SUBPROJECT COMPLETION REPORT

OWRT TITLE II PROJECT C-6276

A DYNAMIC REGIONAL IMPACT ANALYSIS OF FEDERAL EXPENDITURES OF A WATER AND RELATED LAND RESOURCE PROJECT — THE BOISE PROJECT OF IDAHO

BOISE POST-AUDIT STUDY

PART II

SECONDARY ECONOMIC IMPACTS OF THE BOISE PROJECT OF IDAHO, 1947-1970

By

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RESEARCH TECHNICAL COMPLETION REPORT

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STUDY PERSPECTIVE

Introduction

The Boise Irrigation Project of southern Idaho has been in operation since 1910 and waters from this project have stimulated economic development in the area since that time. The primary purpose of the project was to supply irrigation water in the Boise and Payette River valleys. Because irrigation water had become more available both in terms of total quantity and a more adequate supply late in the growing season, a thriving irrigated agricultural production area has developed (some 340,000 acres in 1970). Because of irrigation, input supplying industries have grown to meet farm needs, and agricultural processing industries have developed to process products into a form desired by consumers.

The research problem dealt with in this paper is to measure the secondary or induced economic impacts that have resulted from the development of the Boise Project over time. Since the state of Idaho, the industrial sectors of the state, and the Boise Project have all been growing at the same time, it is rather difficult both conceptually and in terms of data needs to measure these changes.

Briefly, the objectives of this study, specifically developed to help solve the above problem, were as follows:

1) Develop an aggregate regional economic model that would simulate the economies of the state and region;
2) Analyze the growth of the state, region, and the irrigation project through their economic inter-relationships in order to facilitate evaluation of the impact on income and output;
3) Evaluate the economic impact of the Boise Project on the Boise region and the state over time.

The general paucity of economic data, both in terms of specific model parameters and in terms of data that has never eeen collected hampers the analysis.

The general procedures followed to achieve these objectives included the following:

1) Assemble the best economic data available to construct representative input-output tables that depict the state and region over time.

2) Determine growth of the following parameters:
   a) output of economic sectors in Idaho
   b) income contributions of economic sectors
   c) demand for Idaho production in terms of personal consumption and exports (final demand).
3) Analysis of the secondary impacts (on input requirements and processing activities) of irrigated production from the Boise Project.
4) Evaluation of Boise Project impacts on the state of Idaho and the Boise Project region.

Complete statewide data for the history of the project (since 1910) were not available. However, information was generally available (or was developed in earlier stages of this study on direct project output) regarding the structure of the state's economy, sector output, and sector income contribution since 1947.

Direct Economic Impacts

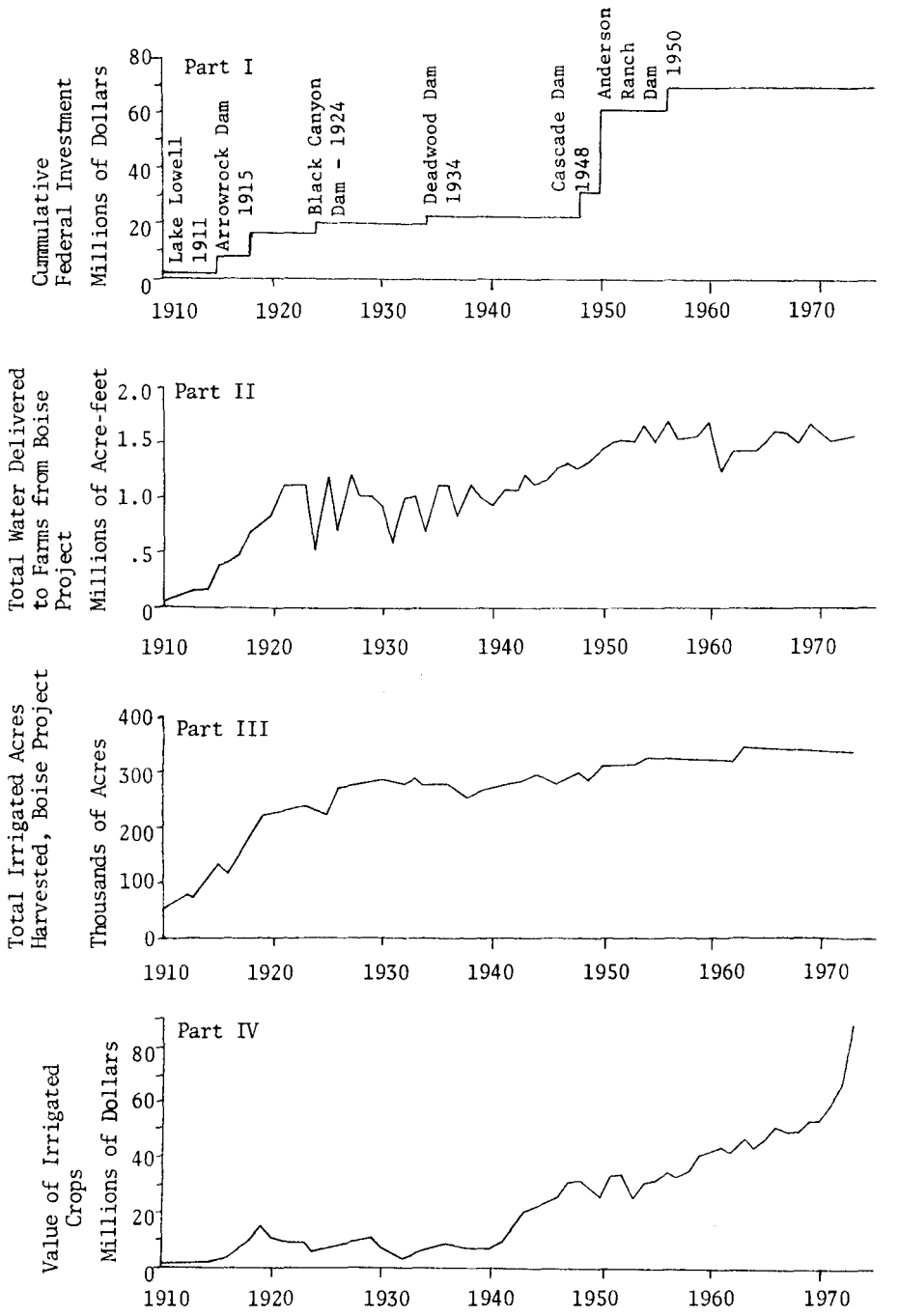
Since the Boise Project began servicing the water needs of the Boise Valley in 1910, the crops and productivity of the area have been changing. For example, federal investments in the project grew to nearly $60 million from 1910 to 1956, the water supply available during the growing season increased in quantity and decreased in variation as more structures were added to the system, and the irrigated acreage expanded from 50,000 acres in 1910 to 270,000 acres by 1926, and to 340,000 acres by 1970 (see Fig. 1).

Returns from irrigated crops grown with project water varied greatly from 1910 to 1940; they were especially low during the depression years of the 1930's. During World War II, however, gross returns began to increase and rose quite steadily from about $3 million per year in 1940 to over $50 million in 1970 (Figure 1, part IV). Reasons for this increase were many, and include the following:

Supply factors:

1) More irrigated land
2) Increased and more stable water supply
3) Greater crop diversity
4) Advancing technology
5) Improved managerial skills of farmers

Figure 1. Summary of direct impacts of the Boise Project, Idaho, 1947-1970.



Demand factors:

1) Shifting product demand
2) Increased processing facilities in the area
3) Growing population in Idaho and the United States
4) Higher consumer income.

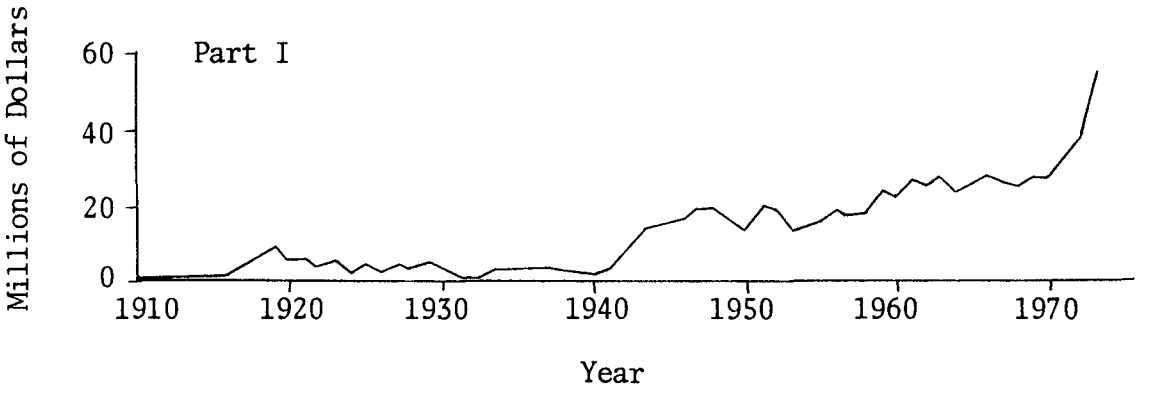
While the above factors, plus others, probably contributed to increased output in the Boise Project area, economic growth probably would not have occurred had not the stage been set by development that took place the previous 30 years (from 1910 to 1940).

Figure 2, part 1 summarizes income growth from the Boise Project during 1910 to 1973. Prior to 1940 economic success (income) was both low and unstable. After 1940, project income grew along with the value of irrigated crops. Figure 2, part II shows that Idaho income also was growing from 1947 to 1973. This research will study the relationships between Idaho economic sectors to estimate what impact the production of Boise Project crops had on income earned in the state and the Boise Region. Appendix A summarizes sector employment, personal income, and output estimates for Idaho for the years these data are available.

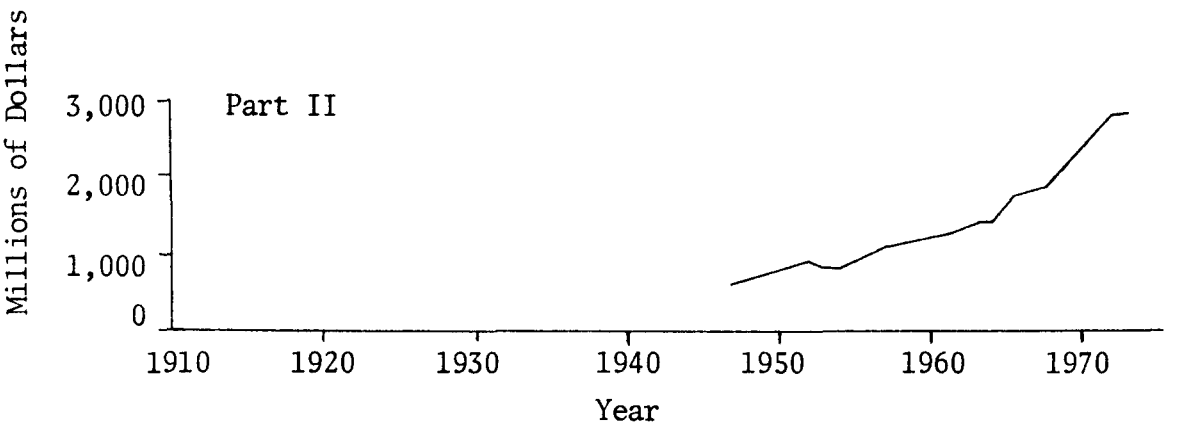
Secondary Economic Impacts

Two types of economic activities create additional income or secondary impacts associated with the Boise Project. In order to grow irrigated crops, inputs must be purchased (such as fuel, fertilizer, or machinery) from other sectors of the Idaho economy (the trade or service sectors). These activities, stimulated by the growing project create jobs and income. By the same token, after irrigated crops are grown they may be marketed directly to the consumer or processed before consumption takes place. These activities may also create employment and income for Idaho residents. The above activities may or may not occur in Idaho, so their impacts may be either regional or national in scope. The Boise area, however, is known as a trade center for southwestern Idaho, and has developed considerable capacity to process animal and crop production which originates from Boise Project lands. For these reasons, it seems logical to conclude that there exists positive economic secondary benefits (income) that has been stimulated by Boise Project irrigated agricultural production. As has been previously pointed out, these income benefits that have been stimulated to occur in Idaho because of the Boise Pro-

Figure 2. Income growth associated with the Boise Project and the State of Idaho, 1910 - 1970.



Value Added Income Associated with the Boise Project



Idaho Personal Income

ject are only associated with the project, separate factors of production are responsible for creating the income resulting from trade and processing. The relative amount of income and output stimulated by Boise Project production are of interest to policymakers who must recommend if, when, and where future public funds are to be spent. Unfortunately, secondary income and impacts from the project are easier to describe in words than they are to measure. This research will attempt to quantify the secondary income and economic impacts of the Boise Project over time.

METHODOLOGY

Economic Models

In order to study the impact of the Boise Project on the Idaho economy, information must be available relative to the nature of the output of the Boise Project, the structure of the Idaho economy, and the changes that have taken place over time. Unfortunately, data are not readily available relative to all the appropriate parameters over time. In short, data are available relative to the physical production of the Boise Project from 1910 to present. Economic output data for Idaho are scattered and only available from 1947 to present. Structural inter-relationships concerning Idaho's economy, however have never been collected in a complete or consistent manner. Consequently, it was necessary to use available Census data and statistics to depict Idaho's economy.

After reviewing past studies and data availability it was decided to utilize the input-output framework constructed by Karen Polenske at the Massachusetts Institute of Technology (6). From Polenske's work simulated input-output models could be constructed for Idaho for the years 1947, 1958, and 1963. While these models were not empirically derived for Idaho they have the advantage of being in balance with data from the remainder of the United States and gave the only estimate of what the Idaho economy might have been like in 1947 and 1958. Polenske's work was modified by that of Peterson in 1968, who derived a provisional input-output model for Idaho for 1963 (5). Peterson's work had the best information relative to industrial inputs imported by Idaho in 1963, while Polenske's work was more representative of the relationships in the trade, service, and financial sectors and offered some insight into the past.

Polenske's and Peterson's models were used to help measure the secondary impacts of the Boise Project from 1947 to 1970, especially as they affected the food processing sector (see Appendix B). To illustrate the impacts of the Boise Project on the immediate regional economy surrounding the project (primarily Ada and Canyon counties) a regional input-output model was developed which separated the state into two parts; those known as the Boise Region and the Rest of Idaho. While complete data are lacking to conclusively construct these models over time, sufficient information is available to simulate economic activity that is consistent with what occurred elsewhere in the United States. The status of information used is dis-

cussed briefly in the following section.

Data Availability and Quality

Boise Project

Excellent information was available concerning Boise Project irrigated crop production, value of output, and income from those crops from 1910 to 1973. Secondary projects impacts were studied only after 1946 since supplementary information on economic activity in Idaho was lacking or so scattered as to make it impractical for evaluation prior to that time.

Sector Output

The Idaho economy was initially divided into thirteen sectors with emphasis on crop agriculture and food processing in order to follow the impacts of processing Boise Project output. Production of each sector was estimated using information developed by Polenske, the Census of Manufactures, and the Survey of Current Business. Using these sources, sector output was estimated when necessary for the years 1947 to 1970. These estimates are presented in Appendix C.

Idaho Economy

As indicated above, input-output models developed from Polenske's work were used to simulate the structure of Idaho's economy from 1947 to 1970. Polenske's work allowed for output changes in eighty Idaho sectors for 1947, 1958, and 1963, and was consistent with total production in the United States for those years. In other words, new sectors were allowed to come into the model and output was allowed to change. This approach, however, does not allow for measuring increased productivity from technological advancements. Even though Idaho sectors were allowed to increase or decrease their output and enter or leave the economy little change was noted in the technological coefficients from 1947 to 1963 after the three original eighty sector models were each reduced to thirteen sectors. Evidently, established Idaho sectors tended to expand over this period, and consequently newly developing sectors failed to change the pattern of input usage appreciably.

Sector Income

Sector income and value added data were generally available from the same government sources as were output data. The relationship between those two variables was assumed to be constant for the aggregated sectors. When data was available for either income or total output, but not the other variable, estimates were made using a constant relationship. While this assumption is an oversimplification of the real world, it was necessary due to the lack of collected information. In the case of certain sectors it became necessary to use value of sales or value of shipments data to approximate total output. Sometimes it was necessary to evaluate information from various sources and select what was felt to be the most representative.

Investment

Data relative to sector investments are necessary to make a truly dynamic analysis of an economy and its sector interactions. Data relative to the sources of capital are nearly completely lacking for Idaho. For this reason it was necessary to attempt to measure Boise Project impacts on a year by year basis using the available input-output models, outputs by sector, Boise Project output data, and information available concerning the processing of Idaho agricultural inputs by various sectors. Increased investments in Idaho's economy undoubtedly accounted for its growing output, but cannot even be estimated with present knowledge.

Boise Project Region

Data are also lacking in regard to the economic interrelationships that occur within Idaho. In order to evaluate Boise Project impacts on the Boise region within Idaho (essentially Ada and Canyon counties) sector outputs for Idaho were separated on the basis of employment within the sector for each respective region. Here again, actual input-output relationships would improve the measurement of Boise Project economic impacts. Results could also be improved if and when better data becomes available.

In summary, while data to evaluate the impact of the Boise Project on Idaho have many missing and partially completed elements, it is felt the

available information allows for reasonable estimates of actual impacts, while allowing for the development of methodology, and pointing out exactly what is necessary to do a more accurate job. Clearly, the Boise Project helped create output and income for irrigation farmers and was partially responsible for the establishment of the food processing industry in the Boise area. The purpose of this part of the study is to measure economically how much impact the irrigation project has had on the Boise region in encouraging further production, employment, and income.

IDAHO ECONOMIC GROWTH

The period following World War II has been an era of steady growth for the state of Idaho. For example, between 1947 and 1972 government statistics indicate total employment increased from 131,200 to 241,500. Between 1957 and 1973 total personal income in Idaho increased from $1,042 million to $2,828 million. In agriculture, for the period between 1947 and 1973 livestock sales increased from $204 million to $640 million, crop sales increased from $312 million to $918 million, while the sales of the food and kindred products industry went from $175 million to $960 million. Since agricultural prices were fairly constant during this period these agricultural prices were fairly constant during this period these figures are good indicators of growth in output. Figure 3 shows the above sector output from 1947 to 1973 in comparison to Boise Project crop output.

Total Personal Income

Income growth by sector is also available from government sources for the period 1957 to 1973 (see Appendix A-2). They show that farm income increased from $169 million in 1957 to $560 million in 1973. At the same time manufacturing income increased from $128 million to $441 million. In Idaho about one-third of manufacturing employment is associated with the food and kindred products industry. Over hhe 1957 to 1973 period, income in most Idaho sectors increased from three to four times.

Table 1 summarized total farm personal income in Idaho and the direct income generated from the Boise Project. In 1957 the Boise Project was estimated to produce 1.6 percent of the state's income, while in 1973 it was estimated to produce 1.9 percent of the income. Compared to state farm personal income the Boise Project generated from 8.5 to 17.6 percent of the total.

Population and Employment

The majority of the Boise Project is located in Ada and Canyon counties of southwestern Idaho, consequently farm income and population data from these two counties are quite representative of the project. Table 2 presents farm income, number of rural residents, average number of residents per household, and per capita income for Census years since the beginning of the project in 1910. The number of rural residents in Ada and Canyon

Figure 3. Sector outputs for Idaho agriculture and food processing sectors, 1947 - 1973.

