuming animal unit.<sup>c</sup>1985-89 average level.

Table 24. Livestock price index—GCAU<sup>a</sup>: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>b</sup> variables

Year	Baseline LHS <sup>b</sup> Variable	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow	All-Milk Farm Price
	(1982 = 1)							(percent)						
<b>1 Percent Increase</b>														
1	0.974	0.0000	0.0000	0.0000	0.0000	-0.0015	0.2383	0.1291	0.3826	0.0000	-0.0006	-0.0007	-0.0059	0.1448
2	0.974	0.0023	0.0021	0.0001	0.0000	-0.0019	0.2256	0.1290	0.3912	-0.0001	-0.0012	-0.0007	-0.0058	0.1446
3	0.974	0.0088	0.0076	0.0003	0.0001	-0.0022	0.2149	0.1289	0.3981	-0.0003	-0.0017	-0.0007	-0.0058	0.1445
4	0.974	0.0133	0.0116	0.0004	0.0002	-0.0024	0.2068	0.1288	0.4036	-0.0006	-0.0020	-0.0007	-0.0058	0.1444
5	0.974	0.0160	0.0146	0.0006	0.0003	-0.0025	0.2007	0.1287	0.4078	-0.0010	-0.0023	-0.0007	-0.0058	0.1443
6	0.974	0.0172	0.0166	0.0007	0.0003	-0.0026	0.1961	0.1286	0.4112	-0.0014	-0.0024	-0.0007	-0.0058	0.1442
7	0.974	0.0174	0.0181	0.0007	0.0003	-0.0027	0.1926	0.1285	0.4139	-0.0018	-0.0025	-0.0007	-0.0058	0.1441
8	0.974	0.0168	0.0190	0.0008	0.0003	-0.0028	0.1899	0.1284	0.4160	-0.0023	-0.0026	-0.0007	-0.0058	0.1440
9	0.974	0.0157	0.0196	0.0008	0.0004	-0.0028	0.1879	0.1284	0.4178	-0.0027	-0.0026	-0.0007	-0.0058	0.1439
10	0.974	0.0142	0.0199	0.0009	0.0004	-0.0028	0.1864	0.1283	0.4192	-0.0032	-0.0026	-0.0007	-0.0058	0.1439
11	0.974	0.0124	0.0200	0.0009	0.0004	-0.0029	0.1852	0.1282	0.4204	-0.0036	-0.0026	-0.0007	-0.0058	0.1438
12	0.974	0.0105	0.0200	0.0009	0.0004	-0.0029	0.1843	0.1282	0.4214	-0.0040	-0.0026	-0.0007	-0.0058	0.1437
13	0.974	0.0085	0.0199	0.0009	0.0004	-0.0029	0.1836	0.1281	0.4222	-0.0045	-0.0025	-0.0007	-0.0058	0.1437
14	0.974	0.0065	0.0196	0.0009	0.0004	-0.0029	0.1831	0.1281	0.4230	-0.0049	-0.0025	-0.0007	-0.0058	0.1436
15	0.974	0.0044	0.0193	0.0009	0.0004	-0.0029	0.1827	0.1280	0.4236	-0.0053	-0.0025	-0.0007	-0.0058	0.1436
20	0.974	-0.0055	0.0174	0.0009	0.0004	-0.0029	0.1817	0.1279	0.4261	-0.0070	-0.0023	-0.0007	-0.0057	0.1434
30	0.973	-0.0206	0.0130	0.0009	0.0004	-0.0029	0.1813	0.1277	0.4292	-0.0096	-0.0020	-0.0007	-0.0057	0.1432
40	0.973	-0.0305	0.0089	0.0009	0.0004	-0.0029	0.1814	0.1276	0.4313	-0.0112	-0.0018	-0.0007	-0.0056	0.1431
Average <sup>c</sup>	0.993	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703	12.71

Table 24. Continued

Year	Baseline LHS <sup>b</sup> Variable	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow	All-Milk Farm Price
	(1982 = 1)							(percent)						
<b>10 Percent Increase</b>														
1	0.974	0.0000	0.0000	0.0000	0.0000	-0.0153	2.4015	1.2912	3.8925	0.0000	-0.0052	-0.0070	-0.0579	1.4477
2	0.974	0.0231	0.0212	0.0007	0.0003	-0.0193	2.3335	1.2900	4.0857	-0.0009	-0.0112	-0.0070	-0.0578	1.4463
3	0.974	0.0887	0.0767	0.0029	0.0013	-0.0218	2.2770	1.2888	4.2365	-0.0030	-0.0156	-0.0070	-0.0577	1.4451
4	0.974	0.1350	0.1183	0.0045	0.0020	-0.0237	2.2346	1.2877	4.3504	-0.0060	-0.0187	-0.0070	-0.0576	1.4439
5	0.974	0.1635	0.1487	0.0057	0.0025	-0.0251	2.2028	1.2868	4.4366	-0.0096	-0.0208	-0.0070	-0.0575	1.4429
6	0.974	0.1784	0.1704	0.0066	0.0029	-0.0262	2.1787	1.2859	4.5022	-0.0138	-0.0222	-0.0070	-0.0574	1.4419
7	0.974	0.1831	0.1857	0.0073	0.0033	-0.0270	2.1605	1.2851	4.5525	-0.0182	-0.0231	-0.0070	-0.0574	1.4410
8	0.974	0.1801	0.1960	0.0079	0.0035	-0.0276	2.1466	1.2843	4.5914	-0.0227	-0.0236	-0.0069	-0.0573	1.4401
9	0.974	0.1717	0.2026	0.0082	0.0037	-0.0280	2.1360	1.2836	4.6218	-0.0273	-0.0239	-0.0069	-0.0572	1.4393
10	0.974	0.1592	0.2063	0.0085	0.0038	-0.0284	2.1279	1.2830	4.6457	-0.0319	-0.0239	-0.0069	-0.0572	1.4386
11	0.974	0.1438	0.2080	0.0088	0.0039	-0.0286	2.1216	1.2824	4.6647	-0.0365	-0.0238	-0.0069	-0.0571	1.4379
12	0.974	0.1265	0.2081	0.0089	0.0040	-0.0288	2.1168	1.2818	4.6799	-0.0409	-0.0236	-0.0069	-0.0570	1.4373
13	0.974	0.1078	0.2070	0.0090	0.0040	-0.0289	2.1130	1.2813	4.6924	-0.0453	-0.0233	-0.0069	-0.0570	1.4367
14	0.974	0.0883	0.2050	0.0091	0.0041	-0.0290	2.1101	1.2808	4.7026	-0.0495	-0.0230	-0.0069	-0.0569	1.4362
15	0.974	0.0683	0.2024	0.0092	0.0041	-0.0291	2.1077	1.2804	4.7112	-0.0536	-0.0227	-0.0069	-0.0569	1.4357
20	0.974	-0.0304	0.1843	0.0094	0.0042	-0.0292	2.1016	1.2786	4.7393	-0.0718	-0.0209	-0.0069	-0.0566	1.4337
30	0.973	-0.1930	0.1430	0.0094	0.0042	-0.0292	2.0989	1.2768	4.7691	-0.0982	-0.0181	-0.0068	-0.0561	1.4317
40	0.973	-0.3057	0.1043	0.0094	0.0042	-0.0291	2.0996	1.2764	4.7886	-0.1151	-0.0163	-0.0067	-0.0557	1.4313
Average <sup>c</sup>	0.993	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703	12.71