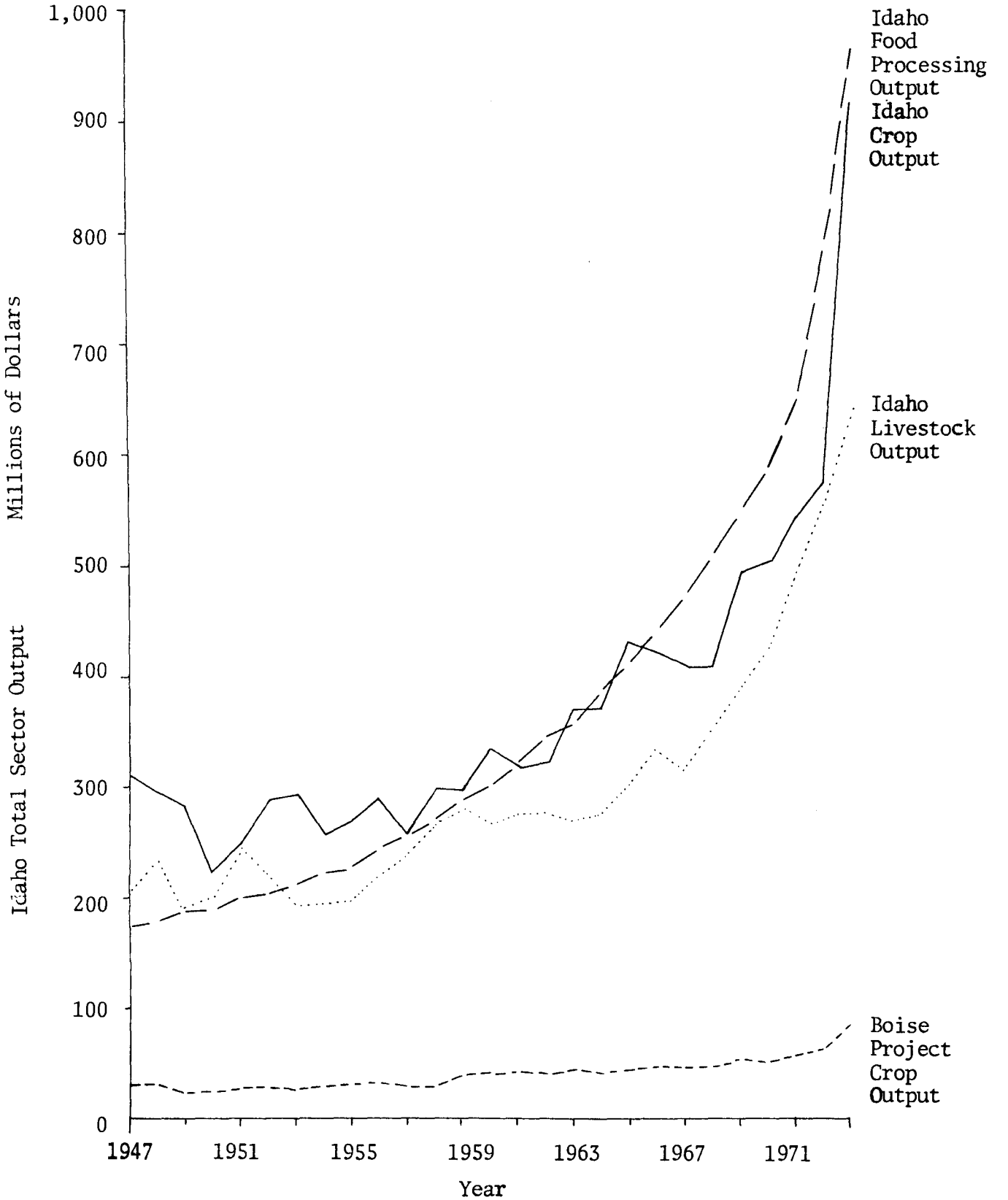


TABLE 1: TOTAL PERSONAL FARM INCOME COMPARED TO TOTAL VALUE-ADDED INCOME FROM THE BOISE PROJECT, IDAHO, 1957 - 1973

Year	Total Idaho Personal Income	Farm Personal Income	Value-added Income from Boise Proj.	Farm as % of total income	Boise Proj. as % of farm income
		(millions of dollars)		(percent)	
1957	1,042	169	17	16.2	10.1
1958	1,091	179	18	16.4	10.1
1959	1,184	174	24	14.7	8.5
1960	1,204	163	23	13.5	14.1
1961	1,238	148	26	12.0	17.6
1962	1,354	181	25	13.4	13.8
1963	1,367	172	27	12.6	15.7
1964	1,397	151	23	10.8	15.2
1965	1,661	254	25	15.3	9.8
1966	1,721	208	27	12.1	13.0
1967	1,825	222	26	12.2	11.7
1968	1,898	194	26	10.2	13.4
1969	2,149	277	29	12.9	10.5
1970	2,364	278	27	11.8	9.7
1971	2,592	289	33	11.2	11.4
1972	2,844	340	38	12.0	11.2
1973	2,828	560	55	19.8	9.8
Compound rate of growth 1957-1973	6.5%	7.7%	7.6%		

TABLE 2: FARM INCOME AND POPULATION DATA FOR ADA AND CANYON COUNTIES, IDAHO, 1910 - 1970 *

Year		Total Farm Income	# Rural Residents	Av.Residents/ Household	Per Capita Income
1910	Ada	1,302,622	11,730	7.80	111.05
	Canyon	1,979,084	17,575	6.05	112.60
	Idaho	34,357,851	255,696	8.29	134.36
1920	Ada	6,856,089	13,820	6.28	496.09
	Canyon	11,312,282	14,205	5.34	796.35
	Idaho	126,495,111	196,563	4.66	643.53
1930	Ada	5,666,522	9,731	4.22	582.31
	Canyon	10,510,762	14,707	4.48	714.67
	Idaho	135,802,055	186,100	4.46	729.72
1940	Ada	3,890,604	11,356	4.22	342.60
	Canyon	6,747,256	17,143	4.72	393.58
	Idaho	83,890,896	200,016	4.58	419.42
1950	Ada	10,433,430	9,236	3.68	1,129.64
	Canyon	26,232,977	17,270	4.33	1,518.99
	Idaho	281,025,323	164,960	4.08	1,703.59
1960	Ada	16,266,990	7,064	3.37	2,302.80
	Canyon	47,505,483	13,682	4.03	3,472.11
	Idaho	438,383,524	145,739	4.32	3,008.00
1970	Ada	23,824,000	5,243	3.44	4,543.96
	Canyon	76,635,000	8,790	3.67	8,717.43
	Idaho	649,571,000	84,074	3.37	7,726.00

* United States Department of Commerce, Bureau of the Census

counties declined from 29,305 in 1910 to 14,033 in 1970. On the other hand, per capita incomes increased from $111.98 in 1910 to $7,158.76 in 1970. Over this period both the number of rural residents and number of farms declined while the average size of farm and farm incomes increased.

Between 1950 and 1970 per capita income for rural residents increased from $1,129.64 to $4,543.96 in Ada County and increased from $1,518.99 to $8,717.43 in Canyon County. Based on 1950 per capita income figures this amounted to a 402.25 percent change in Ada County and a 573.90 percent change in Canyon County in 20 years. Total farm income in Ada County was 228.34 percent higher in 1970 than in 1950, and 292.13 percent greater in Canyon County. Since the land base of the county and farm prices did not change appreciably over the period, a tremendous increase in agricultural productivity is apparent. By comparison, total farm income for Idaho increased from $281,025,323 in 1950 to $649,571,000 in 1970, an increase of 231.14 percent; Ada and Canyon counties together increased 273.98 percent, a considerably higher growth than for the state.

Over the life of the Boise Project (1910 to 1970) farm income in Ada County increased from $1,302,622 to $23,824,000 (18.2 times) while in Canyon County farm income increased from $1,979,084 in 1910 to $76,635,000 (38.72 times). Most of the income change, however, came after 1950 (as is shown in Table 2).

Idaho Sector Output

Along with the growth of the Boise Project counties, output was also increasing in other sectors of Idaho's economy that are important in this study. For example, it was estimated that total Idaho livestock output increased from 204 to 640 million dollars between 1947 and 1973. During this period crop output increased from 312 to 918 million dollars, and the food and kindred products sector increased output from 175 to 960 million dollars. Since sector output data is not available from Census reports, it was necessary to estimate outputs based on data that was available. These procedures are summarized in Appendix C.

Table 3 compares estimated total Idaho crop output with that from the Boise Project and the relative importance of Boise Project output. It shows that Boise Project crop varied from 8.6 to 13.6 percent of total crop output from Idaho. The relative importance of the Boise

Project crop production is fairly constant considering the cultivated area has changed little over the period, while the state of Idaho has been adding considerable acreage. Table 3 compares total output from Idaho food processing, Idaho crop output, and Idaho livestock output with the Boise Project crop output. It is interesting to note the output from the food processing sectors had a lower value in 1947 than either crops or livestock, however, by 1973 food processing output was higher ($960 million) than either crops ($918 million) or livestock ($640 million).

The food processing or food and kindred products sector is particularly important in this analysis of secondary Boise Project impacts since processing of Boise Project products constitutes a large part of the secondary impacts. During 1967 in Idaho 27.6 percent of all employment in the state's food processing sector took place in the Boise Valley according to Idaho Manufacturing Directory (see Appendix D). Secondary Boise Project impacts are closely tied to food processing in Ada and Canyon counties and the relationships that exist between these sectors.

TABLE 3: TOTAL IDAHO AND BOISE PROJECT CROP OUTPUT VALUES COMPARED, 1947 - 1973

Year	Idaho Crop Output Value	Boise Project Crop Output Value	Boise Project as a % of Total Output
1947	$312 x 10^6	$30.1 x 10^6	9.6
1948	298	30.7	10.3
1949	281	28.1	10.0
1950	224	25.7	11.5
1951	249	32.7	13.1
1952	290	32.9	11.3
1953	294	25.3	8.6
1954	259	30.4	11.7
1955	270	31.3	11.6
1956	293	34.1	11.6
1957	263	32.6	12.4
1958	298	34.4	11.5
1959	297	40.4	13.6
1960	336	41.8	12.4
1961	319	43.5	13.6
1962	323	42.1	13.0
1963	368	46.1	12.5
1964	371	43.3	11.7
1965	431	46.3	10.7
1966	423	49.8	11.8
1967	410	48.5	11.8
1968	412	48.9	11.9
1969	493	52.7	10.7
1970	504	52.9	10.5
1971	545	58.4	10.7
1972	574	65.1	11.3
1973	918	87.5	9.5

THE STRUCTURE OF IDAHO'S ECONOMY

Past Studies

At least three researchers have studied the nature of the interrelationship that exists in Idaho's economy. Such work has been done by Peterson (5), Rafsnider (8), Ferguson (2), and Polenske (6). The work by Peterson and Rafsnider were attempts to build input-output models of Idaho's economy in 1963 and 1967 respectively. Ferguson developed a regional input-output model to study the impact of federal expenditures on the Sawtooth National Recreation Area, on the immediate region, and Idaho as a whole (2). Polenske's work allows researchers to develop state input-output models for 1947, 1958, and 1963, thus allowing some examination (although superficial) of the structural changes that might have taken place in Idaho during these years. Unfortunately none of the above studies, except Peterson's, to a degree, were based on a comprehensive and statistically sound empirical sample of Idaho firms. Since this situation is impossible to remedy in terms of establishing past relationships it was necessary to utilize available data and studies on this analysis of the impact of the Boise Project on its immediate region and Idaho.

The above mentioned studies were utilized to help gain insights into the structure of the Idaho economy from 1947 to 1970, and the role of the Boise Project. Briefly, the work by Polenske and Peterson were used to establish the nature of Idaho's economy in 1947, 1958, and 1964 and to evaluate the changes in its structure and that impact on the technical (input-output) coefficients. A procedure similar to Ferguson's regional model methodology was applied to the yearly input-output models to estimate the structure of the Boise Region economy (Ada and Canyon counties) and the rest of Idaho (Appendix E). The experienced gained in the above research efforts provided regional input-output models for the Boise Project area for the years between 1947 and 1970 and with them the opportunity was gained to evaluate project impacts. Obviously, empirical data collected on a state and regional basis for each year would be far superior to the above methodology. Unfortunately, however, it is impossible at this point in time to collect such historical data in detail.

Idaho---Input-Output Structure

To accomodate the analysis of the impact of the Boise Project on the Boise Region over time it was necessary to utilize the work of Peterson in 1963 and Polenske in 1947, 1958, and 1963. Peterson's original model had 16 sectors while Polenske's work contained 80 sectors. Table 4 shows a 13 sector Idaho input-output table containing livestock, crop, and food processing sectors which was developed from the work by Peterson and Polenske (see Appendix B for Polenske's tables). The advantage of Polenske's work is that it allows for structural changes over time and it is consistent with the rest of the United States. Peterson's work has the advantage of being conducted in Idaho with Idaho data, although it is not based on an empirical sample.

Table 4 is a simulated model of Idaho's economy that utilizes the best information available from past research. By subdividing this model into two regions (Boise Project and Rest of Idaho), it allows an evaluation of the impact of the Boise Project on the Boise Region. Since the secondary impacts of the Boise Project depend on its relationships with sectors that either provide inputs for project farms or process its output, the measurement of these impacts depend on the quality of the information available. Obviously, if the quality of the data could be improved so could the estimates.

Sector Output Growth of the Idaho Economy

Given the structure of Idaho's economy (Appendix B) and the estimates of total output (Appendix C), changes in final demand (personal consumption plus exports) may be evaluated. For it is the purchase of goods in terms of final demand that provides the stimulus or incentive for the state's economy to function and develop. Without the out-of-state need for agricultural products and processed food products Idaho's agriculture and food processing sectors could not develop as they have. Consequently, it is of interest to this study, both in terms of growth of aggregate demand and in terms of using the input-output structure, to estimate final demand functions for Idaho agricultural sectors over time.

To study the nature of final demand for Idaho's economic sectors a 10 sector input-output model was developed as follows:

Table 4. The Gross Flows in Idaho's Economy, 1963 (Polenske).
(Dollars x 10^6)

*adjusted by Peterson's Import data for sectors 4,5,6.

Purchases/Sales	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Sales to Idaho Industries	Idaho Personal Consumption	Exports	Total Final Demand	Total Sales
1. Livestock Agriculture (1)	43.250	24.607	.001	83.886	.006	.005	.002	.008	.005	.015	.056	.001	.000	151.822	42.343	76.897	119.240	271.062
2. Crop Agriculture (2,3,4)	127.139	28.270	.004	39.047	.015	.016	.006	.348	.139	.406	.106	.002	.008	195.506	21.195	207.452	228.647	424.153
3. Mining (5-10)	.006	.025	9.427	.082	23.561	.002	.000	4.693	.001	.000	.005	.000	.006	37.808	.000	16.230	16.230	54.038
4. Food Processing (14)	15.539	.925	.094	18.662	1.286	.398	.117	.488	.234	.828	1.417	.044	.014	40.046	21.728	322.119	342.847	383.893
5. Other Manufacturing (13, 16-64)	.126	5.485	.741	15.086	59.119	.658	.148	57.804	3.275	5.706	3.775	.102	.147	152.172	30.085	344.845	374.930	527.102
6. Transportation and Communications (65-67)	9.492	6.046	.648	14.400	16.722	12.065	2.716	10.260	2.220	6.925	4.712	1.897	.440	88.543	79.937	.006	79.943	168.486
7. Utilities (68)	1.048	12.686	1.665	2.744	10.180	1.185	21.813	.896	1.409	7.055	3.417	.179	2.617	66.894	49.501	.000	49.501	116.395
8. Construction (11, 12)	1.481	4.325	.571	.797	2.242	5.700	3.507	.073	19.457	1.358	1.720	.117	4.881	46.229	229.235	.062	229.297	275.526
9. Fire (70, 71)	4.825	27.087	2.441	3.967	6.924	6.269	1.512	3.231	22.250	27.066	14.023	.422	.572	120.589	194.872	.167	195.039	315.628
10. Trade (69)	10.708	12.355	.390	14.333	10.614	3.707	.679	22.475	1.542	5.942	9.299	.120	.148	92.312	283.260	.007	283.267	375.579
11. Services (72-77)	6.630	19.917	.857	11.813	8.903	7.600	2.218	11.764	7.635	21.531	12.455	.383	1.017	112.723	109.252	.019	109.271	221.994
12. Federal Government (78)	.048	.083	.062	.239	.425	.397	.320	.079	2.310	1.681	2.082	.006	.025	7.757	8.553	.000	8.553	16.310
13. State Government (79)	.007	.017	.046	.138	.046	.203	.030	.150	.032	.228	.116	.006	.010	1.029	25.986	.000	25.986	27.015
Total Idaho Industry Purchases	220.279	141.828	16.947	205.194	140.043	38.205	33.068	112.269	60.509	78.741	53.183	3.279	9.885	1,113.430	1,095.947	967.804	2,063.751	3,177.181
Imports	16.483	53.702	11.352	89.046	187.719	15.284	17.797	36.273	47.117	16.774	35.335	1.057	1.261	529.200	283.152	.000	283.152	812.352
Depletion	.000	1.430	.287	.043	5.330	.000	.000	.104	.000	.023	.103	.000	.000	7.320	.000	.000	.000	7.320
Value Added	34.300	227.193	25.452	89.610	194.010	114.997	65.530	126.880	208.002	280.041	133.373	11.974	15.869	1,527.231	165.644	.000	165.644	1,692.875
Total Purchases	271.062	424.153	54.038	383.893	527.102	168.486	116.395	275.526	315.628	375.579	221.994	16.310	27.015	3,177.181	1,544.743	967.804	2,512.547	5,689.728

Sector Number	Name of Sector
1	Livestock
2	Boise irrigated
3	Other Idaho irrigated
4	Dryland crops
5	Mining and manufacturing
6	Food processing
7	Utilities
8	Construction
9	Trade
10	Service, F.I.R.E., Transportation, Government

Figures 4-13 present total sales and final demand comparisons for Idaho sectors based on the estimates of sector outputs and the structure of the state's economy adjusted for changes in technical coefficients over time. For most sectors final demand increases as total output increases. The exception to this generality is the Boise Irrigated sector, in which case total output increases and at the same time final demand is constant or falling. This can only occur if the amount of Boise Project output utilized within the state, in the case by the food processing sector, is increasing. Since we have already seen how food processing output has been growing relative to crop and livestock production, this conclusion is reasonable. In addition, the Boise Project grows many crops that require processing such as vegetables for canning or freezing, sugar beets, and potatoes. The Boise Project area also produces considerable quantities of dairy products which are grown and processed locally.

Comparing the outputs and resulting final demands for the 10 sectors shows that the agricultural based sectors and construction were quite irregular in nature compared with the fewer ups and downs of manufacturing, utilities, trade, and service sectors. Crop agricultural shows the greatest number of ups and downs of the agricultural sectors. Construction appears to have the greatest variation in output and final demand, as would be expected. The food processing sector shows none of the irregularities in output or final demand as do the agricultural sectors. Final demand for both irrigated crop sectors fail to follow their respective sector outputs as do other sectors, indicating that increased amounts of irrigated production was staying in Idaho for further processing. Such a situation is beneficial to Idaho in terms of increased employment and

Figure 4. Livestock output and final demand, Idaho, 1947-1970.

Figure 5. Boise irrigated output and final demand, Idaho, 1947-1970.

Figure 6. Other Idaho irrigated output and final demand, Idaho, 1947-1970.

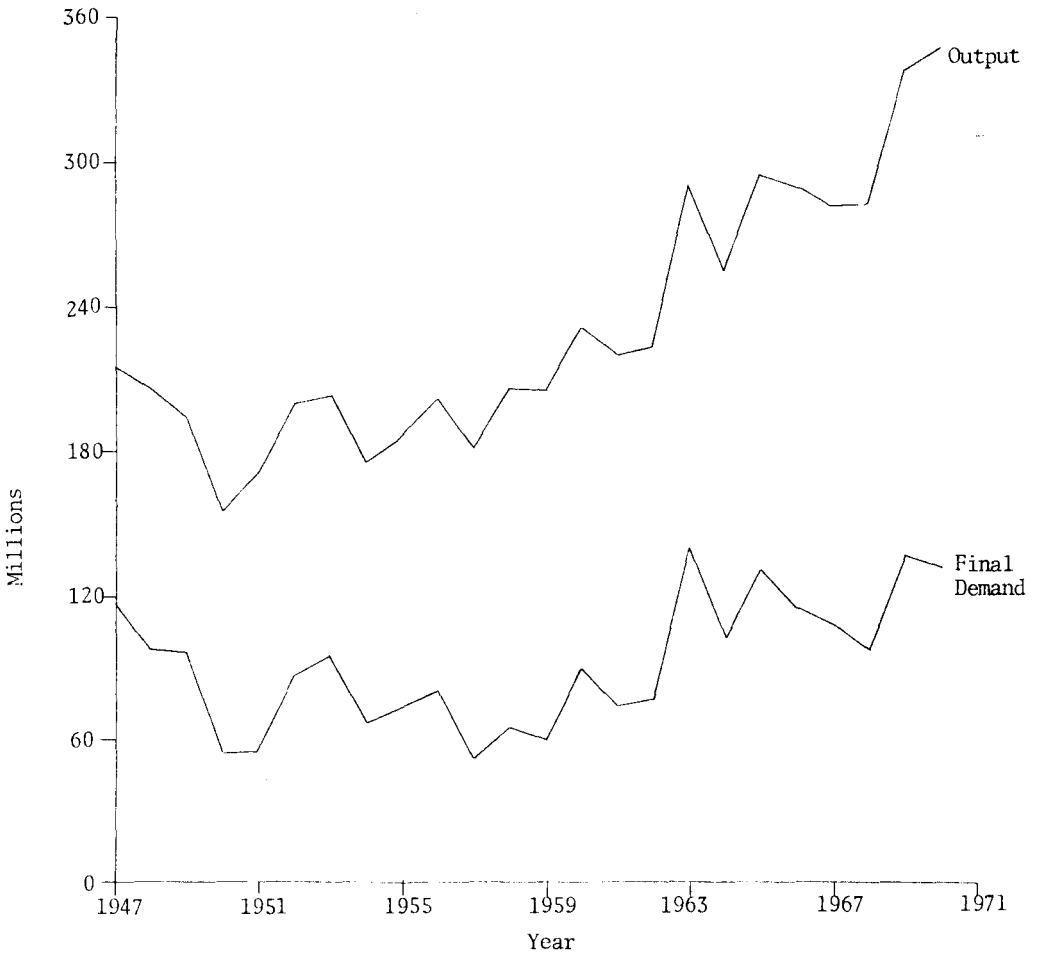


Figure 7. Dryland crop output and final demand, Idaho, 1947-1970.

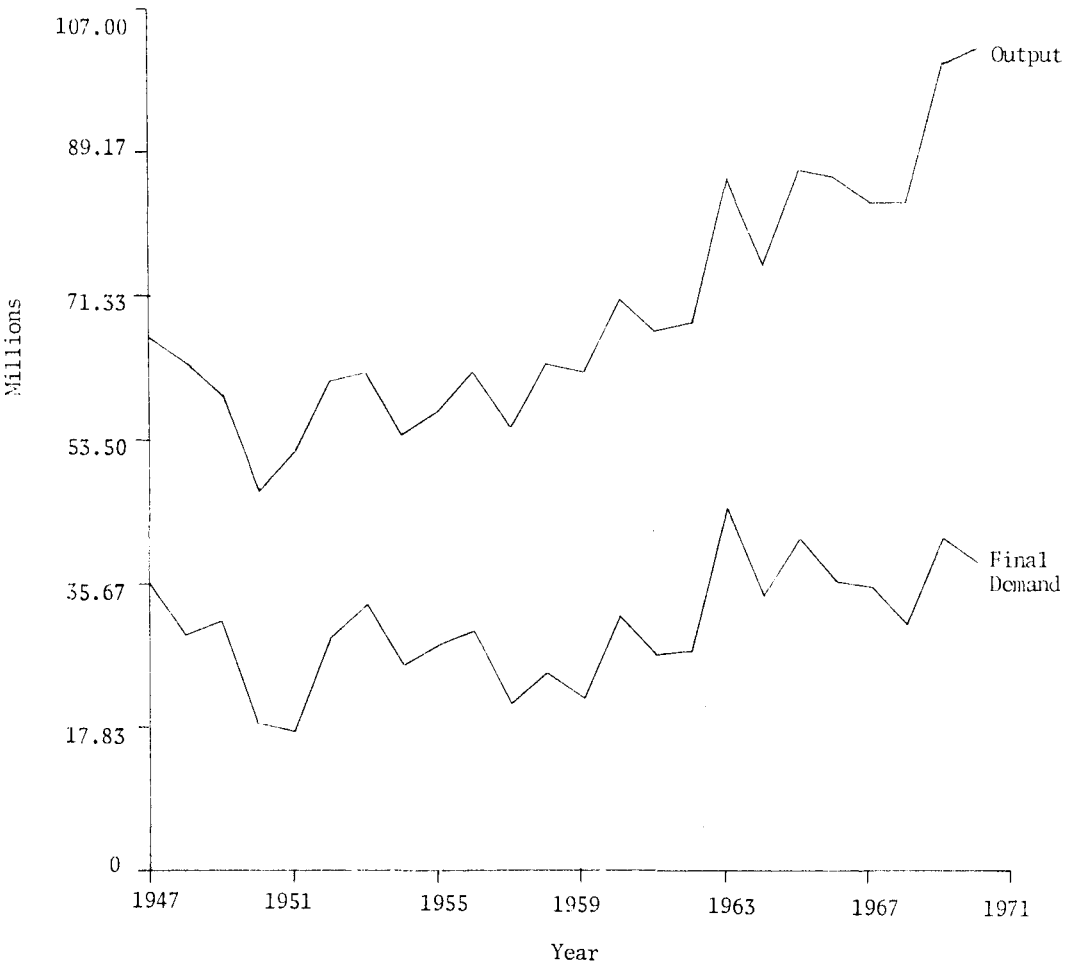


Figure 8. Mining and manufacturing output and final demand, Idaho, 1947-1970.

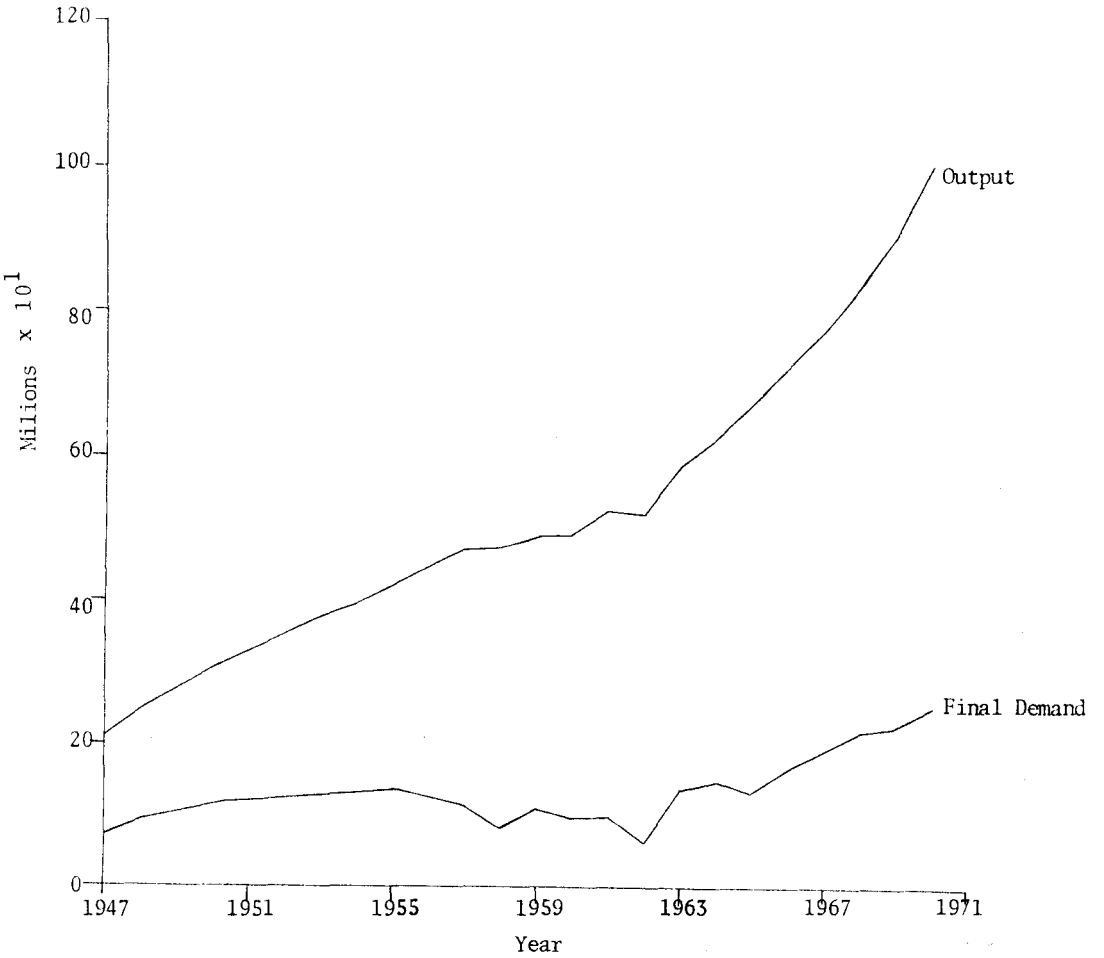


Figure 9. Food Processing output and final demand, Idaho, 1947-1970.

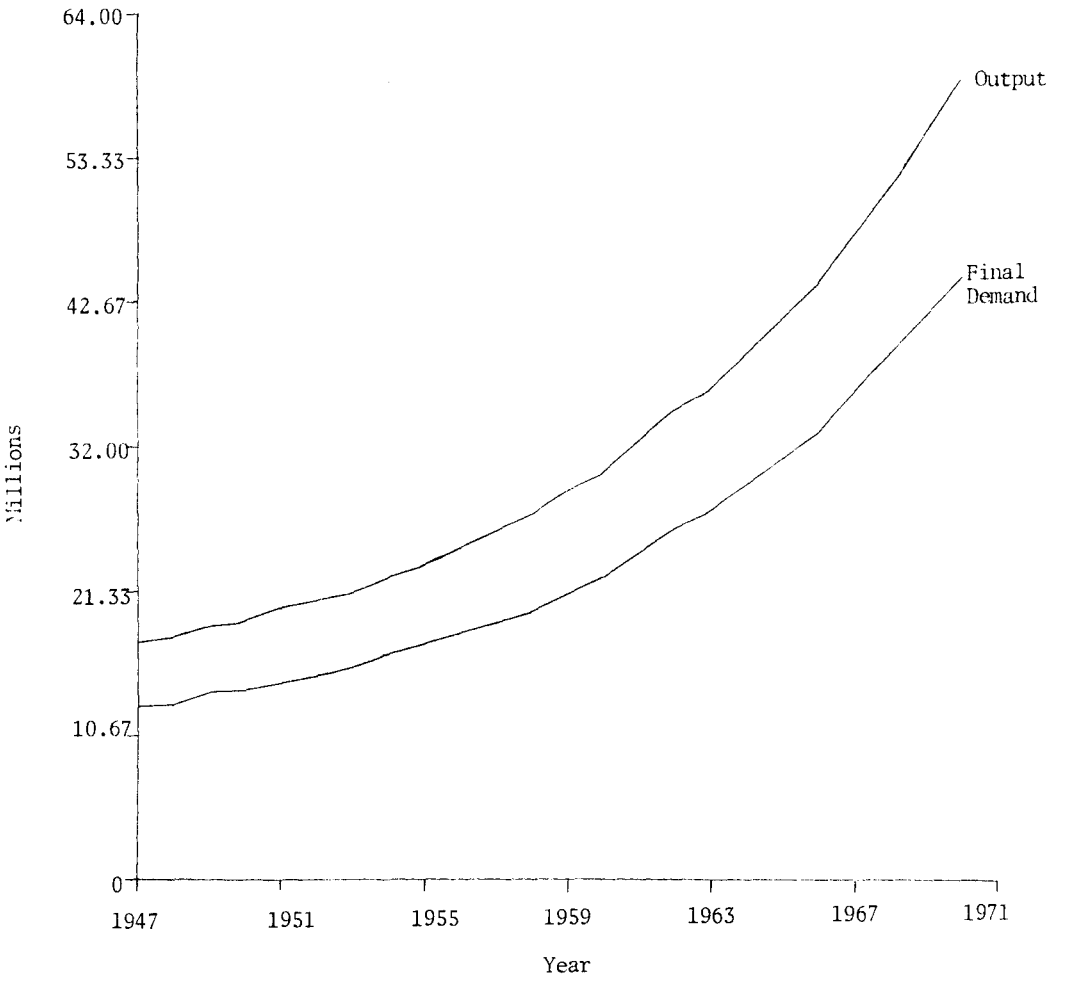


Figure 10. Utilities output and final demand, Idaho, 1947-1970.

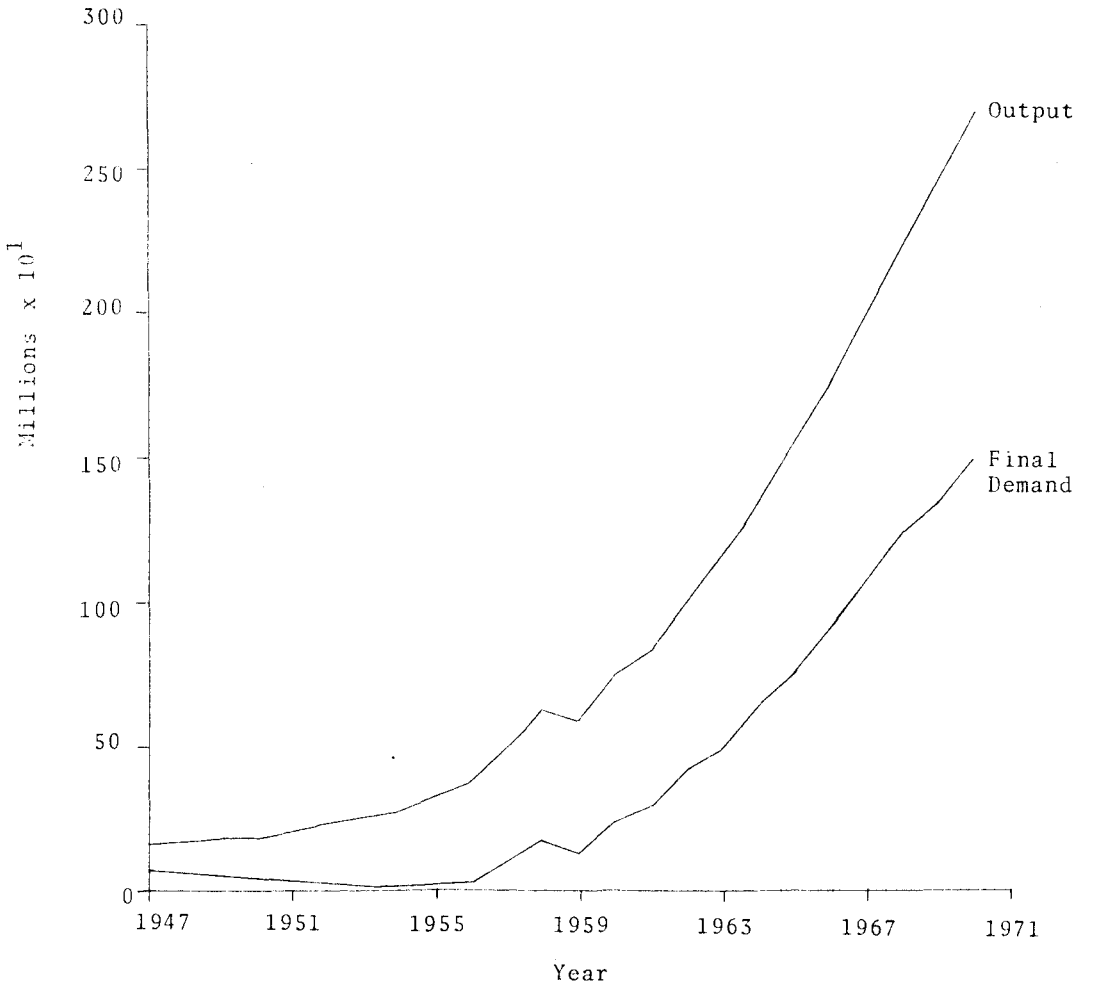


Figure 11. Construction output and final demand, Idaho, 1947-1970.

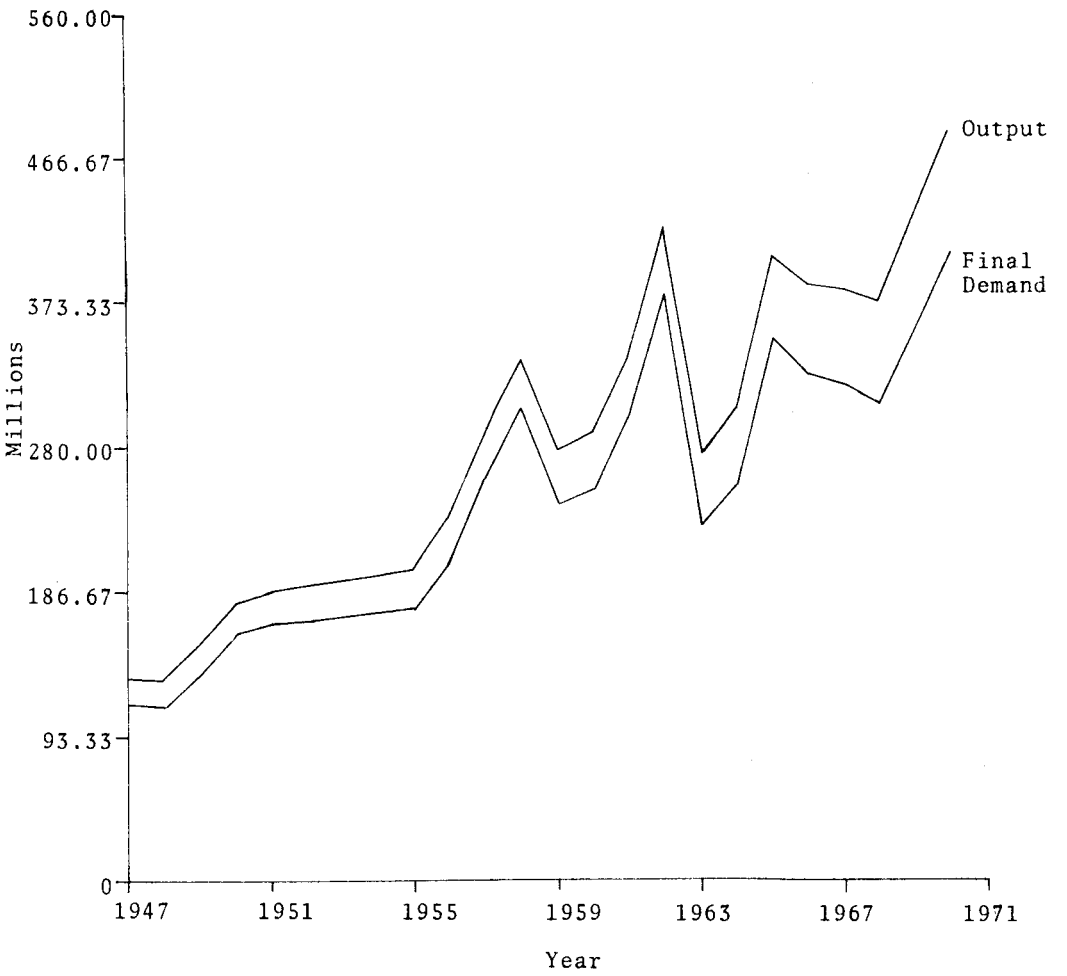


Figure 12. Wholesale and retail trade output and final demand, Idaho, 1947-1970.

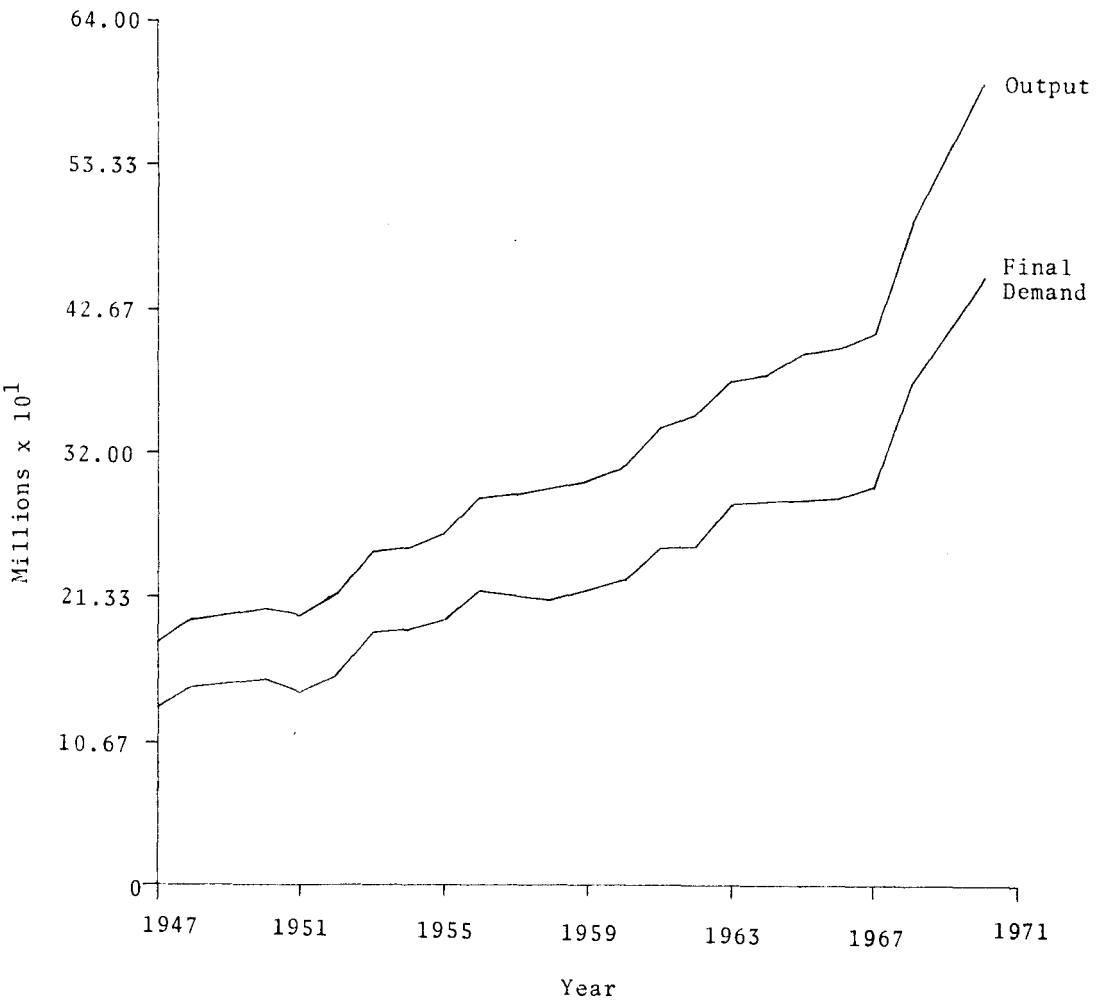
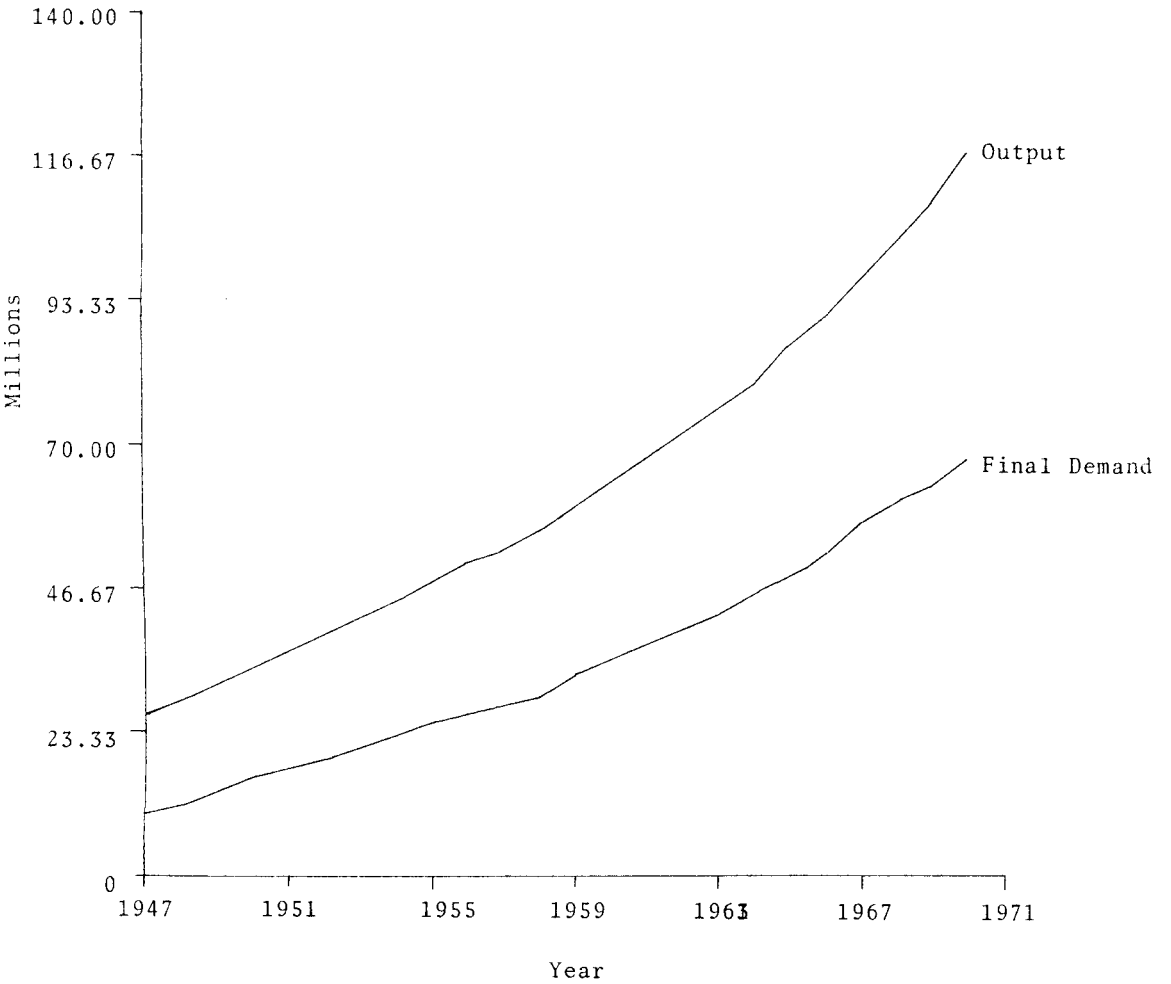