<sup>a</sup>GCAU is a grain-consuming animal unit.<sup>b</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>c</sup>1985-89 average level.

Table 25. Livestock price index—HPAU<sup>a</sup>: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>b</sup> variables

Year	Baseline LHS <sup>b</sup> Variable	Corn Price	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow	All-Milk Farm Price
(1982 = 1)														
(percent)														
<b>1 Percent Increase</b>														
1	1.007	0.0000	0.0000	0.0000	0.0000	-0.0016	0.2032	0.2740	0.1850	0.0000	-0.0007	-0.0016	-0.0131	0.1792
2	1.007	0.0025	0.0023	0.0001	0.0000	-0.0020	0.1895	0.2740	0.1864	0.0000	-0.0011	-0.0016	-0.0131	0.1792
3	1.006	0.0096	0.0076	0.0003	0.0001	-0.0023	0.1780	0.2740	0.1875	0.0000	-0.0014	-0.0016	-0.0130	0.1792
4	1.006	0.0149	0.0114	0.0005	0.0002	-0.0025	0.1693	0.2740	0.1885	0.0000	-0.0016	-0.0016	-0.0130	0.1792
5	1.006	0.0189	0.0140	0.0006	0.0003	-0.0026	0.1628	0.2741	0.1894	0.0000	-0.0017	-0.0016	-0.0130	0.1792
6	1.006	0.0219	0.0156	0.0007	0.0003	-0.0027	0.1579	0.2741	0.1902	0.0000	-0.0018	-0.0016	-0.0130	0.1792
7	1.006	0.0241	0.0165	0.0008	0.0004	-0.0028	0.1542	0.2742	0.1909	0.0000	-0.0019	-0.0016	-0.0130	0.1793
8	1.006	0.0257	0.0169	0.0009	0.0004	-0.0029	0.1515	0.2742	0.1915	0.0000	-0.0019	-0.0016	-0.0129	0.1793
9	1.006	0.0269	0.0170	0.0009	0.0004	-0.0029	0.1494	0.2742	0.1920	0.0000	-0.0020	-0.0015	-0.0129	0.1793
10	1.006	0.0277	0.0167	0.0009	0.0004	-0.0030	0.1479	0.2743	0.1926	-0.0001	-0.0020	-0.0015	-0.0129	0.1794
11	1.005	0.0283	0.0162	0.0010	0.0004	-0.0030	0.1468	0.2744	0.1931	-0.0001	-0.0020	-0.0015	-0.0129	0.1794
12	1.005	0.0286	0.0155	0.0010	0.0004	-0.0030	0.1459	0.2744	0.1935	-0.0001	-0.0020	-0.0015	-0.0129	0.1794
13	1.005	0.0288	0.0148	0.0010	0.0004	-0.0030	0.1453	0.2745	0.1939	-0.0001	-0.0020	-0.0015	-0.0128	0.1795
14	1.005	0.0290	0.0139	0.0010	0.0004	-0.0031	0.1449	0.2746	0.1943	-0.0001	-0.0020	-0.0015	-0.0128	0.1795
15	1.005	0.0290	0.0130	0.0010	0.0004	-0.0031	0.1446	0.2746	0.1947	-0.0001	-0.0020	-0.0015	-0.0128	0.1796
20	1.005	0.0284	0.0078	0.0010	0.0005	-0.0031	0.1441	0.2750	0.1964	-0.0002	-0.0020	-0.0015	-0.0127	0.1798
30	1.004	0.0263	-0.0026	0.0010	0.0005	-0.0031	0.1447	0.2759	0.1991	-0.0005	-0.0020	-0.0015	-0.0126	0.1804
40	1.003	0.0240	-0.0123	0.0010	0.0005	-0.0031	0.1455	0.2769	0.2011	-0.0007	-0.0020	-0.0015	-0.0125	0.1810
Average <sup>c</sup>	1.050	2.11	189.27	1.87	2.12	7,331	47.01	55.22	64.66	7.54	314.49	10,494	13,703	12.71