Figure 13. Services, FIRE, Transportation, and Government, output and final demand, Idaho, 1947-1970.



income. On the other hand, output from food processing is highly correlated with final demand indicating heavy dependence upon consumption and exports for its output markets. Since about 83 percent of the food processing output was exported from Idaho in 1963 the role of the food processing industry in Idaho is heavily dependent upon outside markets.

REGIONAL IMPACTS

Total Output

The Boise Region (Ada and Canyon counties) of Idaho has been growing quite rapidly since 1947. This region is the governmental center of Idaho, a crossroads for transportation, and a center for trade and service activities for southwestern Idaho. Using the methodology previously described, programming results indicate the total regional output (output of all the sectors) increased from $446 million in 1947 to $1,923 million in 1970. By comparison the total output of the Boise Project increased from $51 million in 1947 to $114 million in 1970, and total output of the food processing industry increased from $50 million in 1947 to $169 million in 1970. From these data one would conclude that regional output is growing rapidly, and that the output from the Boise Project and food processing sectors are also growing but not at as fast a pace. As was similarly true at the state level, the level of output from Boise Region food processing passed that of the Boise Project during the period. In 1947 total output from both sectors was approximately $50 million each, however, by 1970 the output from food processing was $55 million greater than Boise Project output (Figure 14).

Figure 14 summarizes output trends for the Boise Region, Boise Project, and the food processing sector in the Boise Region. Both Boise Project output and food processing output appear somewhat minor compared to regional output, but as we shall see later, the total income impacts of both sectors are very important in the region, primarily because of their interrelationships with other sectors of the economy. Also, it will become apparent that Boise Project output and food processing output are closely related and that the total impacts of each group of sectors is very similar.

Regional Income and Sector Impacts

Figure 15 presents regional income and impact data for the Boise Region, the Boise Project, and the food processing sector. Regional income from the Boise Region was estimated to increase from $154 million in 1947 to $574 million in 1970. In a similar manner direct food processing income increased from $10 million in 1947 to $29 million in 1970, while

Figure 14. Comparison of total outputs for the Boise Region, food processing and the Boise Project, Idaho, 1910 - 1970.

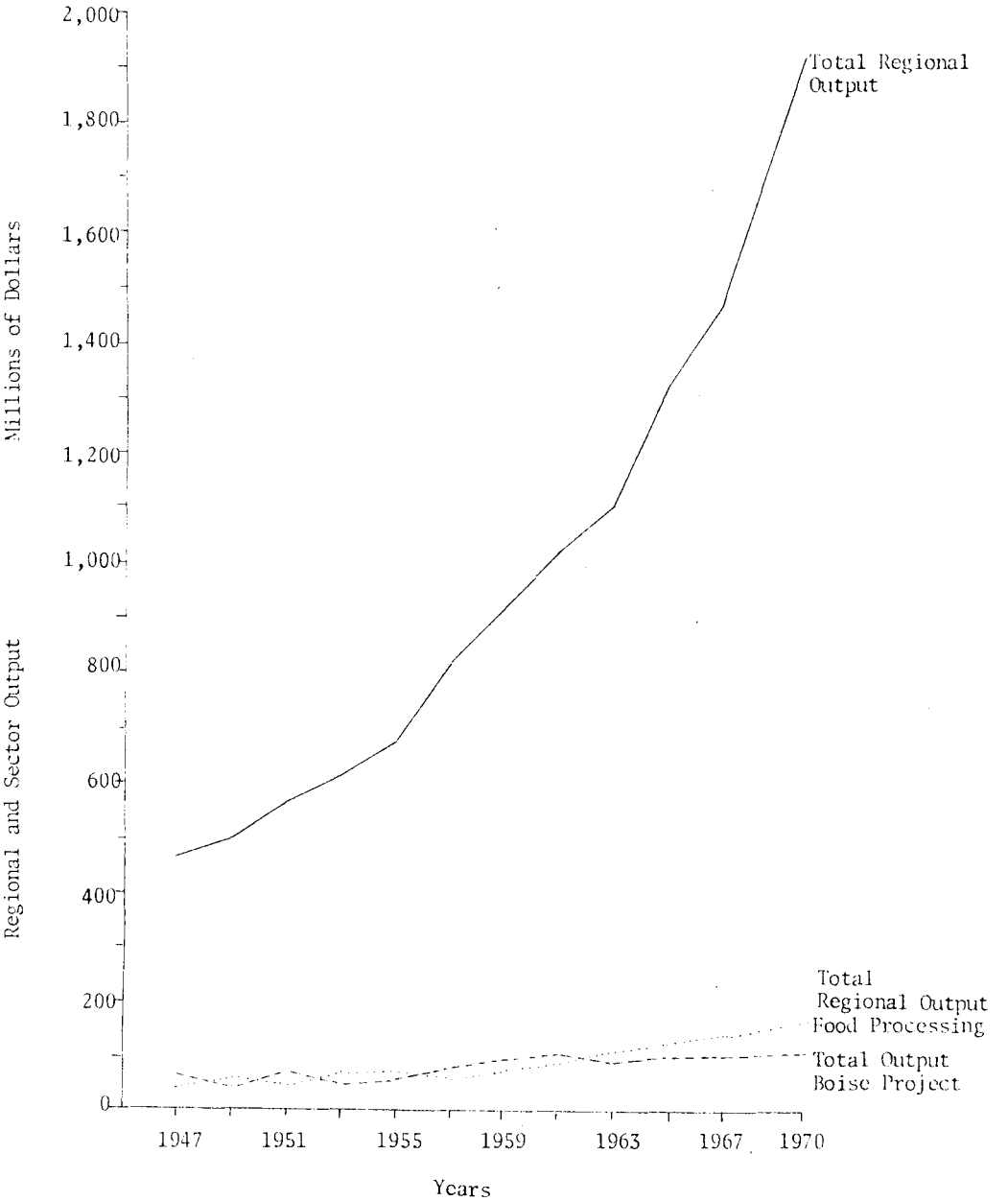
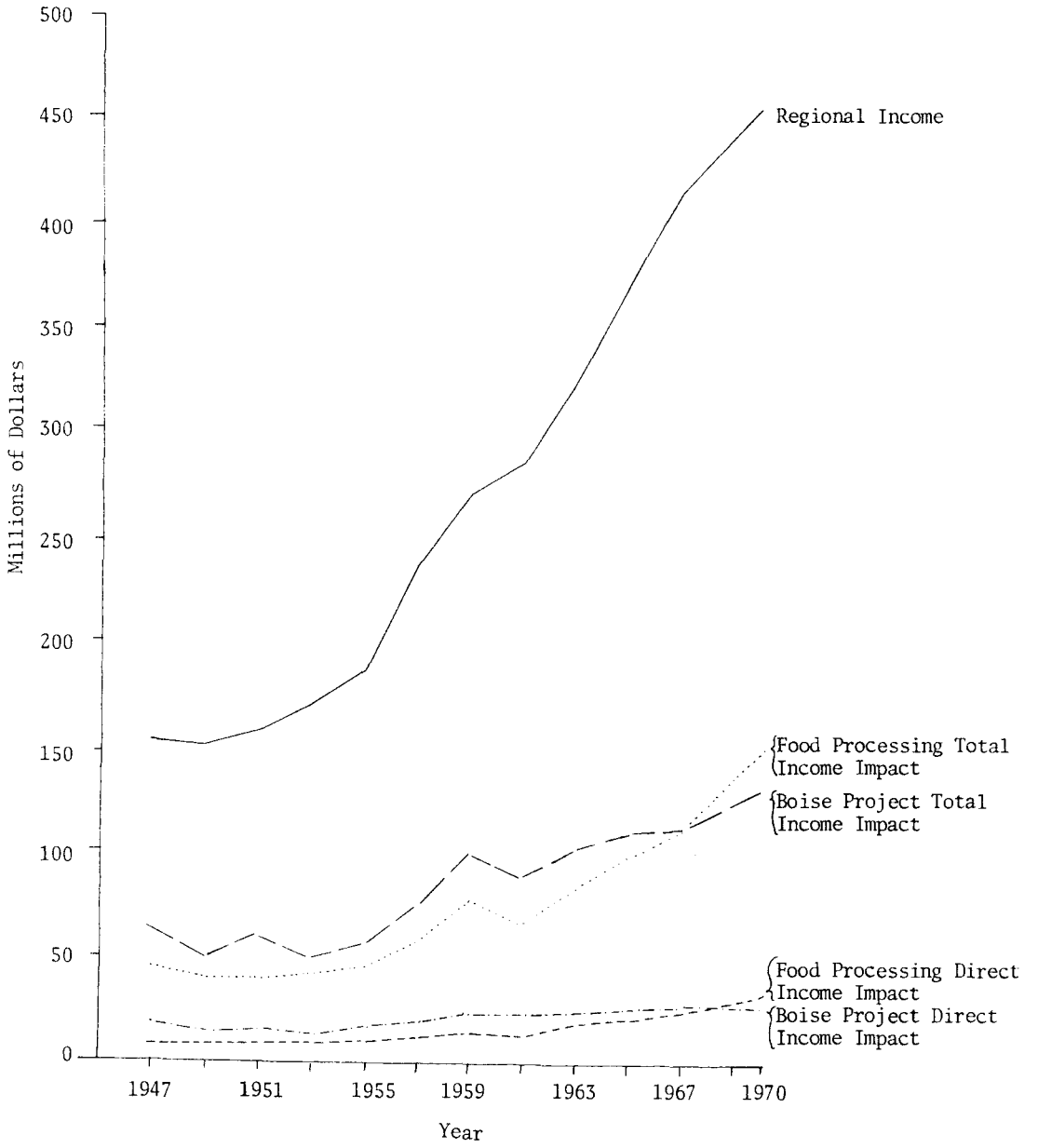


Figure 15. Regional, Boise Project, and food processsing income and impact on imcome, Boise Region, Idaho, 1947 - 1970.



Boise Project direct income increased from $19 million in 1947 to $28 million in 1970. Looking at the food processing sectors and the Boise Project sectors separately, the total impact income associated with each sector was as follows:

	Total Income Impacts	
Sectors	1947	1970
Boise Project	$63.8 million	$127.2 million
Food Processing	$46.6 million	$143.7 million
Region (all)	$154.2 million	$574.4 million

The importance of income associated with food processing alone in 1970 ($143.7 million) was nearly as great as the whole region in 1947 ($154 million).

Figures 16 and 17 compare the relative importance of the Boise Project and food processing sectors with that of total regional income. Figure 16 shows that the direct income impact of the Boise Project dropped from 11.6 percent of regional income in 1947 to 4.8 percent in 1970. Total impact of the Boise Project decreased from 41.3 percent of regional income in 1947 to 22.1 percent in 1970. The direct income impact of the food processing industry was 6.5 percent of regional income in 1947 and 5.0 percent in 1970. Total income effects of the food processing industry was 30.2 percent of regional income in 1947 and 25.0 percent in 1970. While the total impacts of the Boise Project and the food processing sectors tend to measure the same things, it is important to note that the relative importance of the food processing sector has not declined as greatly as that of the basic agricultural sectors (Boise Project).

Boise Project Impacts

Determination of the impacts of the Boise Project were estimated in two ways. Direct income impacts were estimated from the value of crop production on project lands, and the costs of production. Total regional income impacts associated with the Boise Project were estimated using Leontief income coefficients from regional input-output tables developed for each year. The secondary income impacts of the Boise Project were then estimated by subtracting the direct impacts from the total income impacts. Secondary projects impacts occur because Boise Project irrigation

Figure 16. Boise Project Income Impact as a Percent of Regional Income, Idaho, 1947 - 1970.

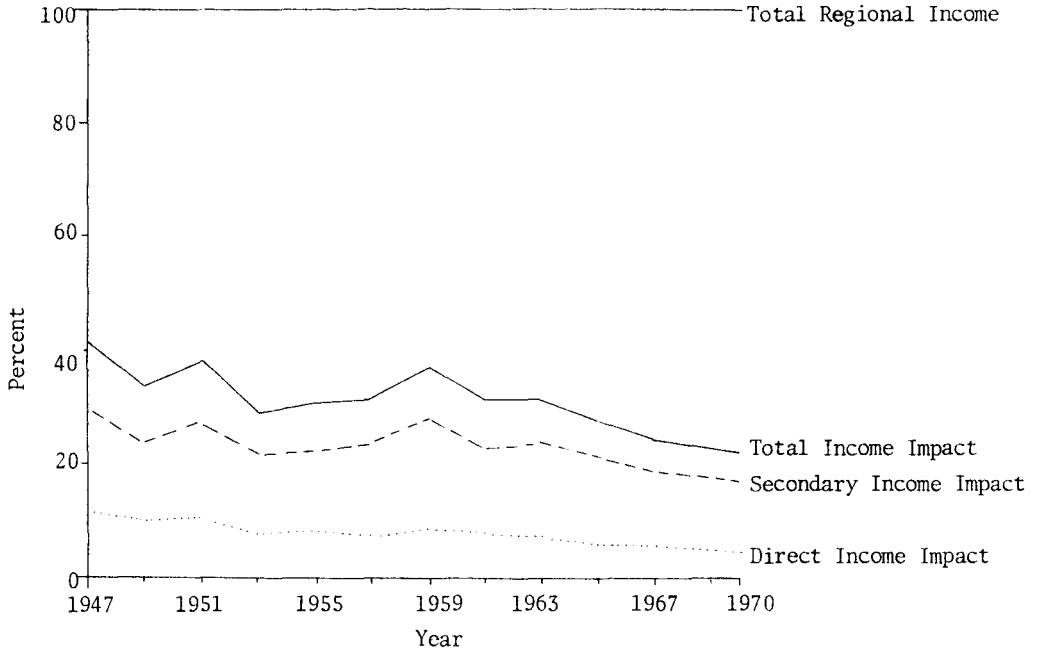
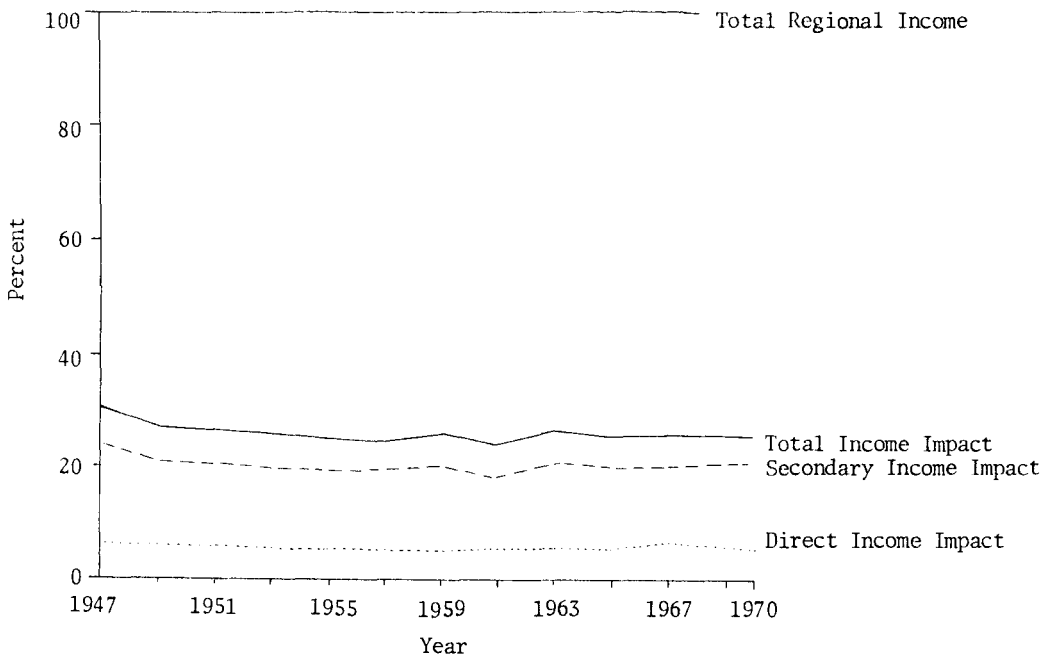


Figure 17. Food Processing Impact Income as a Percent of Regional Income, Idaho, 1947 - 1970.



production requires inputs for production, and project output requires various degrees of processing which may occur in the Boise Region. Much of the secondary impacts of the Boise Project would be expected to be associated with that of the food processing industry.

Table 5 summarizes direct, secondary, and total income impacts of the Boise Project output. From 1947 to 1970, direct income impacts increased from $17.9 million to $28.1 million and total impacts increased from $63.8 million to $127.2 million. Based on these results, secondary project income impacts were estimated to increase from $45.9 million in 1947 to $99.1 million in 1970, or essentially doubled in 23 years. Perhaps the greatest secondary impact of the Boise Project was that it helped stimulate the development of the food processing industry which surpassed the importance of the Boise Project both in terms of total output and income during the study period. As is shown in Table 5, the rate of growth of secondary project income impacts (3.4 percent per year) was greater than that of either the direct income impact (1.9 percent) or the total impact (3.0 percent). Project income growth was not as great as regional income growth which was 5.8 percent per year from 1947 to 1970.

Food Processing Impact

The food processing industry of the Boise Region came after the development of the Boise Project itself. By 1970, however, the importance of the food processing sectors had surpassed the Boise Project in terms of both direct and total income impacts. The rates of growth of income associated with the food processing sectors are more closely related to regional growth than are those of the Boise Project (Table 6). Direct income from food processing increased from $10 million in 1947 to nearly $30 million in 1970, while total impact was estimated to have increased from $46 million in 1947 to $143 million in 1970. The important point here is that the food processing sectors represent (at least in part) the secondary impacts of the Boise Project. By 1970 the direct income effects were as great as those from the project ($29.2 million compared to $28.1 million), and the total impacts were considerably greater ($143 million compared to $127.2 million).