Table 25. Continued

Year	Baseline LHS <sup>b</sup> Variable	Corn Price (1982 = 1)	Soybean Meal Price	Sorghum Price	Barley Price	Corn Production	7-Market Barrow and Gilt Price	Wholesale Chicken Price	Omaha Steer Price	Prime Interest Rate	Wholesale Price Index	Dairy Cows on Farms	Milk Production per Cow	All-Milk Farm Price
<b>10 Percent Increase</b>														
1	1.007	0.0000	0.0000	0.0000	0.0000	-0.0155	2.0489	2.7403	1.8971	0.0000	-0.0061	-0.0157	-0.1287	1.7916
2	1.007	0.0251	0.0229	0.0008	0.0003	-0.0198	1.9652	2.7401	1.9792	0.0000	-0.0102	-0.0156	-0.1285	1.7916
3	1.006	0.0964	0.0777	0.0031	0.0014	-0.0226	1.8960	2.7402	2.0432	0.0000	-0.0129	-0.0156	-0.1282	1.7917
4	1.006	0.1509	0.1172	0.0049	0.0022	-0.0247	1.8446	2.7403	2.0927	-0.0001	-0.0148	-0.0156	-0.1280	1.7919
5	1.006	0.1921	0.1443	0.0062	0.0028	-0.0262	1.8063	2.7406	2.1310	-0.0001	-0.0160	-0.0155	-0.1278	1.7921
6	1.006	0.2231	0.1621	0.0072	0.0032	-0.0274	1.7779	2.7409	2.1610	-0.0002	-0.0168	-0.0155	-0.1276	1.7923
7	1.006	0.2464	0.1727	0.0080	0.0035	-0.0283	1.7569	2.7413	2.1847	-0.0003	-0.0174	-0.0155	-0.1274	1.7926
8	1.006	0.2638	0.1780	0.0085	0.0038	-0.0289	1.7412	2.7418	2.2036	-0.0004	-0.0178	-0.0155	-0.1273	1.7929
9	1.006	0.2767	0.1793	0.0090	0.0040	-0.0294	1.7297	2.7423	2.2188	-0.0005	-0.0180	-0.0155	-0.1271	1.7932
10	1.006	0.2863	0.1775	0.0093	0.0041	-0.0298	1.7212	2.7429	2.2313	-0.0006	-0.0182	-0.0154	-0.1269	1.7936
11	1.005	0.2932	0.1735	0.0095	0.0042	-0.0301	1.7151	2.7435	2.2416	-0.0008	-0.0183	-0.0154	-0.1268	1.7940
12	1.005	0.2981	0.1678	0.0097	0.0043	-0.0303	1.7107	2.7441	2.2503	-0.0009	-0.0183	-0.0154	-0.1266	1.7944
13	1.005	0.3015	0.1609	0.0099	0.0044	-0.0304	1.7075	2.7448	2.2577	-0.0011	-0.0184	-0.0154	-0.1264	1.7949
14	1.005	0.3037	0.1530	0.0100	0.0044	-0.0305	1.7054	2.7455	2.2641	-0.0012	-0.0184	-0.0154	-0.1263	1.7953
15	1.005	0.3050	0.1444	0.0100	0.0045	-0.0306	1.7040	2.7462	2.2698	-0.0014	-0.0184	-0.0153	-0.1261	1.7958
20	1.005	0.3035	0.0966	0.0102	0.0045	-0.0308	1.7033	2.7501	2.2909	-0.0024	-0.0183	-0.0153	-0.1254	1.7984
30	1.004	0.2871	-0.0022	0.0102	0.0045	-0.0308	1.7109	2.7589	2.3187	-0.0046	-0.0181	-0.0151	-0.1241	1.8041
40	1.003	0.2673	-0.0949	0.0102	0.0045	-0.0307	1.7200	2.7683	2.3393	-0.0067	-0.0179	-0.0150	-0.1230	1.8102
Average <sup>c</sup>	1.050	2.11	189.27	1.87	2.12	7.331	47.01	55.22	64.66	7.54	314.49	10,494	13,703	12.71

<sup>a</sup>HPAU is a high-protein consuming animal unit.<sup>b</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>c</sup>1985-89 average level.

Table 26. Dairy cows on farms: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	All-Milk Farm Price	Utility Cow Price	Corn Price	Soybean Meal Price	Alfalfa Price
	(1,000 head)			(percent)		
<b>1 Percent Increase</b>						
1	10,494	0.087	0.024	0.000	0.000	0.044
2	10,494	0.157	-0.043	-0.009	-0.006	-0.078
3	10,494	0.213	-0.058	-0.017	-0.010	-0.107
4	10,494	0.258	-0.070	-0.023	-0.014	-0.129
5	10,494	0.294	-0.080	-0.028	-0.017	-0.147
6	10,494	0.323	-0.088	-0.032	-0.019	-0.162
7	10,494	0.346	-0.094	-0.035	-0.021	-0.173
8	10,494	0.365	-0.099	-0.038	-0.023	-0.183
9	10,494	0.380	-0.103	-0.040	-0.024	-0.190
10	10,494	0.392	-0.106	-0.042	-0.025	-0.196
Average <sup>b</sup>	10,494	12.71	43.28	2.11	189.25	77.60
<b>10 Percent Increase</b>						
1	10,494	0.869	-0.216	0.000	0.000	-0.410
2	10,494	1.567	-0.390	-0.094	-0.056	-0.739
3	10,494	2.128	-0.530	-0.169	-0.101	-1.003
4	10,494	2.578	-0.642	-0.229	-0.137	-1.216
5	10,494	2.939	-0.732	-0.278	-0.166	-1.386
6	10,494	3.230	-0.804	-0.317	-0.190	-1.523
7	10,494	3.463	-0.862	-0.348	-0.208	-1.633
8	10,494	3.650	-0.909	-0.373	-0.223	-1.721
9	10,494	3.800	-0.946	-0.393	-0.235	-1.792
10	10,494	3.921	-0.977	-0.410	-0.245	-1.849
Average <sup>b</sup>	10,494	12.71	43.28	2.11	189.25	77.60

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 27. Milk production per cow: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	All-Milk Farm Price	Corn Price	Soybean Meal Price	Alfalfa Price		
1 Percent Increase		(pounds)	(percent)				
1	13,688	0.000	0.000	0.000	0.000		
2	13,688	0.108	0.000	0.000	-0.075		
3	13,688	0.108	-0.016	-0.010	-0.075		
4	13,688	0.108	-0.016	-0.010	-0.075		
5	13,688	0.108	-0.016	-0.010	-0.075		
6	13,688	0.108	-0.016	-0.010	-0.075		
7	13,688	0.108	-0.016	-0.010	-0.075		
8	13,688	0.108	-0.016	-0.010	-0.075		
9	13,688	0.108	-0.016	-0.010	-0.075		
10	13,688	0.108	-0.016	-0.010	-0.075		
Average <sup>b</sup>	13,703	12.71	2.11	189.25	77.60		
10 Percent Increase							
1	13,688	0.000	0.000	0.000	0.000		
2	13,688	1.082	0.000	0.000	-0.703		
3	13,688	1.082	-0.161	-0.096	-0.703		
4	13,688	1.082	-0.161	-0.096	-0.703		
5	13,688	1.082	-0.161	-0.096	-0.703		
6	13,688	1.082	-0.161	-0.096	-0.703		
7	13,688	1.082	-0.161	-0.096	-0.703		
8	13,688	1.082	-0.161	-0.096	-0.703		
9	13,688	1.082	-0.161	-0.096	-0.703		
10	13,688	1.082	-0.161	-0.096	-0.703		
Average <sup>b</sup>	13,703	12.71	2.11	189.25	77.60		

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

**Table 28. Milk production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables**

Year	Baseline LHS <sup>a</sup> Variable	All-Milk Farm Price	Utility Cow Price	Corn Price	Soybean Meal Price	Alfalfa Price
	(million pounds)	(percent)				
<b>1 Percent Increase</b>						
1	143,640	0.087	-0.024	0.000	0.000	-0.044
2	143,640	0.265	-0.043	-0.009	-0.006	-0.153
3	143,640	0.321	-0.058	-0.033	-0.020	-0.181
4	143,639	0.366	-0.070	-0.040	-0.024	-0.204
5	143,639	0.402	-0.080	-0.044	-0.026	-0.222
6	143,639	0.432	-0.088	-0.048	-0.029	-0.236
7	143,639	0.455	-0.094	-0.052	-0.031	-0.248
8	143,639	0.474	-0.099	-0.054	-0.032	-0.257
9	143,639	0.489	-0.103	-0.056	-0.033	-0.265
10	143,639	0.501	-0.106	-0.058	-0.034	-0.271
Average <sup>b</sup>	143,650	12.71	43.28	2.11	189.25	77.60
<b>10 Percent Increase</b>						
1	143,640	0.869	-0.216	0.000	0.000	-0.410
2	143,640	2.667	-0.390	-0.094	-0.056	-1.437
3	143,640	3.233	-0.530	-0.329	-0.197	-1.699
4	143,639	3.688	-0.642	-0.390	-0.233	-1.910
5	143,639	4.054	-0.732	-0.438	-0.262	-2.079
6	143,639	4.347	-0.804	-0.477	-0.286	-2.215
7	143,639	4.583	-0.862	-0.508	-0.304	-2.324
8	143,639	4.772	-0.909	-0.533	-0.319	-2.412
9	143,639	4.924	-0.946	-0.553	-0.331	-2.482
10	143,639	5.046	-0.977	-0.570	-0.341	-2.539
Average <sup>b</sup>	143,650	12.71	43.28	2.11	189.25	77.60

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 29. Fluid milk utilization: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Whole Milk CPI <sup>b</sup>	Per Capita Real Disposable Income	Non- alcoholic Beverage CPI	Nondurables with- out Food CPI	Proportion of U.S. Population under 20	Population
(million pounds)		(percent)					
<b>1 Percent Increase</b>							
1	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
2	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
3	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
4	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
5	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
6	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
7	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
8	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
9	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
10	55,373	-0.227	0.122	0.053	0.174	1.085	1.000
Average <sup>c</sup>	53,568	105.6	0.13	110.3	103.8	0.291	244.0
<b>10 Percent Increase</b>							
1	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
2	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
3	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
4	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
5	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
6	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
7	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
8	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
9	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
10	55,373	-2.149	1.170	0.509	1.679	10.889	10.000
Average <sup>c</sup>	53,568	105.6	0.13	110.3	103.8	0.291	244.0

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 30. Total milk utilization: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup>	Manufacturing-				Wholesale			Frozen		Per Capita		Non-durables		Proportion						
		Whole Milk CPI <sup>b</sup>	grade Milk Price	Wholesale Butter Price	Dry Milk WPI <sup>c</sup>	Nonfat Cheese Price	Dairy Production PPI <sup>d</sup>	Disposable Income	Real Beverage CPI	Non-alcoholic Beverage CPI	without Food Population	Milk Fed to Calves	Farm-Churned Butter	Other Milk Use	Population	Dairy Wage Rate	Cheese Removals	Dry Milk Removals	Nonfat Butter Removals		
(million pounds)										(percent)											
<b>1 Percent Increase</b>																					
1	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
2	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
3	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
4	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
5	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
6	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
7	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
8	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
9	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
10	143,704	-0.084	-0.367	0.087	0.030	0.216	0.007	0.186	0.045	0.020	0.065	0.403	0.011	0.005	0.016	0.371	-0.164	0.012	0.008	0.020	
<b>Average<sup>e</sup></b>		143,880	105.6	11.63	137.25	85.94	97.3	111.3	105.1	0.13	110.3	103.8	0.291	1,644.6	648.4	2,309.0	244.0	9.66	328.4	575.7	295.9
1	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
2	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
3	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
4	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
5	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
6	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
7	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
8	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
9	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
10	143,704	-0.798	-3.670	0.815	0.294	1.985	0.066	1.712	0.435	0.189	0.623	4.044	0.114	0.045	0.161	3.714	-1.640	0.120	0.077	0.205	
<b>Average<sup>e</sup></b>		143,880	105.6	11.63	137.25	85.94	97.3	111.3	105.1	0.13	110.3	103.8	0.291	1,644.6	648.4	2,309.0	244.0	9.66	328.4	575.7	295.9