Rates of income growth of food processing (1947 compared to 1970) show considerably higher increases for food processing sectors than for the Boise

TABLE 5: DIRECT, SECONDARY, AND TOTAL INCOME IMPACTS OF THE BOISE PROJECT ON THE BOISE REGION, IDAHO, 1947 - 1970

Year	Boise Project Agricultural Sectors			Boise Regional Income
	Direct	Secondary	Total	
	(millions of dollars)			
1947	$17.9	$45.9	$ 63.8	$154.2
1949	15.0	35.4	50.4	149.0
1951	16.1	43.2	59.4	156.5
1953	12.4	36.9	49.4	168.6
1955	14.7	41.6	56.7	184.4
1957	16.9	56.9	73.8	234.4
1959	22.1	76.4	98.5	267.6
1961	21.9	66.7	88.6	282.3
1963	23.1	76.1	99.2	317.1
1965	24.7	82.9	107.6	390.3
1967	25.3	82.1	107.4	434.4
1970	28.1	99.1	127.2	574.4
Rate of Growth (1947 - 1970)	1.9%	3.4%	3.0%	5.8%

TABLE 6: DIRECT, INDIRECT, AND TOTAL INCOME IMPACTS OF THE FOOD PROCESSING SECTORS ON THE BOISE REGION, IDAHO, 1947 - 1970

Year	Food Processing Sectors			Boise Regional Income
	Direct	Indirect	Total	
	(millions of dollars)			
1947	$ 9.9	$ 36.6	$ 46.6	$154.2
1949	9.2	30.8	40.0	149.0
1951	9.2	31.6	40.7	156.5
1953	9.4	33.1	42.5	168.6
1955	10.2	35.0	45.2	184.4
1957	12.2	44.9	57.0	234.4
1959	14.0	53.8	67.8	267.6
1961	14.6	51.2	65.8	282.3
1963	17.0	64.6	81.6	317.1
1965	20.2	76.8	97.0	390.3
1967	23.4	85.8	109.2	434.4
1970	29.3	114.5	143.7	574.4
Rate of Growth (1947 - 1970)	4.8%	5.0%	5.0%	5.8%

Project sectors. The irregular output values for the Boise Project make such comparisons somewhat unreliable, especially since direct income from the Boise Project was $17.9 million in 1947 and then dropped to $12.4 million in 1955 and took until 1959 to pass the 1947 level. Total income impact of the Boise Project grew at the rate of 3.0 percent per year while that of the food processing sectors grew at an estimated 5 percent per year. Prior to 1940 the Boise Project itself undoubtedly was more important to the region than food processing, however, since the late 1960's the food processing impact was greater than that from the Boise Project. The reader should keep in mind that the total impact of the Boise Project and food processing represent many of the same economic forces.

Secondary Boise Project Income Impacts and Total Food Processing Income Impacts Compared

Since a major portion of secondary income impacts of the Boise Project are expected to be associated with the food processing sectors, a comparison of the two sets of sectors is of interest. Figure 18 presents total income impacts of both the Boise Project sectors and the food processing sectors. Total income impacts of both sectors have moved up together over time, but prior to 1967 the total impact of Boise Project exceeded that of food processing. These results would indicate that the impact of food processing has grown beyond that which was induced by the Boise Project. The initial development of the food processing industry was probably closely tied to the Boise Project.

Figure 19 tends to support the above conclusion. It presents the secondary income impacts of the Boise Project and total income impacts of the food processing sectors. One might expect these impacts to be nearly identical since the secondary impacts of the Boise Project are those resulting from induced activities in the service input and processing sectors. From 1947 to 1961 secondary impacts of the Boise Project and total impact of the food processing sectors are nearly identical. After 1961, however, the total impact of the food processing sector continually exceeds the secondary impact of the Boise Project indicating the processing of agricultural inputs outside of those supplied by the Boise Project. In terms of development associated with the Boise Project one may conclude that the water resources allowed for a highly successful

Figure 18. Total Income Impacts of the Boise Project and Food Processing, 1947 - 1970.

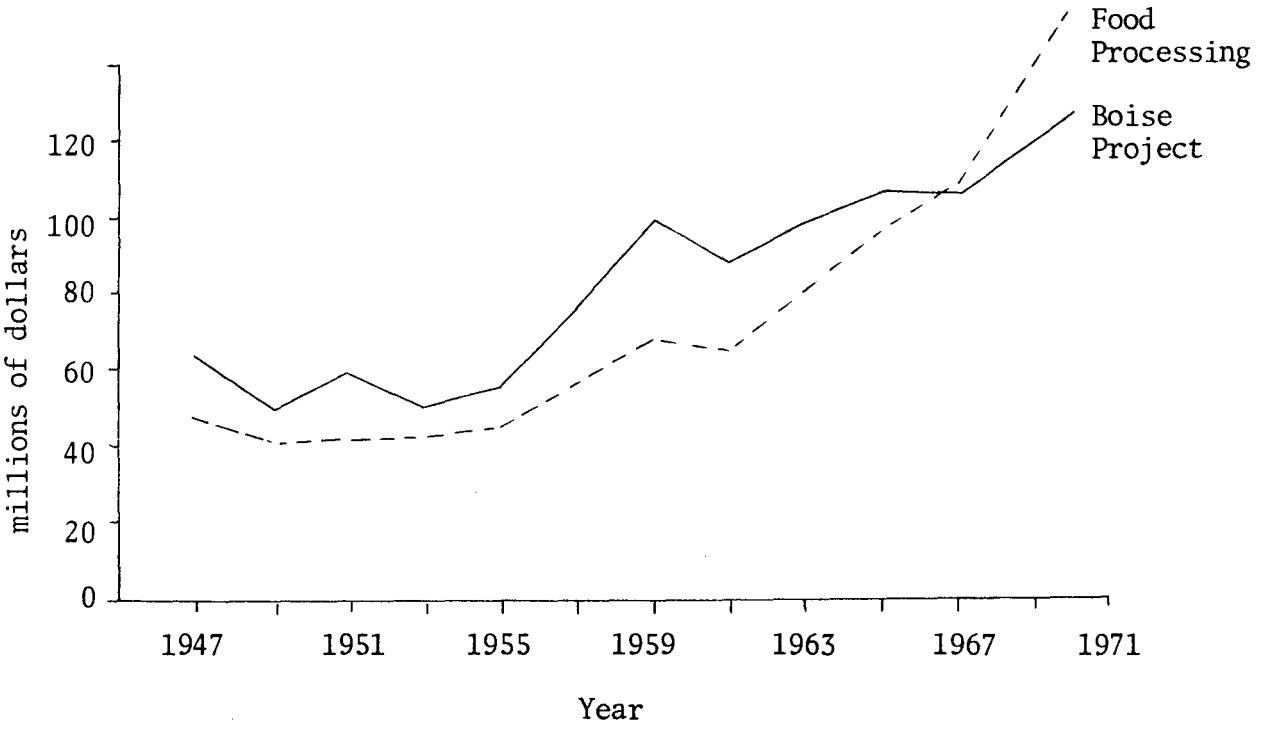
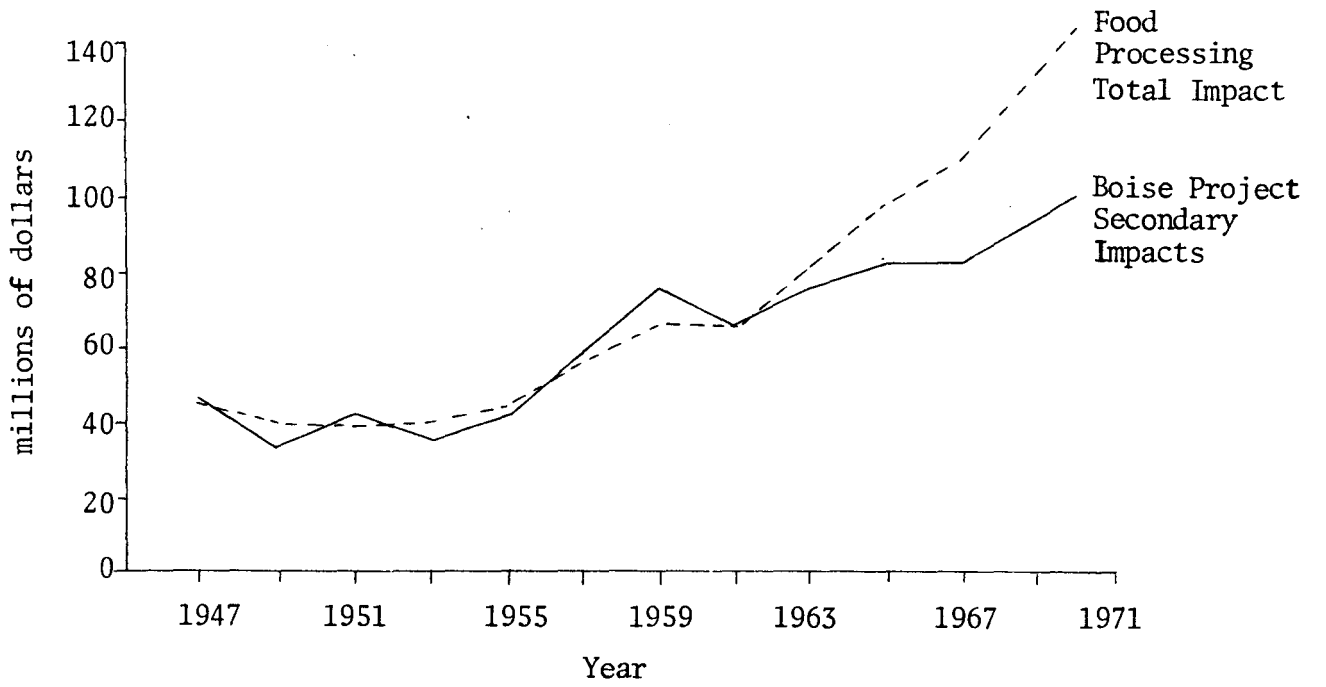


Figure 19. Secondary Income Impacts of the Boise Project and Total Income Impacts Food Processing, 1947 - 1970.



irrigated agriculture and a food processing industry that in itself is at least as important and probably more important than the irrigated agriculture. These sectors, of course, are heavily dependent upon one another.

Another way to compare secondary Boise Project income impacts with total income impacts of food processing is to plot the results against one another. This is done in Figure 20. The data generated for each variable tended to fall in a straight line from 1947 to 1963, however, after 1963 this was not true. A 45^{o} guide line is also plotted in Figure 20 and serves as an indicator that total income impact of food processing was an almost perfect indicator of secondary project impacts from 1949 to 1963, but was not after 1963 because of the greater importance of food processing impacts.

Figure 21 shows why the above situation occurs when total output of food processing is compared with that of the Boise Region. From 1947 to 1961 gross outputs are very similar for food processing and Boise Project; once past 1961, the output from food processing is continually higher and increasing faster than that of the Boise Project. These comparisons tend to confirm the result that one of the major impacts of the Boise Project was the instigation of a strong and growing food processing sector -- a sector that is more important economically than the project itself. These two sectors are highly interrelated and it is doubtful that either would exist at present levels without the other.

Figure 20. Secondary Income Impacts of the Boise Project, Idaho, 1947 - 1970.

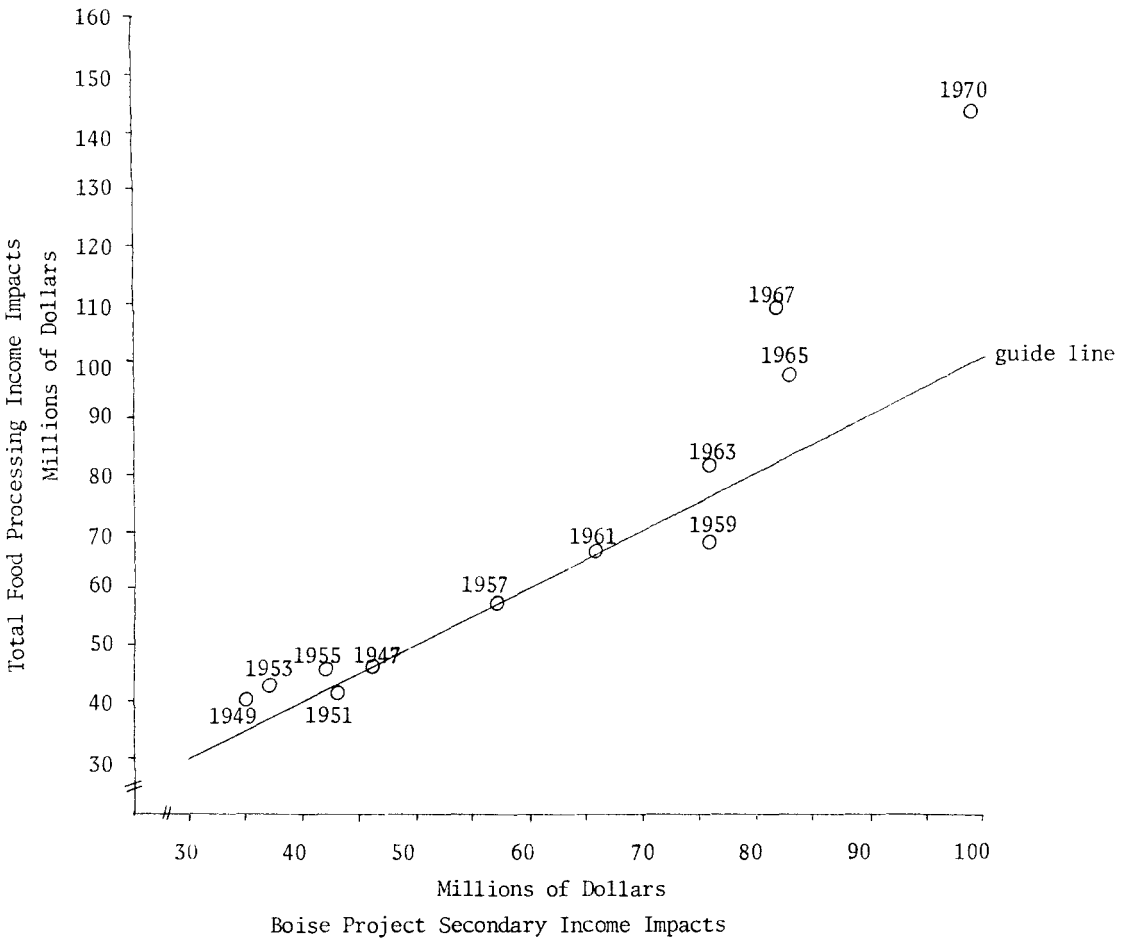
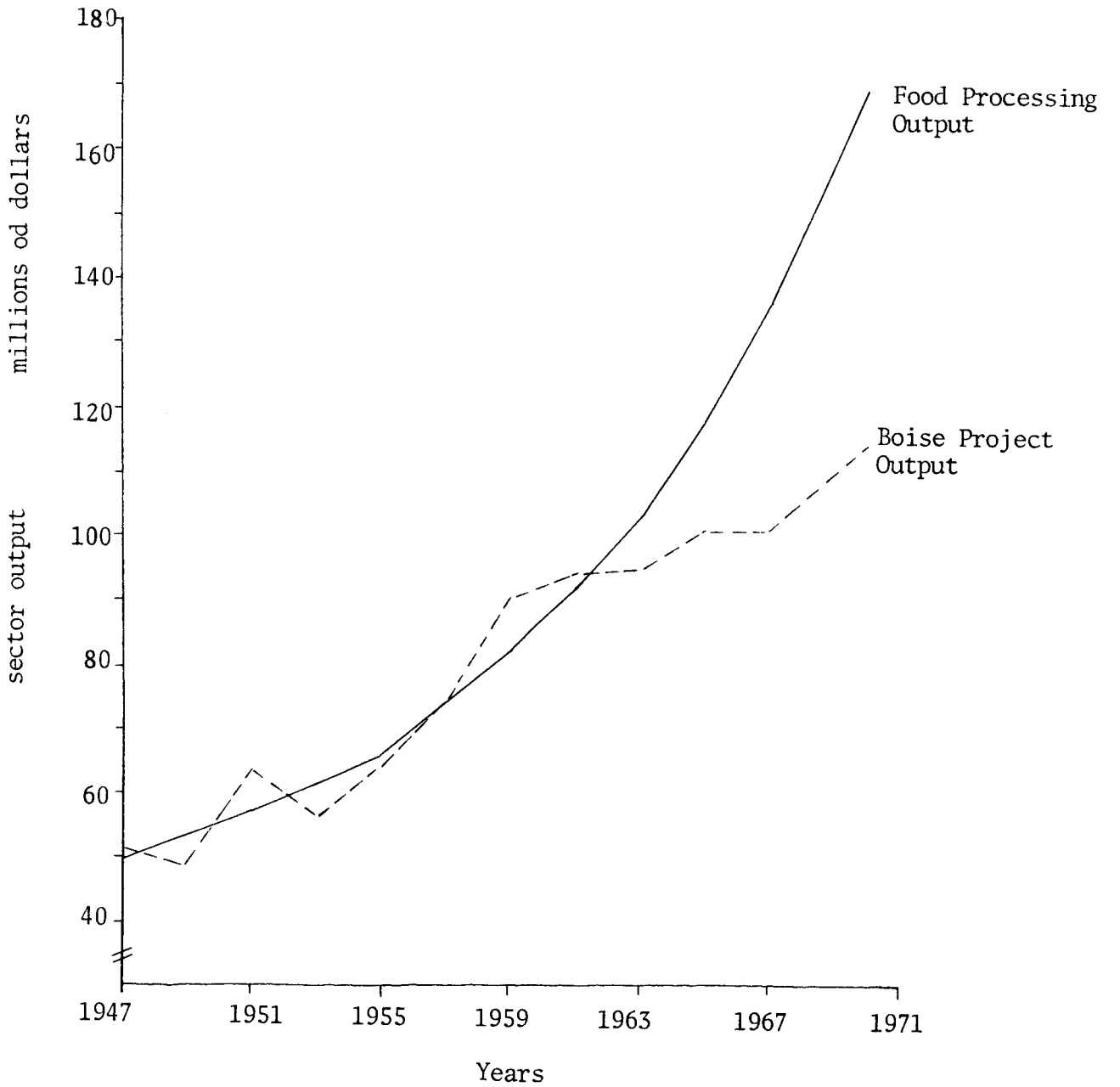


Figure 21. Total Boise Project and Food Processing Output, Idaho, 1910 - 1970.



SUMMARY

The Boise Irrigation Project of southern Idaho was built by the Bureau of Reclamation between 1910 and 1955. Whether or not one considers this project an economic success depends on the point in time when the question is asked. Prior to 1940 direct benefits (income) from the project were not always greater than costs and at one time (during the depression) they were negative. Since 1940, however, direct income impacts have increased to about $28 million per year (in 1970). This value-added figure is 40 percent of the total investment cost of the project ($69.1 million).

Secondary benefits from the Boise Project result from economic activity stimulated by project output. These benefits are associated with inputs purchased and output processing. Using a regional input-output table describing the Boise Region (Ada and Canyon counties) and the Rest of Idaho, secondary income impacts of the project were estimated. Analyses indicate that direct income impacts increased from $17.9 million in 1947 to $28.1 million in 1970, while indirect impacts increased from $45.9 million in 1947 to $99.1 million in 1970. In 1947 the total impact of the project was estimated to be 41.4 percent of regional income, while in 1970 the total impact of the project dropped to 22.1 percent of regional income. Both the region and the project have been expanding since 1946 - the former at a more rapid rate.

The influence that the Boise Project has had on the development of the local food processing industry is probably its greatest single economic contribution. By 1970 the food processing industry had considerably greater economic impact on regional income than did the Boise Project itself ($143.7 million compared to $127.2 million). The economic development described above for the Boise Project and the food processing industry is the result of many factors -- water resource development being just one of those many factors. Over the period of the Boise Project, 1910 to 1970, it appears that the annual income benefits ($28.1 million of direct income and $99.1 million of indirect income) will repay the project costs of $70 million in tax dollars many times. For a comparison annual costs of the Boise Project (including depreciation, capital costs, and operative and maintenance costs) were $5.5 million in 1970. The degree of economic development associated with the Boise Project would have been nearly impossible to forsee in 1910,

or for that matter during the 1930's; however, since 1940 the benefits (income) associated with the project have been increasing steadily.