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>CPI is consumer price index.<sup>c</sup>WPI is wholesale price index.<sup>d</sup>PPI is producer price index.<sup>e</sup>1985-89 average level.

Table 31. Butter production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Manufacturing-		Wholesale		Cheese		Producer Price Index	Dairy Wage Rate	Cheese Removals	Nonfat Dry Milk Removals	Butter Removals							
		grade Milk Price	Wholesale Butter Price	Nonfat Dry Milk Price	Wholesale Price Index														
(million pounds)										(percent)									
<b>1 Percent Increase</b>																			
1	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
2	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
3	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
4	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
5	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
6	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
7	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
8	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
9	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
10	1,207	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108									
Average <sup>b</sup>	1,207	11.63	137.25	85.94	97.3	105.1	9.66	328.4	575.7	295.9									
<b>10 Percent Increase</b>																			
1	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
2	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
3	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
4	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
5	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
6	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
7	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
8	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
9	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
10	1,207	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082									
Average <sup>b</sup>	1,207	11.63	137.25	85.94	97.3	105.1	9.66	328.4	575.7	295.9									

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 32. Butter domestic use: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable (million pounds)	Butter CPI <sup>b</sup>	Per Capita	Nondurables		
			Real Disposable Income	without Food CPI	Population	Butter Donations
<b>1 Percent Increase</b>						
1	1,121	-0.241	-0.045	0.241	0.814	0.186
2	1,121	-0.241	-0.045	0.241	0.814	0.186
3	1,121	-0.241	-0.045	0.241	0.814	0.186
4	1,121	-0.241	-0.045	0.241	0.814	0.186
5	1,121	-0.241	-0.045	0.241	0.814	0.186
6	1,121	-0.241	-0.045	0.241	0.814	0.186
7	1,121	-0.241	-0.045	0.241	0.814	0.186
8	1,121	-0.241	-0.045	0.241	0.814	0.186
9	1,121	-0.241	-0.045	0.241	0.814	0.186
10	1,121	-0.241	-0.045	0.241	0.814	0.186
Average <sup>c</sup>	1,121	103.1	0.13	103.8	244.0	215.7
<b>10 Percent Increase</b>						
1	1,121	-2.275	-0.430	2.341	8.142	1.864
2	1,121	-2.275	-0.430	2.341	8.142	1.864
3	1,121	-2.275	-0.430	2.341	8.142	1.864
4	1,121	-2.275	-0.430	2.341	8.142	1.864
5	1,121	-2.275	-0.430	2.341	8.142	1.864
6	1,121	-2.275	-0.430	2.341	8.142	1.864
7	1,121	-2.275	-0.430	2.341	8.142	1.864
8	1,121	-2.275	-0.430	2.341	8.142	1.864
9	1,121	-2.275	-0.430	2.341	8.142	1.864
10	1,121	-2.275	-0.430	2.341	8.142	1.864
Average <sup>c</sup>	1,121	103.1	0.13	103.8	244.0	215.7

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 33. Butter ending stocks: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable (million pounds)	Butter Removals	Butter Donations	CCC <sup>b</sup> Butter Exports	Butter Commercial Stocks
			(percent)		
<b>1 Percent Increase</b>					
1	219	1.354	-0.987	-0.430	0.194
2	219	2.706	-1.973	-0.859	0.194
3	219	4.058	-2.958	-1.289	0.194
4	219	5.408	-3.942	-1.717	0.194
5	219	6.756	-4.926	-2.146	0.194
6	219	8.104	-5.908	-2.574	0.194
7	219	9.450	-6.890	-3.001	0.194
8	219	10.795	-7.870	-3.428	0.194
9	219	12.139	-8.850	-3.855	0.194
10	219	13.482	-9.829	-4.282	0.194
Average <sup>c</sup>	219	295.9	215.7	94.0	42.5
<b>10 Percent Increase</b>					
1	219	13.537	-9.869	-4.299	1.944
2	219	27.062	-19.730	-8.595	1.943
3	219	40.575	-29.581	12.886	1.942
4	219	54.075	-39.424	-17.174	1.941
5	219	67.563	-49.257	-21.457	1.940
6	219	81.039	-59.081	-25.737	1.940
7	219	94.503	-68.897	-30.013	1.939
8	219	107.954	-78.703	-34.285	1.938
9	219	121.393	-88.501	-38.553	1.937
10	219	134.819	-98.290	-42.817	1.936
Average <sup>c</sup>	219	295.9	215.7	94.0	42.5

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CCC is Commodity Credit Corporation.

<sup>c</sup>1985-89 average level.

Table 34. Cheese production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Manufacturing-		Cheese Wholesale Price Index	Producer Price Index	Dairy Wage Rate	Cheese Removals
		grade Milk Price	(million pounds)				
<b>1 Percent Increase</b>							
1	5,341	-0.733	0.726	0.354	-0.357	0.040	
2	5,341	-0.733	0.726	0.354	-0.357	0.040	
3	5,341	-0.733	0.726	0.354	-0.357	0.040	
4	5,341	-0.733	0.726	0.354	-0.357	0.040	
5	5,341	-0.733	0.726	0.354	-0.357	0.040	
6	5,341	-0.733	0.726	0.354	-0.357	0.040	
7	5,341	-0.733	0.726	0.354	-0.357	0.040	
8	5,341	-0.733	0.726	0.354	-0.357	0.040	
9	5,341	-0.733	0.726	0.354	-0.357	0.040	
10	5,341	-0.733	0.726	0.354	-0.357	0.040	
Average <sup>b</sup>	5,343	11.63	97.3	105.1	9.66	328.4	
<b>10 Percent Increase</b>							
1	5,341	-7.331	6.665	3.250	-3.575	0.402	
2	5,341	-7.331	6.665	3.250	-3.575	0.402	
3	5,341	-7.331	6.665	3.250	-3.575	0.402	
4	5,341	-7.331	6.665	3.250	-3.575	0.402	
5	5,341	-7.331	6.665	3.250	-3.575	0.402	
6	5,341	-7.331	6.665	3.250	-3.575	0.402	
7	5,341	-7.331	6.665	3.250	-3.575	0.402	
8	5,341	-7.331	6.665	3.250	-3.575	0.402	
9	5,341	-7.331	6.665	3.250	-3.575	0.402	
10	5,341	-7.331	6.665	3.250	-3.575	0.402	
Average <sup>b</sup>	5,343	11.63	97.3	105.1	9.66	328.4	

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 35. Cheese domestic use: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable (million pounds)	Cheese CPI <sup>b</sup>	Per Capita	Nondurables	Cheese Donations	
			Real Disposable Income	without Food CPI		
<b>1 Percent Increase</b>						
1	5,619	-0.307	0.292	0.308	0.939	0.061
2	5,619	-0.307	0.292	0.308	0.939	0.061
3	5,619	-0.307	0.292	0.308	0.939	0.061
4	5,619	-0.307	0.292	0.308	0.939	0.061
5	5,619	-0.307	0.292	0.308	0.939	0.061
6	5,619	-0.307	0.292	0.308	0.939	0.061
7	5,619	-0.307	0.292	0.308	0.939	0.061
8	5,619	-0.307	0.292	0.308	0.939	0.061
9	5,619	-0.307	0.292	0.308	0.939	0.061
10	5,619	-0.307	0.292	0.308	0.939	0.061
Average <sup>c</sup>	5,678	107.9	0.13	103.8	244.0	393.0
<b>10 Percent Increase</b>						
1	5,619	-2.897	2.834	2.990	9.391	0.618
2	5,619	-2.897	2.834	2.990	9.391	0.618
3	5,619	-2.897	2.834	2.990	9.391	0.618
4	5,619	-2.897	2.834	2.990	9.391	0.618
5	5,619	-2.897	2.834	2.990	9.391	0.618
6	5,619	-2.897	2.834	2.990	9.391	0.618
7	5,619	-2.897	2.834	2.990	9.391	0.618
8	5,619	-2.897	2.834	2.990	9.391	0.618
9	5,619	-2.897	2.834	2.990	9.391	0.618
10	5,619	-2.897	2.834	2.990	9.391	0.618
Average <sup>c</sup>	5,678	107.9	0.13	103.8	244.0	393.0

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 36. Cheese ending stocks: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Cheese Removals (million pounds)	Cheese Donations	CCC <sup>b</sup> Cheese Exports	Cheese Commercial Stocks
<b>1 Percent Increase</b>					
1	588	0.558	-0.668	-0.100	0.631
2	588	1.117	-1.336	-0.200	0.631
3	588	1.675	-2.004	-0.300	0.631
4	588	2.233	-2.672	-0.400	0.631
5	588	2.791	-3.340	-0.500	0.631
6	588	3.350	-4.008	-0.600	0.631
7	588	3.908	-4.677	-0.699	0.631
8	588	4.466	-5.345	-0.799	0.631
9	588	5.025	-6.013	-0.899	0.631
10	588	5.583	-6.681	-0.999	0.631
Average <sup>c</sup>	588	328.4	393.0	58.8	371.3
<b>10 Percent Increase</b>					
1	588	5.583	-6.681	-0.999	6.311
2	588	11.166	-13.361	-1.998	6.311
3	588	16.749	-20.042	-2.998	6.311
4	588	22.332	-26.723	-3.997	6.311
5	588	27.915	-33.404	-4.996	6.311
6	588	33.497	-40.084	-5.995	6.311
7	588	39.080	-46.765	-6.995	6.311
8	588	44.663	-53.446	-7.994	6.311
9	588	50.246	-60.126	-8.993	6.311
10	588	55.829	-66.807	-9.992	6.311
Average <sup>c</sup>	588	328.4	393.0	58.8	371.3

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CCC is Commodity Credit Corporation.

<sup>c</sup>1985-89 average level.

Table 37. Nonfat dry milk production: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Manufacturing- grade Milk Price	Wholesale Butter Price	Wholesale Nonfat Dry Milk Price	Cheese Wholesale Price Index	Producer Price Index	Dairy Wage Rate	Cheese Removals	Nonfat Dry Milk Removals	Butter Removals
(million pounds)										(percent)
1 Percent Increase										
1	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
2	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
3	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
4	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
5	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
6	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
7	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
8	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
9	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
10	1,084	-0.727	0.459	0.159	0.104	0.351	-0.355	0.006	0.041	0.108
Average <sup>b</sup>	1,117	11.63	137.25	85.94	97.3	105.1	9.66	328.4	575.7	295.9
10 Percent Increase										
1	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
2	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
3	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
4	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
5	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
6	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
7	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
8	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
9	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
10	1,084	-7.266	4.304	1.556	0.951	3.226	-3.548	0.057	0.408	1.082
Average <sup>b</sup>	1,117	11.63	137.25	85.94	97.3	105.1	9.66	328.4	575.7	295.9

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.<sup>b</sup>1985-89 average level.