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APPENDIX A

IDAHO SECTOR DATA

Table A-1.Employment for Idaho by major industrial sectors, 1947 - 1972.*
(thousands)

Year	Agricultural services	Mining	Contract construction	Manufac-turers	Trans. and utilities	Wholesale trade	Retail trade	F.I.R.E.	Services	Sub-total	Federal gov't	State gov't	Total
1947	**	5,2	7.1	21.1	24.6	6.7	25.4	2.9	14.4	107.4	5.9	17.9	131.2
1948	**	5.6	7.9	21.9	24.6	6.8	25.6	3.4	14.8	110.6	5.4	17.8	133.8
1949	**	5.2	9.0	20.6	24.7	6.6	26.0	3.6	14.8	109.9	5.6	18.8	134.3
1950	**	5.6	10.5	22.4	25.6	6.9	26.0	3.9	14.7	115.6	5.1	19.8	140.5
1951	0.5	5.5	12.4	24.6	26.9	7.3	27.3	3.9	15.2	123.6	5.5	19.6	148.7
1952	**	5.6	10.1	23.9	27.0	7.0	28.2	4.1	15.9	121.8	6.5	19.3	147.6
1953	0.4	4.8	8.7	24.3	26.2	7.0	27.9	4.4	16.3	120.0	6.4	18.9	145.3
1954	**	4.5	8.3	24.3	24.6	7.2	26.7	4.5	16.6	116.7	6.0	19.5	142.2
1955	**	4.4	8.7	25.8	25.1	7.7	27.6	4.7	17.2	121.2	5.8	20.5	147.5
1956	0.6	4.8	9.7	27.7	25.4	7.6	28.3	4.9	18.2	127.1	7.0	21.1	155.2
1957	**	4.7	10.4	25.8	25.7	7.6	28.7	5.1	19.6	127.6	7.6	22.3	157.5
1958	**	3.9	11.0	25.8	24.9	7.9	29.0	5.3	20.6	128.4	8.3	23.4	160.1
1959	0.5	3.6	10.0	28.5	24.5	8.4	30.4	5.6	21.1	132.6	8.1	24.0	164.7
1960	**	2.5	9.6	28.8	24.6	8.4	30.8	5.8	21.5	132.0	8.2	24.5	164.7
1961	**	3.3	10.4	29.9	23.6	8.4	30.7	5.9	21.8	134.0	8.7	25.7	168.4
1962	0.7	3.3	11.5	30.5	23.6	8.4	31.4	6.3	22.5	138.5	9.1	27.3	174.9
1963	**	3.2	8.7	30.4	23.5	8.6	31.8	6.6	23.4	136.2	9.4	28.4	174.0
1964	0.7	3.3	9.3	31.8	23.4	8.6	32.6	6.8	24.0	140.8	9.2	28.9	178.9
1965	0.7	3.4	11.4	33.3	23.7	8.8	34.3	7.1	25.6	148.6	9.6	30.0	188.2
1966	1.1	3.6	10.2	35.6	24.4	9.1	36.0	7.2	27.1	154.3	9.8	32.1	196.2
1967	1.0	3.3	9.8	35.3	24.1	9.2	36.0	7.3	28.5	154.5	9.9	34.4	198.8
1968	1.0	3.3	9.6	37.9	24.2	9.4	36.7	7.4	29.4	158.9	9.7	35.5	204.1
1969	1.0	3.6	10.4	39.9	24.7	9.6	38.3	7.6	31.0	166.1	9.8	37.0	212.9
1970	1.1	3.5	10.9	40.3	25.1	9.9	39.4	8.0	32.4	170.5	10.0	39.1	219.6
1971	1.2	3.4	11.2	41.2	25.6	11.2	41.3	8.5	34.5	178.0	10.1	41.2	229.3
1972	1.2	3.0	11.5	43.2	26.6	12.9	43.8	9.1	36.5	187.8	10.3	43.4	241.5

* Source: Employment & Earnings, States and Areas, 1939-1975, Department of Labor, Bureau of Labor Statistics, GPO, Washington, D.C.

** The data for these years for this sector are not available, consequently, the sub-total and total column do not contain this figure.

Table A-2. Major sources of personal income for Idaho by sectors, 1957 - 1973.*
(Millions of dollars)

Year	Farm	Government Dispersments			Mining Min	Contract construction	Manufac-turers	Wholesale trade	F.I.R.E.	Trans. and Comm.	Services	Other	Rent	Total
		Federal	State	Transfer Payments										
1957	169	34	68	71	27	76	128	162	29	82	91	2	103	1,042
1958	179	37	78	82	23	85	133	171	31	83	73	2	114	1,091
1959	174	37	84	91	22	73	154	188	34	87	108	2	130	1,184
1960	163	41	88	94	16	76	154	193	36	87	118	2	136	1,204
1961	148	46	94	107	21	89	159	194	37	88	124	2	129	1,238
1962	181	43	104	109	21	111	169	205	40	91	134	2	144	1,354
1963	172	50	109	114	22	72	178	210	42	94	139	2	164	1,367
1964	151	52	116	115	23	80	174	221	44	96	150	2	173	1,397
1965	254	57	126	124	25	106	202	236	49	93	170	8	211	1,661
1966	208	63	134	136	28	101	222	252	53	103	181	8	232	1,721
1967	222	67	150	160	27	100	236	258	56	104	198	9	238	1,825
1968	194	71	156	181	29	98	265	267	60	107	213	8	249	1,898
1969	277	77	178	195	32	113	297	290	65	116	230	9	270	2,149
1970	278	87	221	237	34	127	315	315	69	124	254	10	293	2,364
1971	289	96	250	283	33	137	336	346	77	142	277	11	315	2,592
1972	340	110	263	315	34	164	386	383	87	158	309	13	282	2,844
1973	560	120	277	359	34	193	441	433	101	179	338	13	310	2,828

* Source: Survey of Current Business, 1947-1974, Department of Commerce (BEA), GPO, Washington, D.C.

Table A-3. Estimated output values of various sectors based on available data, Idaho, 1947 - 1963.*
(Millions of dollars)

Years	Livestock	Crops	Mining	Construction	Wholesale/ retail trade	Service industries	Food and kindred products	Other manufac-turing	Trans and Comm.	Utilities	F.I.R.E.
1947	204	312	50	131	179	77	175	158	93	16	83
1948	233	298	51	130	197	78	179	195	101	17	94
1949	189	281	52	152	200	83	187	224	109	18	103
1950	200	224	54	179	205	90	190	250	116	18	114
1951	244	249	52	187	200	96	200	275	124	20	125
1952	219	290	51	190	215	106	205	300	130	23	135
1953	194	294	50	194	247	115	212	325	135	25	149
1954	195	259	49	198	250	122	224	345	140	27	160
1955	197	270	54	202	260	133	232	370	146	32	173
1956	220	293	61	236	287	146	245	387	150	37	187
1957	239	263	63	290	290	146	257	407	154	49	201**
1958	267	298	54	337	295	117	270	420	157	63	216
1959	282	297	51	278	300	173	287	437	160	59	235
1960	268	336	37	290	310	189	301	453	163	75	251
1961	275	319	49	339	340	198	324	475	166	83	270
1962	276	323	49	423	350	214	347	500	167	100	290
1963	272	368	51	275	375	222	362	535	168	116	316
1964	276	371	54	305	380	240	387	570	171	135	335
1965	305	431	58	404	395	272	413	615	174	155	360
1966	336	423	66	385	400	290	440	660	178	176	385
1967	318	410	63	381	410	317	475	710	183	200	410
1968	352	412	68	373	490	341	510	765	190	224	440
1969	390	493	75	430	540	368	549	830	197	245	470
1970	426	504	80	484	595	406	590	920	206	270	500
1971	496	545	77	522	646	443	650	988	217	300	535
1972	557	574	80	625	700	494	800	1,024	232	324	575
1973	640	918	80	735	770	540	960	1,045	254	350	620

* Sources: Survey of Current Business, Department of Commerce (BEA), GPO, Washinngton, D.C., 1947-1974.
Statistical Abstract, Department of Commerce, Bureau of the Census, GPO, Washington, D.C., 1947-1974.
see Appendix C for estimating methods used.

** Figures prior to 1958 do not include rent data due to unavailability.

APPENDIX B

Regional Economic Models--Boise Project

Regional Economic Models--Boise Project

Table B - 1. The gross flows in Idaho's economy, 1963 (Polenske).

Table B - 2. The gross flows in Idaho's economy, 1958 (Polenske).

Table B - 3. The gross flows in Idaho's economy, 1947 (Polenske).

Appendix B

Regional Economic Models--Boise Project

Purpose

One of the objectives for the Boise Project economic analysis is to evaluate the impact of the project on the region and the state of Idaho over time. Sufficient data to complete this task on a regional basis are not available from secondary sources even for one year, however, by using various sources of scattered information a reasonable amount of information is available to study Boise Project impacts on the state of Idaho since the second world war. Essentially, this analysis attempts to evaluate the economic impact of growing irrigated crops and generating electricity from the project and trying to determine how these products helped induce employment and income throughout the Idaho economy. Because farmers can produce irrigated crops and power is generated, farm inputs are purchased; farm income is spent for consumer goods; and farm products are processed, wholesaled, retailed, and exported. In addition, industry has access to power. These economic activities encourage economic growth and development for both individual counties and the state.

The major data problems encountered in accomplishing the above objectives were two fold. First, was to obtain gross output and income information by the major sectors in Idaho's economy. The second, was to obtain a model or models to represent the structure of Idaho's economy over time. The first problem was partially solved by projecting gross output or sales relationships from Census of Manufactures and Survey of Current Business publications (see Appendix C). The second problem was partially solved by using an input-output model developed by Karen R. Polenske for 51 regions in the United States (which includes the 50 states plus the District of Columbia), which she referred to as a multiregional input-output model. Polenske's system of input-output tables develops state models which must be consistent with each other and at the same time be consistent with economic activity in the United States as a whole. In addition, the methodology employed is well

documented and described in her book, State Estimates of Technology, 1963 (6). Two other input-output models have been developed for Idaho by separate authors, however, they have neither of the above advantages (7) (5).

What Economic Impacts?

Water resource development projects have long been felt to have had so-called secondary effects on the local and regional economy. For example, an irrigation project may not only increase irrigated crop production, but it also encourages growth of input firms, retail outlets, and perhaps the processing of some farm products for further remanufacture or export. When and if this happens, economic output increases, more people are employed, and incomes rise. While it is one thing to think and observe that these economic phenomenon occur, it is quite another problem to document and quantify exactly how much increased production, employment, and income are the result of or associated with a water resource development project. Another problem is assessing these impacts is that economic activity is very interdependent and consequently it is impossible to say that an irrigation project was the only cause of increased food processing in a region. In most cases, a number of reasons may be responsible for continued economic growth--access to raw materials is only one reason, transportation costs to potential markets may be one other. In any event, the measurement of secondary and induced impacts of water resource development projects is not easily accomplished. This research is only one step in accomplishing that goal.

Methodology -- Relevant Parameters

In order to attempt to evaluate the impacts of the Boise Project on the state of Idaho, it was desirable to determine the direct output of the project; the economic interrelationships that exist in the region and the state; state income and output by sector; and to be able to obtain this information for the duration of the project. Information about the direct impacts of the project were available from 1910 to 1970, however, data concerning the structure of the regional and stage economies were only available from 1946 to 1970.

Direct cost and benefits from the Boise Project itself helped to establish how the project was related to the Idaho economy through the purchase of farm inputs and the sale of products either for use as inputs in other production processes or for consumption within the state or sale outside Idaho. Any of these activities might stimulate other economic development in Idaho. Since food processing is one of the main manufacturing industries in Idaho, it is of particular interest to note how the Boise Project is economically related to this sector, and the impact on income and employment.

It was found that the technical coefficients (input-output ratios) for the major sectors in the Idaho economy were not static, and that most parameters (output, income, and employment) were growing over time. Consequently, it was necessary to develop an economic model that both adapted to the observed changes and represented the Boise Project, the region, and the state over time. Initially, this was accomplished by projecting the changes in the input-output coefficients based on Polenske's three models. Since sector output and income information was not available for all years, a constant relationship was assumed to occur between the two variables over the period studied, 1947-1970. Actual sector data on these variables would have improved the results in terms of evaluated impacts.

Idaho Input-Output Models

Three separate input-output tables were used to represent Idaho's economy in 1947, 1958, and 1963. They were developed from Polenske's multiregional input-output study and are shown in Appendix B's tables 1, 2, and 3. Initially each of these tables included 87 sectors, however, to reduce programming problems in the dynamic analysis the number of sectors was subsequently reduced to the 13 endogenous sectors found in the appendix tables. Polenske's input-output tables show the structure of Idaho's economy in each year and allows for changes in input-output (technical coefficients). Governmental activities in these models are minimal and coefficients only reflect activities in which a non-service type product is produced.

Briefly, the advantages of using Polenske's models for Idaho were as follows:

1) There were three models for different years available, all using the same sector format.
2) All tables in the original multiregional input-output model had to balance in terms of the national tables.
3) Polenske's models allowed for structural change among the sectors.
4) Dynamic programming with three input-output tables provided many more checks and balances than attempting to use only one model.
5) Polenkse's procedures were well documented.
6) By attempting to make the input-output models dynamic over time and including the Boise Project as both a sector and a region within the models, the relationships between the project and the region become more apparent over time, and help reveal project impacts.
7) By incorporating the structural changes in the Idaho economy along with knowing sector outputs, a dynamic input-output model could be developed and evaluated as to its success in estimating gross output.

Table B-1. The gross flows in Idaho's economy, 1963 (Polenske).
(dollars x 10^6)

Purchases/Sales	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Sales to Idaho Industries	Idaho Personal Consumption	Exports	Total Final Demand	Total Sales
1. Livestock Agriculture (1)	79.387	24.607	.001	83.886	.006	.005	.002	.008	.005	.015	.056	.001	-0-	187.979	42.343	40.740	83.083	271.062
2. Crop Agriculture (2)	127.139	28.270	.004	39.047	37.631	.016	.006	.348	.139	.406	.106	.002	.008	233.122	21.195	169.836	191.031	424.153
3. Mining (5-10)	.054	-0-	8.214	.270	23.561	.054	5.458	6.160	-0-	-0-	-0-	.162	.216	44.149	-0-	9.889	9.889	54,038
4. Food Processing (14)	15.539	.925	.095	72.055	1.286	.398	.117	.488	.234	.828	1.417	.044	.014	93.440	21.728	268.725	290.453	383.893
5. Other Manufacturing (13, 16-64)	4.696	46.157	9.444	33.001	175.825	8.432	1.259	85.235	3.275	10.704	16.106	.231	.850	395.215	30.085	101.802	131.387	527.102
6. Transportation and Communications (65-67)	9.492	6.046	.654	14.400	16.722	12.065	2.716	10.260	2.220	6.925	4.712	1.897	.440	88.549	79.937	-0-	79.937	168.486
7. Utilities (68)	1.048	12.686	1.670	2.744	10.180	1.185	21.813	.896	1.409	7.055	3.417	.117	2.617	66.837	49.558	-0-	49.558	116.395
8. Construction (11, 12)	1.481	4.325	.571	.797	2.242	5.700	3.507	.073	19.457	1.358	1.720	.179	4.881	46.291	229.235	-0-	229.235	275.526
9. Fire (70, 71)	4.825	27.087	2.608	3.967	6.924	6.269	1.512	3.231	22.250	27.066	14.023	.422	.572	120.756	194.872	-0-	194.872	315.628
10. Trade (69)	10.708	12.355	.397	14.333	10.614	3.707	.679	22.475	1.542	5.942	9.299	.120	.148	92.319	283.260	-0-	283.260	375.579
11. Services (72-77)	6.630	19.917	.876	11.813	8.903	7.600	2.218	11.764	7.635	21.531	12.455	.383	1.017	112.742	109.252	-0-	109,252	221.994
12. Federal Government (78)	.048	.083	.062	.239	.425	.397	.320	.079	2.310	1.681	2.082	.006	.025	7.757	8.553	-0-	8.553	16.310
13. State Government (79)	.007	.017	.046	.138	.046	.203	.030	.150	.032	.228	.116	.006	.010	1.029	25.986	-0-	25.986	27.015
Total Idaho Industry Purchases	261.054	182.475	24.642	276.690	294.365	46.031	39.637	141.167	60.508	83.739	65.509	3.570	10.798	1490.185	1,096.004	590.992	1,686.996	3,177.181
Imports	1.003	13.055	3.585	17.550	33.397	7.458	22.024	7.375	47.118	11.776	23.009	.766	.348	188.464	283.152	--	283.152	471.616
Depletion	-0-	1.430	.359	.043	5.330	-0-	-0-	.104	-0-	.023	.103	-0-	-0-	7.392	-0-	--	-0-	7.392
Value Added	9.005	227.193	25.452	89.610	194.010	114.997	54.734	126.880	208.002	280.041	133.373	11.974	15.860	1,491.140	165.644	--	165.644	1,656.780
Total Purchases	271.062	424.153	54.038	383.893	527.102	168.486	116.395	275.526	315.628	375.579	221.994	16.310	27.015	3,177.181	1,544.800	590.992	2,135.792	5,312.973

Table B-2. The gross flows in Idaho's economy, 1958 (Polenske).
(dollars x 10^6)

Purchases/Sales	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Sales to Idaho Industries	Idaho Personal Consumption	Exports	Total Final Demand	Total Sales
1. Livestock Agriculture (1)	78.441	17.400	.001	58.419	.007	.005	.001	.009	.004	.012	.042	.001	-0-	154.342	57.840	55.650	113.490	267.832
2. Crop Agriculture (2, 3, 4)	125.624	20.427	.003	27.193	31.205	.014	.003	.456	.099	.319	.094	.002	.003	205.442	10.638	85.465	96.153	301.595
3. Mining (5-10)	.026	.019	7.929	.251	22.467	.026	5.207	5.855	.001	-0-	.024	.153	.188	42.146	-0-	9.422	9.422	51.568
4. Food Processing (14)	15.354	.598	.084	50.160	1.199	.363	.063	.587	.181	.651	1.138	.036	.004	70,438	14.730	182.178	196.908	267.346
5. Other Manufacturing (13, 16-64)	4.640	32.882	8.154	22.855	140.390	7.595	.679	106.431	2.467	8.419	11.727	.194	.350	346,783	16.845	57.003	73.848	420.631
6. Transportation and Communications (65-67)	9.379	4.306	.574	10.028	14.124	10.760	1.460	12.715	1.707	5.447	3.327	1.562	.182	75.571	81.340	-0-	81.340	156.911
7. Utilities (68)	1.036	9.161	1.418	1.911	7.706	1.131	11.728	1.065	1.089	5.549	2.753	.147	1.082	45.776	16.803	-0-	16.803	62.579
8. Construction (11, 12)	1.463	3.124	.472	.555	1.873	5.292	1.886	.087	12.793	1.068	1.670	.096	2.018	32.397	305.309	-0-	305.309	337.706
9. Fire (70, 71)	4.767	19.475	2.535	2.762	5.595	5.759	.813	3.877	16.367	21.288	10.996	.348	.236	94.818	121.706	-0-	121.706	216.524
10. Trade (69)	10.580	8.844	.367	9.982	9.238	3.359	.365	27.420	1.115	4.674	6.802	.099	.061	82.906	212.499	-0-	212.490	295.405
11. Services (72-77)	6.550	14.243	.829	8.226	7.944	6.719	1.193	14.967	5.814	16.935	8.810	.315	.421	92.966	66.241	-0-	66.241	159.207
12. Federal Government (78)	.047	.059	.057	.166	.340	.390	.172	.094	1.712	1.322	1.051	.005	.010	5.425	8.001	-0-	8.001	13.426
13. State Government (79)	.007	.012	.038	.096	.040	.185	.016	.185	.025	.179	.089	.005	.004	.881	10.288	-0-	10.288	11.169
SUBTOTAL	257,914	130.550	22.461	192,624	242,128	41,598	23.586	173.748	43.523	65.863	48.523	2. 963	4.559	1,249.891	922.290	389.718	1,312.008	2,561.899
14. Imports	1.020	6.997	5.602	12.286	19.740	6.784	9.566	10.967	30.992	9.264	10.813	.606	.050	124.687	238.268	--	238.152	362.839
15. Depletion	-0-	1.038	.703	.030	3.622	-0-	-0-	.137	-0-	.018	.077	-0-	-0-	5.625	--	--	-0-	5.625
16. Value Added	8.898	163.010	22.802	62.406	155.141	108.529	29.427	152.854	142.158	220.260	99.794	9.857	6,560	1,181.696	139.394	--	139.394	1,321.050
TOTAL	267.832	301,595	51.568	267.346	420,631	156,911	62,579	337.706	216.524	295.405	159.207	13.426	11.169	2,561.899	1,299.952	--	1,689.554	4,251,453

Table B-3. The gross flows in Idaho's economy, 1947 (Polenske).
(dollars x 10^6)