Table 38. Nonfat dry milk domestic use: Impacts of a permanent 1 percent increase and permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Whole Milk CPI <sup>b</sup>	Wholesale Nonfat Dry Milk Price	Per Capita Real Disposable Income	Nondurables without Food CPI	Nonfat Dry Milk Donations	
(million pounds)		(percent)					
<b>1 Percent Increase</b>							
1	573	2.296	-0.652	0.369	-1.593	0.204	
2	573	2.296	-0.652	0.369	-1.593	0.204	
3	573	2.296	-0.652	0.369	-1.593	0.204	
4	573	2.296	-0.652	0.369	-1.593	0.204	
5	573	2.296	-0.652	0.369	-1.593	0.204	
6	573	2.296	-0.652	0.369	-1.593	0.204	
7	573	2.296	-0.652	0.369	-1.593	0.204	
8	573	2.296	-0.652	0.369	-1.593	0.204	
9	573	2.296	-0.652	0.369	-1.593	0.204	
10	573	2.296	-0.652	0.369	-1.593	0.204	
Average <sup>c</sup>	575	105.6	85.94	0.13	103.8	244.0	
<b>10 Percent Increase</b>							
1	573	24.916	-6.027	3.602	-14.011	2.039	
2	573	24.916	-6.027	3.602	-14.011	2.039	
3	573	24.916	-6.027	3.602	-14.011	2.039	
4	573	24.916	-6.027	3.602	-14.011	2.039	
5	573	24.916	-6.027	3.602	-14.011	2.039	
6	573	24.916	-6.027	3.602	-14.011	2.039	
7	573	24.916	-6.027	3.602	-14.011	2.039	
8	573	24.916	-6.027	3.602	-14.011	2.039	
9	573	24.916	-6.027	3.602	-14.011	2.039	
10	573	24.916	-6.027	3.602	-14.011	2.039	
Average <sup>c</sup>	575	105.6	85.94	0.13	103.8	244.0	

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 39. Nonfat dry milk ending stocks: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable (million pounds)	Nonfat Dry Milk Removals	Nonfat Dry Milk Donations	CCC <sup>b</sup> Nonfat Dry Milk Exports	Nonfat Dry Milk Commercial Stocks
(percent)					
<b>1 Percent Increase</b>					
1	430	1.338	-0.272	-1.610	0.157
2	430	2.676	-0.543	-3.221	0.157
3	430	4.015	-0.815	-4.833	0.157
4	430	5.354	-1.087	-6.445	0.157
5	430	6.694	-1.359	-8.058	0.157
6	430	8.035	-1.631	-9.672	0.157
7	430	9.376	-1.903	-11.286	0.157
8	430	10.718	-2.175	-12.901	0.157
9	430	12.060	-2.448	-14.516	0.157
10	430	13.403	-2.720	-16.133	0.157
Average <sup>c</sup>	430	575.7	116.9	693.0	67.6
<b>10 Percent Increase</b>					
1	430	13.378	-2.715	-16.10	1.570
2	430	26.761	-5.432	-32.21	1.571
3	430	40.150	-8.149	-48.33	1.571
4	430	53.545	-10.868	-64.45	1.571
5	430	66.945	-13.588	-80.58	1.572
6	430	80.351	-16.309	-96.72	1.572
7	430	93.762	-19.031	-112.86	1.572
8	430	107.179	-21.755	-129.01	1.573
9	430	120.602	-24.479	-145.16	1.573
10	430	134.030	-27.205	-161.33	1.573
Average <sup>c</sup>	430	575.7	116.9	693.0	67.6

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CCC is Commodity Credit Corporation.

<sup>c</sup>1985-98 average level.

Table 40. All-milk farm price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Variable	Manufacturing			Butter Consumer Price Index	Cheese Consumer Price Index	Nonfat Dry Milk Wholesale Price	
		Baseline LHS <sup>a</sup>	-grade Milk Price	Marketing Cost Index				
(dollars per hundredweight)					(percent)			
<b>1 Percent Increase</b>								
1	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
2	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
3	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
4	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
5	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
6	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
7	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
8	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
9	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
10	12.71	0.928	0.008	0.036	-0.005	-0.018	-0.001	
<b>Average<sup>b</sup></b>	<b>12.71</b>	<b>11.63</b>	<b>366.1</b>	<b>1.20</b>	<b>103.1</b>	<b>107.9</b>	<b>85.94</b>	
<b>10 Percent Increase</b>								
1	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
2	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
3	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
4	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
5	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
6	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
7	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
8	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
9	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
10	12.71	9.283	0.098	0.365	-0.042	-0.146	-0.011	
<b>Average<sup>b</sup></b>	<b>12.71</b>	<b>11.63</b>	<b>366.1</b>	<b>1.20</b>	<b>103.1</b>	<b>107.9</b>	<b>85.94</b>	

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 41. Fluid milk farm price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Manufacturing- grade		Fluid Difference
		Milk Price	(percent)	
<b>1 Percent Increase</b>				
1	12.83	0.907	0.093	
2	12.83	0.907	0.093	
3	12.83	0.907	0.093	
4	12.83	0.907	0.093	
5	12.83	0.907	0.093	
6	12.83	0.907	0.093	
7	12.83	0.907	0.093	
8	12.83	0.907	0.093	
9	12.83	0.907	0.093	
10	12.83	0.907	0.093	
<b>Average<sup>b</sup></b>	<b>12.83</b>	<b>11.63</b>		<b>1.20</b>
<b>10 Percent Increase</b>				
1	12.83	9.068	0.932	
2	12.83	9.068	0.932	
3	12.83	9.068	0.932	
4	12.83	9.068	0.932	
5	12.83	9.068	0.932	
6	12.83	9.068	0.932	
7	12.83	9.068	0.932	
8	12.83	9.068	0.932	
9	12.83	9.068	0.932	
10	12.83	9.068	0.932	
<b>Average<sup>b</sup></b>	<b>12.83</b>	<b>11.63</b>		<b>1.20</b>

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

Table 42. Fluid milk consumer price index: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Manufacturing-			Fluid Difference		
		grade Milk Price	Marketing Cost Index	(percent)			
(1982 to 1984 = 100)							
<b>1 Percent Increase</b>							
1	105.6	0.359	0.416	0.037			
2	105.6	0.359	0.416	0.037			
3	105.6	0.359	0.416	0.037			
4	105.6	0.359	0.416	0.037			
5	105.6	0.359	0.416	0.037			
6	105.6	0.359	0.416	0.037			
7	105.6	0.359	0.416	0.037			
8	105.6	0.359	0.416	0.037			
9	105.6	0.359	0.416	0.037			
10	105.6	0.359	0.416	0.037			
Average <sup>b</sup>	105.6	11.63	366.1	1.20			
<b>10 Percent Increase</b>							
1	105.6	3.594	4.165	0.370			
2	105.6	3.594	4.165	0.370			
3	105.6	3.594	4.165	0.370			
4	105.6	3.594	4.165	0.370			
5	105.6	3.594	4.165	0.370			
6	105.6	3.594	4.165	0.370			
7	105.6	3.594	4.165	0.370			
8	105.6	3.594	4.165	0.370			
9	105.6	3.594	4.165	0.370			
10	105.6	3.594	4.165	0.370			
Average <sup>b</sup>	105.6	11.63	366.1	1.20			

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>1985-89 average level.

**Table 43. Butter wholesale price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables**

Year	Baseline LHS <sup>a</sup> Variable	Marketing Cost Index	Butter CPI <sup>b</sup>
	(cents per pound)	(percent)	
<b>1 Percent Increase</b>			
1	137.25	-0.396	1.402
2	137.25	-0.396	1.402
3	137.25	-0.396	1.402
4	137.25	-0.396	1.402
5	137.25	-0.396	1.402
6	137.25	-0.396	1.402
7	137.25	-0.396	1.402
8	137.25	-0.396	1.402
9	137.25	-0.396	1.402
10	137.25	-0.396	1.402
<b>Average<sup>c</sup></b>	<b>137.25</b>	<b>366.1</b>	<b>103.1</b>
<b>10 Percent Increase</b>			
1	137.25	-3.958	14.016
2	137.25	-3.958	14.016
3	137.25	-3.958	14.016
4	137.25	-3.958	14.016
5	137.25	-3.958	14.016
6	137.25	-3.958	14.016
7	137.25	-3.958	14.016
8	137.25	-3.958	14.016
9	137.25	-3.958	14.016
10	137.25	-3.958	14.016
<b>Average<sup>c</sup></b>	<b>137.25</b>	<b>366.1</b>	<b>103.1</b>

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

Table 44. Cheese wholesale price: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables

Year	Baseline LHS <sup>a</sup> Variable	Marketing Cost Index	Cheese CPI <sup>b</sup>
	(cents per pound)	(percent)	
<b>1 Percent Increase</b>			
1	128.16	-1.109	2.271
2	128.16	-1.109	2.271
3	128.16	-1.109	2.271
4	128.16	-1.109	2.271
5	128.16	-1.109	2.271
6	128.16	-1.109	2.271
7	128.16	-1.109	2.271
8	128.16	-1.109	2.271
9	128.16	-1.109	2.271
10	128.16	-1.109	2.271
Average <sup>c</sup>	128.16	366.1	107.9
<b>10 Percent Increase</b>			
1	128.16	-11.092	22.710
2	128.16	-11.092	22.710
3	128.16	-11.092	22.710
4	128.16	-11.092	22.710
5	128.16	-11.092	22.710
6	128.16	-11.092	22.710
7	128.16	-11.092	22.710
8	128.16	-11.092	22.710
9	128.16	-11.092	22.710
10	128.16	-11.092	22.710
Average <sup>c</sup>	128.16	366.1	107.9

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

**Table 45. Cheese wholesale price index: Impacts of a permanent 1 percent increase and a permanent 10 percent increase in RHS<sup>a</sup> variables**

Year	Baseline LHS <sup>a</sup> Variable	Marketing Cost Index	Cheese CPI <sup>b</sup>
	(1982 to 1984) = 100	(percent)	
<b>1 Percent Increase</b>			
1	97.3	-1.080	2.210
2	97.3	-1.080	2.210
3	97.3	-1.080	2.210
4	97.3	-1.080	2.210
5	97.3	-1.080	2.210
6	97.3	-1.080	2.210
7	97.3	-1.080	2.210
8	97.3	-1.080	2.210
9	97.3	-1.080	2.210
10	97.3	-1.080	2.210
Average <sup>c</sup>	97.3	366.1	107.9
<b>10 Percent Increase</b>			
1	97.3	-10.795	22.103
2	97.3	-10.795	22.103
3	97.3	-10.795	22.103
4	97.3	-10.795	22.103
5	97.3	-10.795	22.103
6	97.3	-10.795	22.103
7	97.3	-10.795	22.103
8	97.3	-10.795	22.103
9	97.3	-10.795	22.103
10	97.3	-10.795	22.103
Average <sup>c</sup>	97.3	366.1	107.9

<sup>a</sup>RHS indicates right-hand-side and LHS indicates left-hand-side.

<sup>b</sup>CPI is consumer price index.

<sup>c</sup>1985-89 average level.

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