Purchases/Sales	1	2	3	4	5	6	7	8	9	10	11	12	13	Sub-Total	Idaho Personal Consumption	Exports	Total Final Demand	Total Sales
1. Livestock Agriculture (1)	60.206	18.368	.001	39.158	.001	.002	-0-	.004	.001	.007	.033	-0-	-0-	117.781	44,742	43,047	87.769	205.570
2. Crop Agriculture (2, 3, 4)	96.421	21.229	.004	18.227	12.690	.008	.001	.156	.037	.193	.045	.001	.001	149.013	18.083	144.924	163.007	312.020
3. Mining (5-10)	.015	.019	9.930	.168	7.749	.018	1.363	2.210	-0-	-0-	.012	.056	.082	21.622	-0-	27.825	27.825	49.447
4. Food Processing (14)	11.785	.372	.090	33.635	.246	.216	.016	.236	.060	.394	.564	.013	.002	47.629	9.843	121.730	131.573	179.202
5. Other Manufacturing (13, 16-64)	2.353	22.676	6.216	10.122	33.366	3.422	.125	26.493	.553	3.368	4.197	.046	.100	113.037	10.215	34.586	44.801	157.838
6. Transportation and Communications (65-67)	7.199	4.484	.599	6.722	4.408	7.394	.382	4.857	.564	3.299	1.736	.575	.079	42.298	50.530	-0-	50.530	92.828
7. Utilities (68)	.290	3.562	.617	.468	.914	.220	1.120	.160	.130	1.227	.497	.020	.172	9.397	6.974	-0-	6.974	16.371
8. Construction (11, 12)	1.123	3.326	.568	.372	.533	3.269	.493	.036	5.165	.647	.839	.035	.877	17.283	114.323	-0-	114.523	131.606
9. Fire (70, 71)	3.659	20.695	2.453	1.852	2.177	3.586	.213	1.569	5.726	12.894	5.934	.127	.103	60.988	21.866	-0-	21.866	82.854
10. Trade (69)	8.121	9.153	.299	6.691	2.847	2.209	.096	10.775	.399	2.831	3.653	.036	.027	47.137	131.789	-0-	131.789	178.926
11. Services (72-77)	5.029	15.116	.765	5.514	3.051	3.890	.311	5.449	1.944	10.253	5.728	.116	.182	57.352	26.818	-0-	26.818	84.170
12. Federal Government (78)	.036	.062	.057	.112	.155	.192	.045	.039	.594	.801	.500	.002	.004	2.599	2.343	-0-	2.343	4.942
13. State Government (79)	.005	.012	.040	.064	.005	.121	.004	.071	.009	.108	.045	.002	.002	.489	4.367	-0-	4.367	4.856
SUBTOTAL	196.242	119.074	21.639	123.105	68.142	24.547	4.169	52.055	15.182	36.027	23.783	1.029	1.631	686.625	441.893	372.112	814.005	1,500.630
14. Imports	2.499	21.624	5.503	14.246	27.184	6.670	4.504	18.067	13.016	9.477	8.459	.285	.373	131.907	114.160	--	114.160	246.067
15. Depletion	-0-	1.074	.276	.020	1.371	-0-	-0-	.047	-0-	.013	.042	-0-	-0-	2.841	-0-	--	-0-	2.841
16. Value Added	6.829	170.248	22.029	41.831	61.141	61.611	7.698	61.437	54.656	133.413	51.886	3.628	2.852	679.257	66.787	--	66.787	746.044
TOTAL	205.570	312.020	49.447	179.202	157.838	92.828	16.371	131.606	82.854	178.926	84.170	4.942	4.856	1,500.630	622.840	--	994.952	2,492.741

APPENDIX C

ESTIMATED OUTPUT BY ECONOMIC SECTOR, 1947-1974

ESTIMATED OUTPUT BY ECONOMIC SECTOR, IDAHO, 1947 - 1974

Introduction

For purposes of evaluating the impact of the Boise Project on the State of Idaho over time it was necessary to determine what economic changes had taken place in Idaho from 1947 to 1974. For input-output purposes the state was divided into 11 non-governmental and 2 government sectors. Since the government sectors only accounted for direct economic services (such as the postal service) its economic impact was small and was assumed to increase in direct proportion to the gross Idaho product. For the 11 non-governmental it was necessary to determine changes in total output over time. Unfortunately, data of the type needed were not always available; however, by investigating a number of sources it was possible to at least estimate total sector output for these 11 sectors. Sources of data available were not always consistent between sectors nor did the data available always meet input-output requirements. For these and other reasons, it was usually necessary to estimate total output or gross margins from what was evaluated to be the most reliable source of information. The following briefly recapitulates the data, sources used, and the resulting output estimates for each sector.

Livestock Agriculture - Sector 1

The U.S. Department of Agriculture publishes consistent and reliable data for livestock agriculture. The data series on cash receipts from livestock and livestock products was used for the estimation of total output. Total livestock output was somewhat greater than what the data on cash receipts showed because some livestock products were used for home consumption and others were used to replace and expand herds. Estimates of total livestock output were made using cash receipts and expanding these data by a margin which was consistent with estimates by Polenske (6) and Famure (1). Table C-1 and Figure C-1 summarize cash receipts and estimates of total output for the livestock sector. Estimates of total output are simply cash receipts times the percentage difference of Polenske and Famure's estimates of total output.

Crop Agriculture - Sector 2

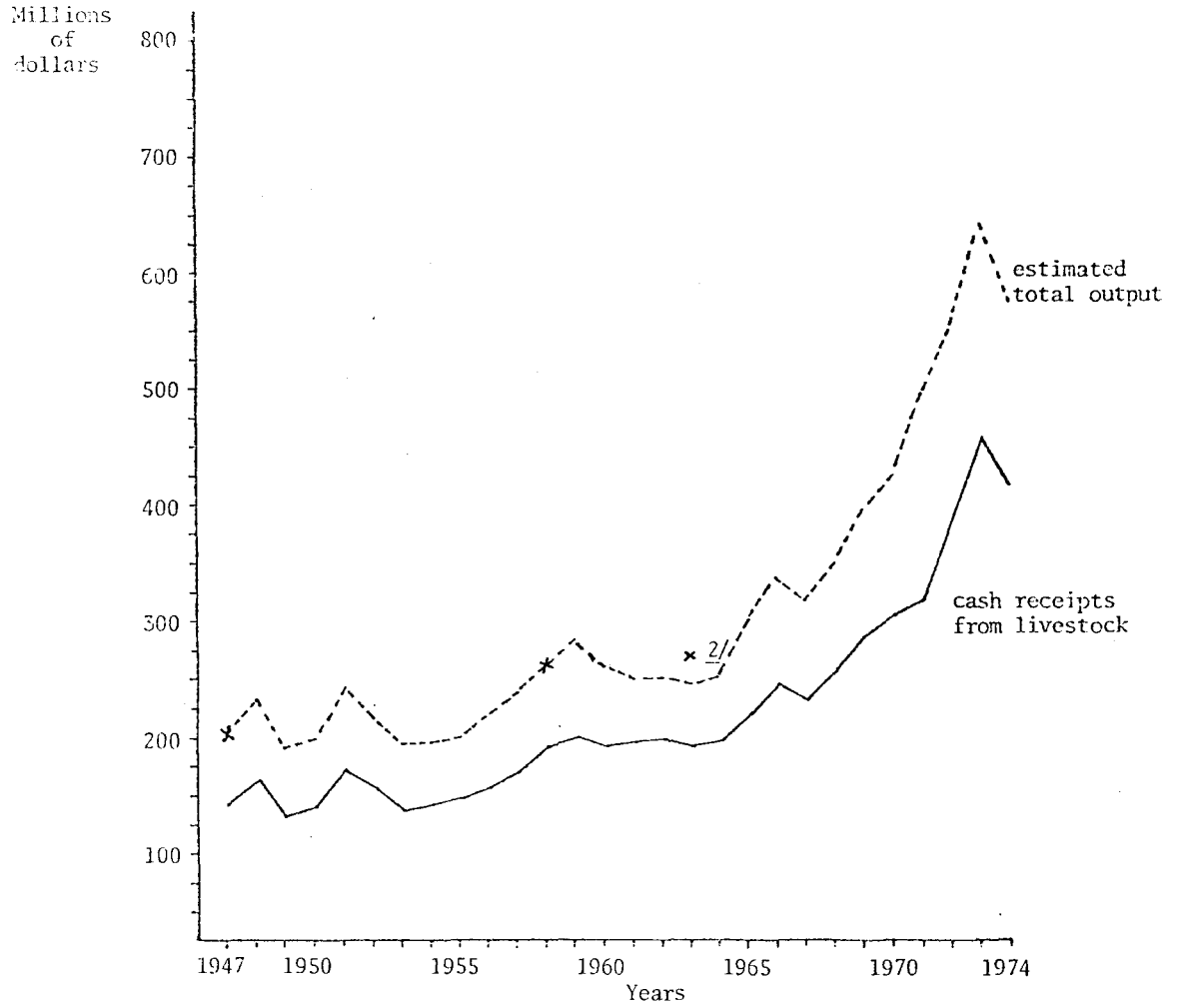
Total output of crop agriculture was estimated from cash receipts from crops data series published by the U.S. Department of Agriculture.

Table C-1. Estimates of total output for the livestock sector, Idaho, 1947 - 1974

Year	Cash Receipts from livestock and livestock products*	Estimated total output
47	$ 146 x 10^6	$ 204 x 10^6
48	167	233
49	135	189
50	143	200
51	174	244
52	157	219
53	139	194
54	140	195
55	141	197
56	157	220
57	171	239
58	191	267
59	201	282
60	192	268
61	197	275
62	198	276
63	194	272
64	197	276
65	218	305
66	240	336
67	227	318
68	252	352
69	279	390
70	304	426
71	321	496
72	398	557
73	457	640
74	411	575

* Source: USDA Bureau of Agricultural Economics. Cash Receipts and Value of Home Consumption by States, 1924-1951 (GPO, 1952).

Figure C-1. Estimated value of total output for livestock agriculture sector, Idaho, 1947-1974.[1]



[1]/USDA Bureau of Agricultural Economics, Cash Receipts & Value of Home Consumption by States, 1924-1951 (GPO, 1952).

[2]/Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

This data series has been consistently estimated over the 1947 to 1974 period. Cash receipts from crops understated the real value of total crop output because some crops never were sold directly in the market place (most hay and feed grains are fed in the same farms on which they are grown). For this reason, Polenske's (6) and Famure's (1) estimates of total crop output in 1947, 1958, 1963, and 1970 were averaged and the percentage difference was used to estimate the value of total crop output for each year. These data were then consistent and available to trace output expansion for input-output use. In order to utilize the input-output framework it was necessary to account for total crop (resource) use and not just that which was sold on the open market. Feed resources not marketed represented economic activity which did not show up in regular data series. This accounting problem was even more acute for range and pasture resources. Output estimates for crop agriculture are found in Table C-2 and Figure C-2.

Mining - Sector 3

Mineral production and mining were another resource industry in which it was difficult to establish market values and to determine exactly when mining should begin and end and where manufacturing or processing should begin. These ambiguities made it somewhat more difficult to establish the value of total output for mining in any one year. Data were available from the Business Statistics U.S. Department of Commerce (16) and showed the income from mining in Idaho from 1948 to 1973. From the above data and Polenske's estimates of total output for 1947, 1958, and 1963, total output estimates for the period were somewhat lower than the total value of the mineral industry in Idaho series published in The Mineral Yearbook (18); however, these later estimates obviously included some processing along with mining. Table C-3 and Figure C-3 present the mining income data and estimates total output utilized in this study.

Food Processing - Sector 4

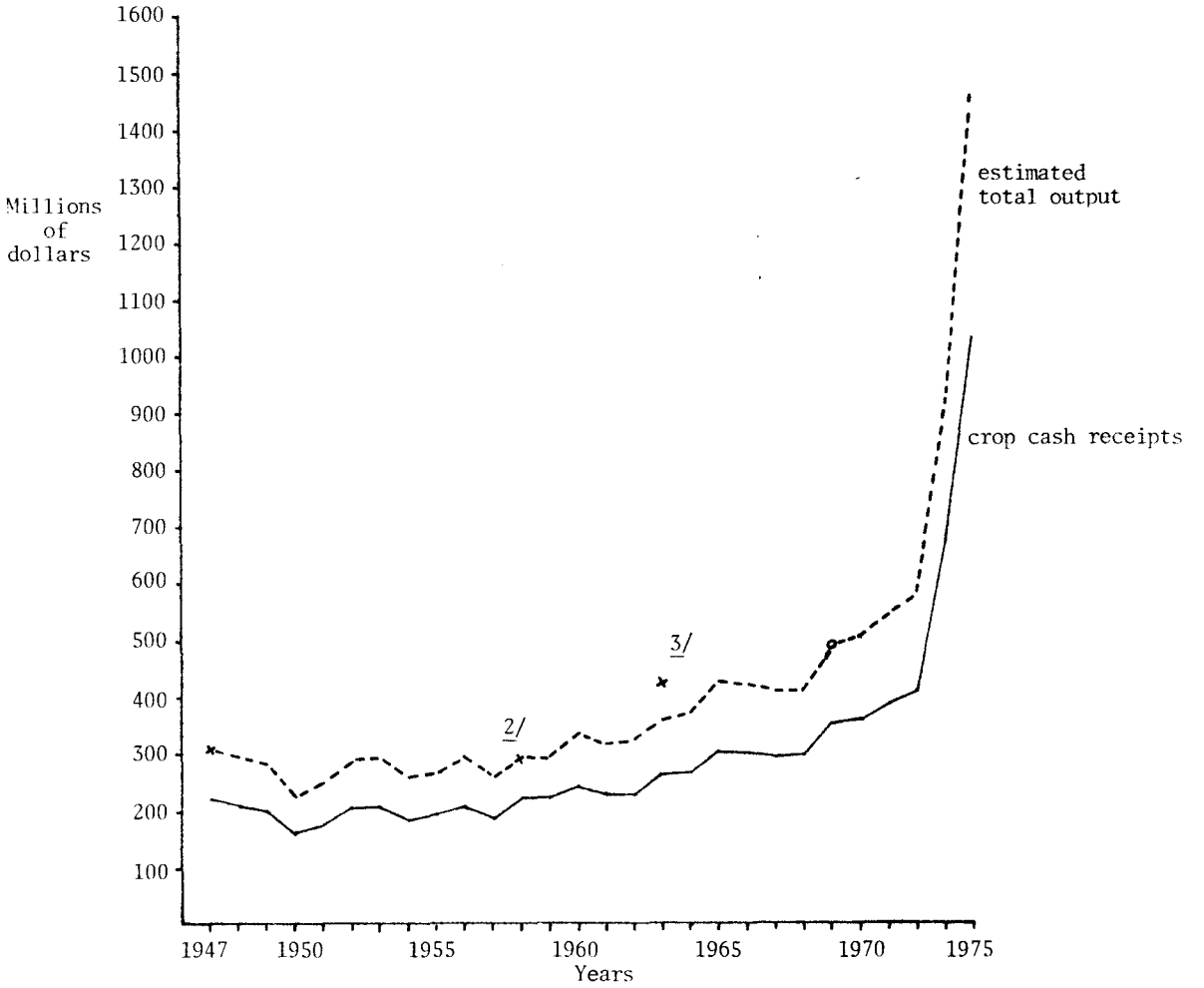
Data appropriate for the food processing sector was obtained from the Annual Survey of Manufacturers (15) series on value of shipments . Value added by the food and kindred products industry was obviously related to the value of shipment data. Value of shipment data were only available for 1967 to 1972 while value-added data were available from 1947 through 1972. To estimate total output for the food processing sector, Polenske's

Table C-2. Estimates of total output for the crop agriculture sector, Idaho, 1947 - 1974.

Year	Cash receipts from crops	Estimated total output
47	$ 222 x 10^6	$ 312 x 10^6
48	213	298
49	201	281
50	160	224
51	178	249
52	206	290
53	210	294
54	185	259
55	193	270
56	209	293
57	188	263
58	213	298
59	212	297
60	240	336
61	228	319
62	231	323
63	263	368
64	265	371
65	308	431
66	302	423
67	293	410
68	294	412
69	352	493
70	360	504
71	389	545
72	410	574
73	659	918
74	731	1019

* Source: USDA Bureau of Agricultural Economics. Cash Receipts and Value of Home Consumption by States, 1924-1951 (GPO, 1952)

Figure C-2. Estimated value of total output for crop agriculture sector, Idaho, 1947-1974.[1/]



[1/] USDA Bureau of Agricultural Economics. Cash Receipts and Value of Home Consumption by States, 1924-1951 (GPO, 1952).

[2/] Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

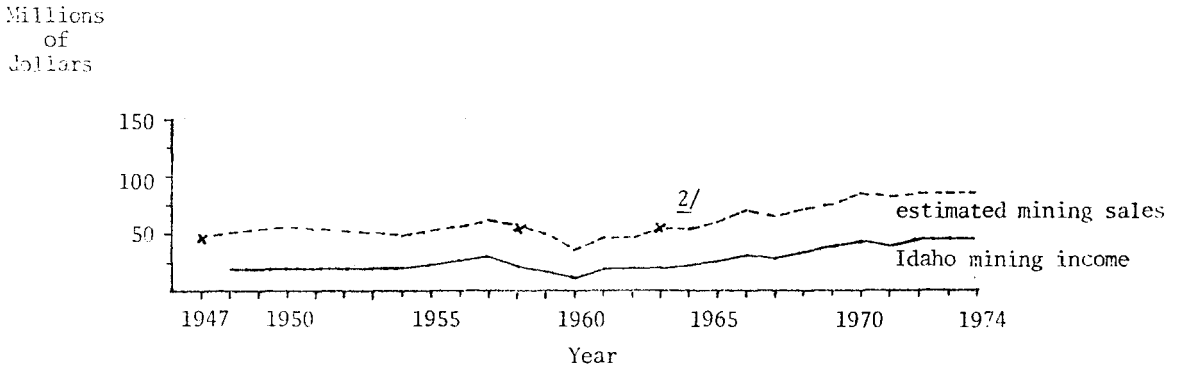
[3/] Olowole M. Famure, "The Income Contributions of Agricultural Commodities to Idaho's Economy and the Economic Interrelationships in Agriculture: An Input-Output Model." Unpublished Master's Thesis, Department of Agricultural Economics, University of Idaho.

Table C-3. Estimates of total output for the mining sector, Idaho, 1947 - 1974

Year	Idaho mining income*	Estimated total output
47	$ -- x 10^6	$ 50 x 10^6
48	22	51
49	--	52
50	23	54
51	--	52
52	--	51
53	--	50
54	21	49
55	23	54
56	26	61
57	27	63
58	23	54
59	22	51
60	16	37
61	21	49
62	21	49
63	22	51
64	23	54
65	25	58
66	28	66
67	27	63
68	29	68
69	32	75
70	34	80
71	33	77
72	34	80
73	34	80
74	34	80

* Source: U.S. Bureau of the Census. Survey of Current Business. 54, No.8:47-74.

Figure C-3. Estimated value of total output for mining sector, Idaho, 1947-1974.[1/]



[1/] U.S. Bureau of the Census. Survey of Current Business. 54, No. 8:47-74.

[2/] X=Polenske figures. Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

(6) estimates for 1947, 1958, and 1963 plus the value of shipments from 1967 to 1972 were utilized. Figure C-4 shows Polenske's estimates and value of shipment data along with value added by the food and kindred products industry. Table C-4 presents the data utilized in making estimates of total output for the food processing sector.

Other Manufacturing - Sector 5

Similar data were available for the other manufacturing sector as for food processing (where: other manufacturing is total manufacturing minus food and kindred products manufacturing). Here again, the best data series available were value of shipments from 1964 to 1972 (15), Polenske's estimates (6), and value-added data from the Business Statistics (16). Polenske's estimates for 1947, 1958, and 1963 apparently are related to the value of shipments data from 1964 to 1972. Figure C-5 and Table C-5 present the data base and estimates for total output. While these estimates of total output are obviously not as accurate as actual census data would be, they are probably accurate within 2 percent.

Transportation and Communications - Sector 6

Data for the transportation and communications sector were very difficult to obtain for a state such as Idaho. The closest information available relevant to this sector was income generated by transportation available from the Business Statistics (16) for the years 1956 to 1973. To estimate total output for the transportation and communications sector Polenske's (6) estimates for 1947, 1958, and 1963 were extrapolated to 1974 based on the slope of the line established from income generated by transportation data. See Table C-6 and Figure C-6 for the data upon which these estimates were based.

Utilities - Sector 7

For the utilities sector, operating revenue data were available from 1956 to 1972 except for 1958 to 1960 (4). When comparing Polenske's estimates of total output for 1947, 1958, and 1963 it became apparent that the two sets of data were on very different levels. Operating revenues may have included some double counting if gas or electricity was sold between utilities within Idaho and then resold to the public, thus resulting in inflated values when operating revenues were used as estimates for total output. To avoid this potential problem an extrapolation was made from

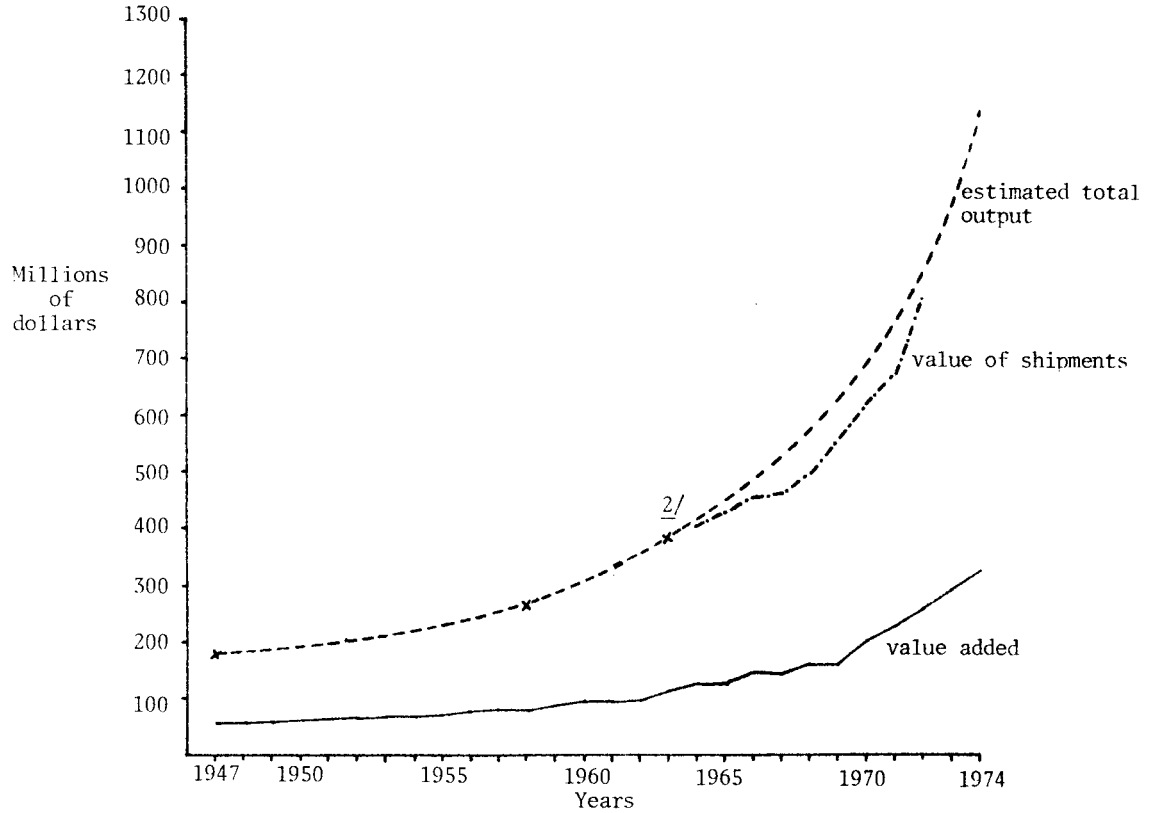
Table C-4. Estimates of total output for the food processing sector, Idaho, 1947 - 1974

Year	Value of shipments [1]	Estimated total output
47	$ 179 [2] x 10^6	$ 175 x 10^6
48	180	179
49	187	187
50	200	190
51	210	200
52	217	205
53	225	212
54	232	224
55	240	232
56	250	245
57	263	257
58	267 [2]	270
59	288	287
60	312	301
61	337	324
62	380	347
63	384 [2]	362
64	403	387
65	428	413
66	454	440
67	461	475
68	497	510
69	558	549
70	621	590
71	673	650
72	804	800
73	960	960
74	1,142	1,142

[1] U.S. Bureau of the Census. Annual Survey of Manufacturers, 1947-1972.

[2] Karem R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

Figure C-4. Estimated value of total output for food processing sector, Idaho, 1947-1974.[1/]



[1/] U.S. Bureau of the Census. Annual Survey of Manufacturers, 1947-1972.

[2/] Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

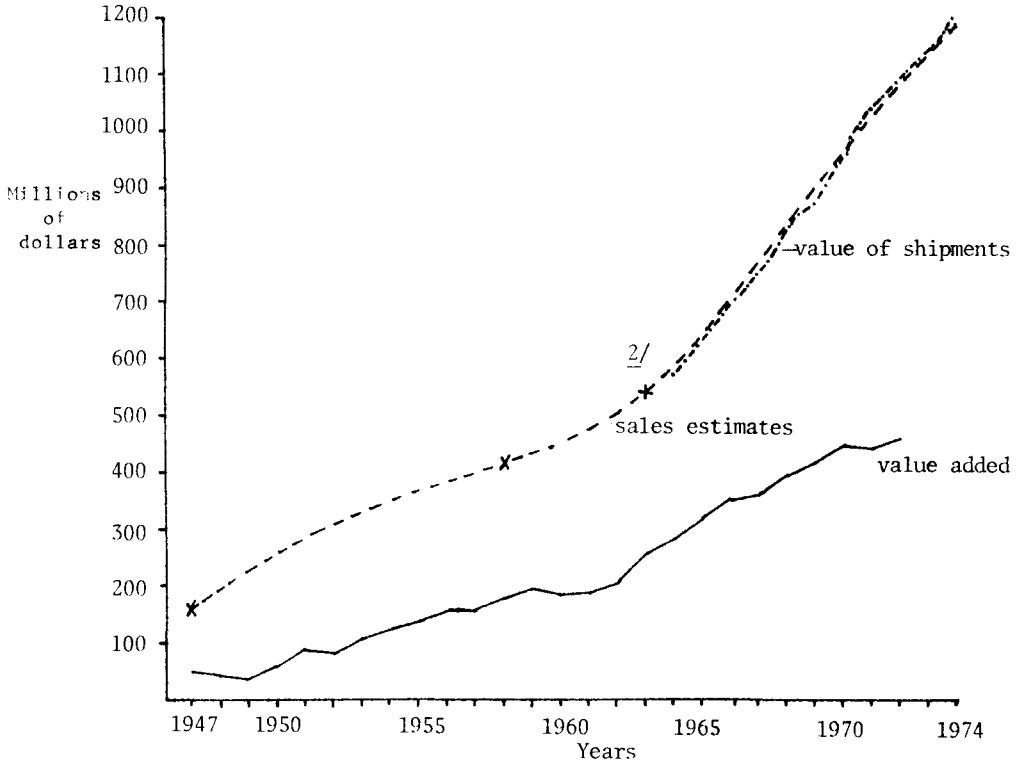
Table C-5. Estimates of total output for other manufacturing sector, Idaho, 1947 - 1974

Year	Value of shipments [1]	Estimated total output
47	$ 158 [2] x 10^6	$ 158 x 10^6
48	---	195
49	---	224
50	---	250
51	---	275
52	---	300
53	---	325
54	---	345
55	---	370
56	---	387
57	---	407
58	421 [2]	420
59	---	437
60	---	453
61	---	475
62	---	500
63	527 [2]	535
64	571	570
65	634	615
66	704	660
67	764	710
68	840	765
69	874	830
70	953	920
71	988	988
72	1,017	1,024
73	1,048	1,045
74	1,079	1,065

[1] U.S. Bureau of the Census. Annual Survey of Manufacturers, 1947-1972.

[2] Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

Figure C-5. Estimated value of total output for other manufacturing sector, Idaho, 1947-1974.[1/]



[1/] U.S. Bureau of the Census. Annual Survey of Manufacturers, 1947-1972.

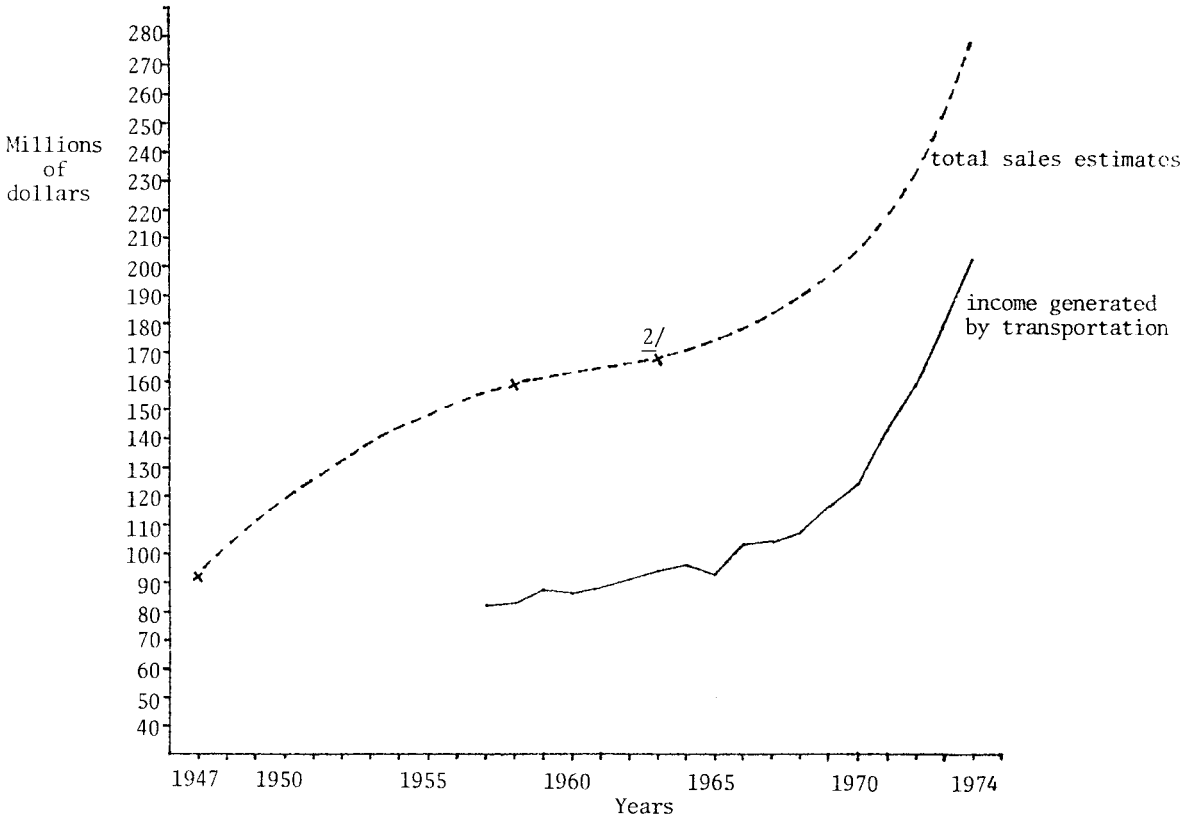
[2/] Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

Table C-6. Estimates of total output for transportation and communications sector, Idaho, 1947 - 1974

Year	Income generated by transportation*	Estimated total output
47	$ --- x 10^6	$ 93 x 10^6
48	---	101
49	---	109
50	---	116
51	---	124
52	---	130
53	---	135
54	---	140
55	---	146
56	---	150
57	82	154
58	83	157
59	87	160
60	87	163
61	88	166
62	91	167
63	94	168
64	96	171
65	93	174
66	103	178
67	104	183
68	107	190
69	116	197
70	124	206
71	142	217
72	158	232
73	179	254
74	202	278

* Source: U.S. Bureau of the Census. Survey of Current Business. 54, No. 8:47-74

Figure C-6. Estimated value of total output for transportation and communications sector, Idaho, 1947-1974.[1/]



[1/] U.S. Bureau of the Census. Survey of Current Business, 54, No. 8:47-74.

[2/] X=Polenske figures. Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

Polenske's data for 1947, 1958, and 1963 using the slope of the data implied by the operating revenue data to estimate total output for utilities. Table C-7 and Figure C-7 summarize these relationships.

Construction - Sector 8

Construction data for the state of Idaho were also scarce. Total receipts from contract construction were available from 1956 to 1972, but were obviously incomplete insofar as total construction was concerned. Data were available from 1949 to 1972 on the actual income earned from construction (14), consequently this information coupled with Polenske's (6) estimates for total sales in 1947, 1958, and 1963 were utilized to estimate total output from construction for the period 1947 to 1974. Since the construction sector tends to respond to business conditions more readily than other sectors these estimates probably contain the greatest relative error, although there is little to compare with to determine accuracy. Table C-8 and Figure C-8 show the data base and estimates of construction output.

Finance, Insurance, Real Estate - Sector 9

Direct data series on total output for the finance, insurance, and real estate sector were not available. It was found, however, that when total business receipts plus rent data were combined, the total was closely related to the estimates by Polenske (6) for 1947, 1958, and 1963. Consequently, the slope of the line implied by totaling business receipts plus rent were used to estimate total output for sector 9 (FIRE) (17). This procedure tends to smooth out short run fluctuations but should represent long run trends fairly well. Table C-9 and Figure C-9 summarize the estimating procedure used for finance, insurance, and real estate sector.

Wholesale and Retail Trade - Sector 10

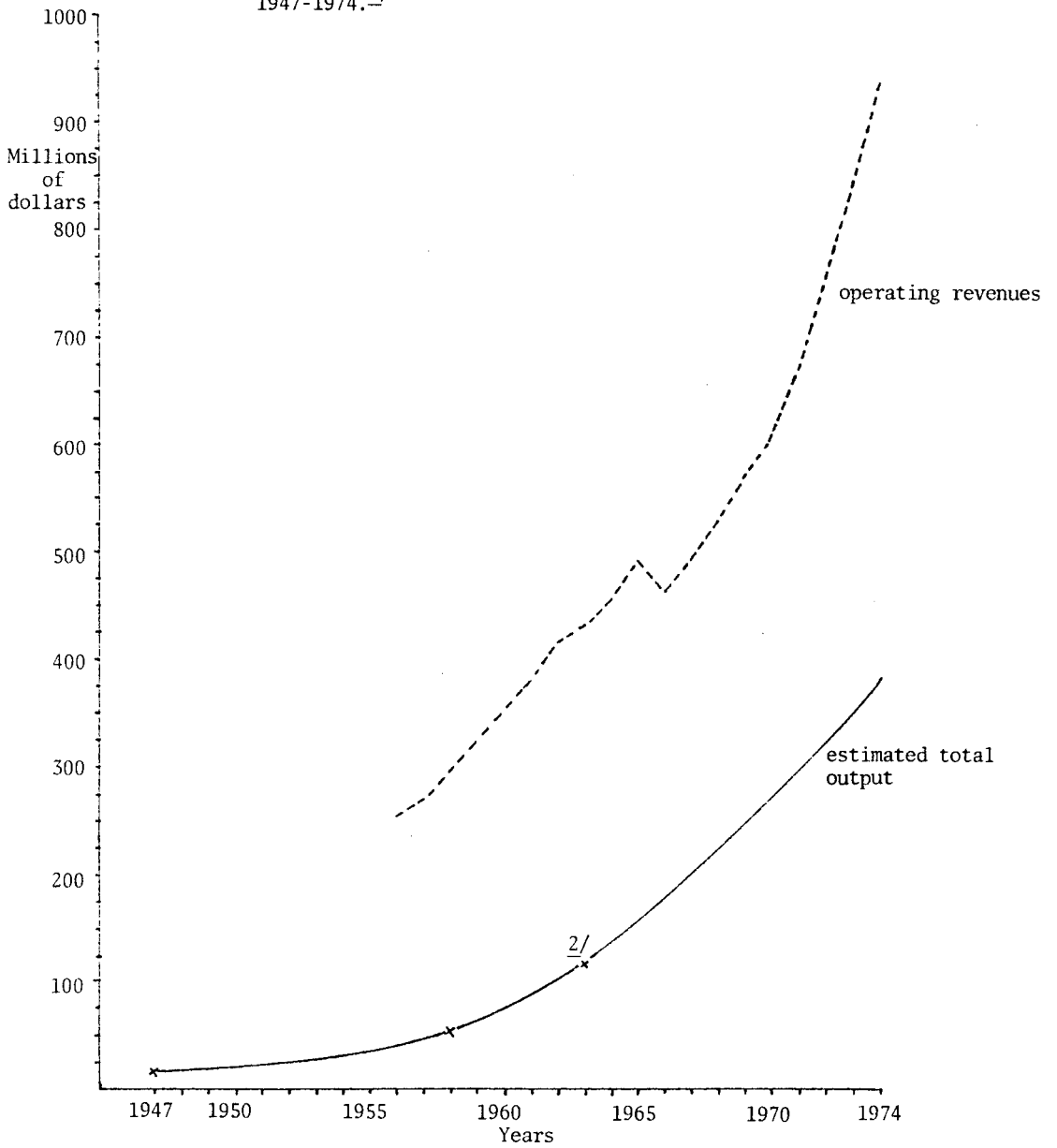
To avoid double counting problems gross margins are utilized in input-output tables to represent total output for the trade sectors. Income data from the wholesale and retail trade sector were available since 1948 and were utilized to estimate gross margins over time. Income from wholesale and retail trade activity was closely related to Polenske's (6) gross margin estimates and the patterns established by the two relationships were used to estimate gross margins from trade for the period 1947 to 1974.

Table C-7. Estimates of total output for utilities sector, Idaho, 1947 - 1974

Year	Idaho utility receipts (Operating revenues)*	Estimated total output
47	$ 130 x 10^6	$ 16 x 10^6
48	145	17
49	150	18
50	167	18
51	180	20
52	195	23
53	210	25
54	225	27
55	240	32
56	255	37
57	270	49
58	290	63
59	312	59
60	327	75
61	380	83
62	416	100
63	431	116
64	456	135
65	494	155
66	463	176
67	493	200
68	530	224
69	570	245
70	608	270
71	674	300
72	754	324
73	843	350
74	936	378

* Source: Idaho Public Utilities Commission. Annual Reports to the Public Utilities Revenue, 1956-1972.

Figure C-7. Estimated value of total output for utilities sector, Idaho, 1947-1974.[1/]



[1/] Idaho Public Utilities Commission. Annual Reports of the Public Utilities Revenue, 1956-1972.

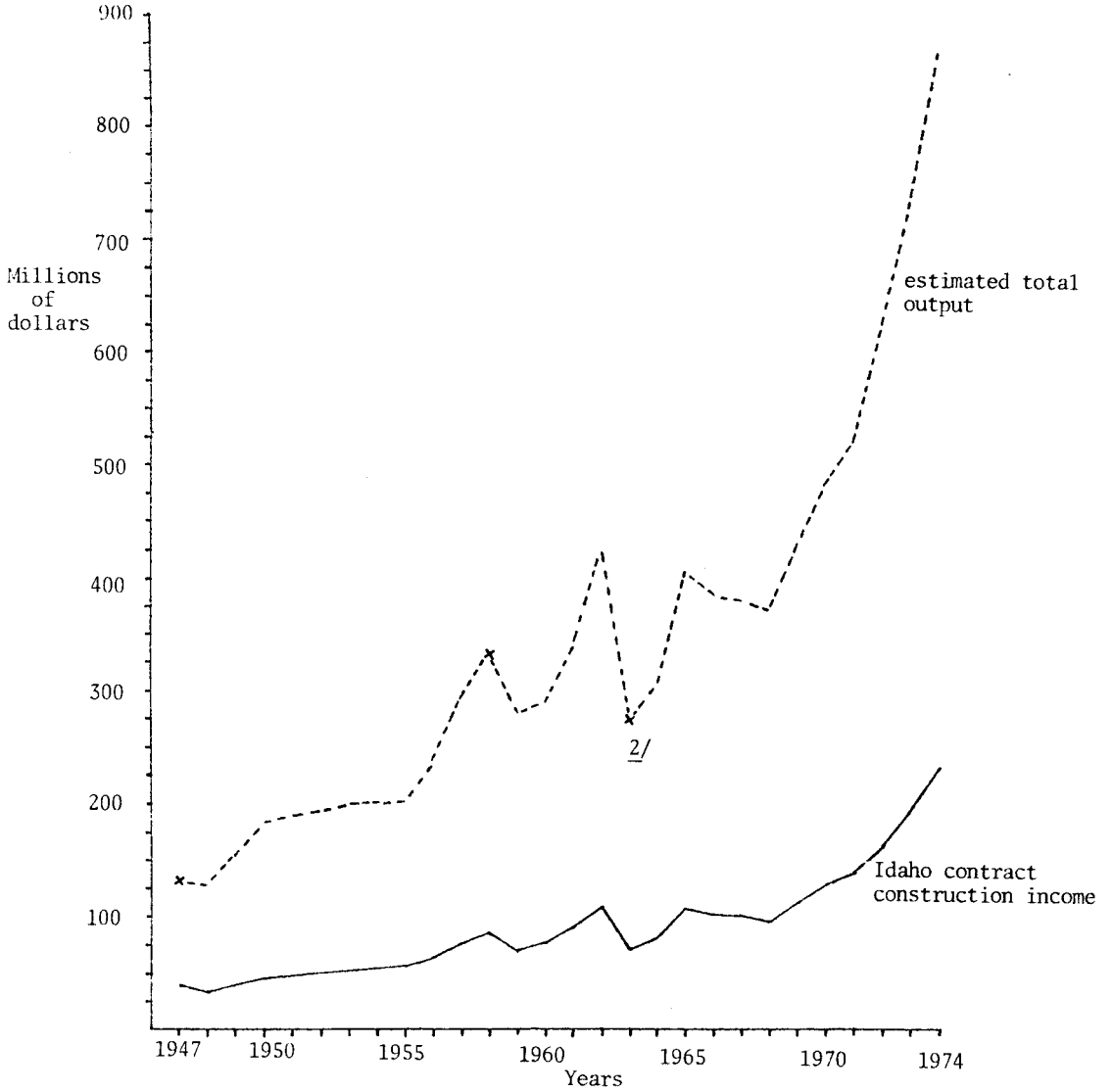
[2/] X=Polenske figures. Karen Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

Table C-8. Estimates of total output for construction sector, Idaho, 1947 - 1974

Year	Idaho contract construction income*	Estimated total output
47	$ --- x 10^6	$ 131 x 10^6
48	34	130
49	40	152
50	47	179
51	49	187
52	50	190
53	51	194
54	52	198
55	53	202
56	62	236
57	76	290
58	85	337
59	73	278
60	76	290
61	89	339
62	111	423
63	72	275
64	80	305
65	106	404
66	101	385
67	100	381
68	98	373
69	113	430
70	127	484
71	137	522
72	164	625
73	193	735
74	227	864

* Source: U.S. Bureau of the Census. Survey of Current Business. 54, No. 8: 47-74.

Figure C-8. Estimated value of total output for construction sector, Idaho, 1947-1974.[1/]



[1/] U.S. Bureau of the Census. Survey of Current Business, 54, No. 8:47-74.

[2/] X=Polenske figures. Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1947).

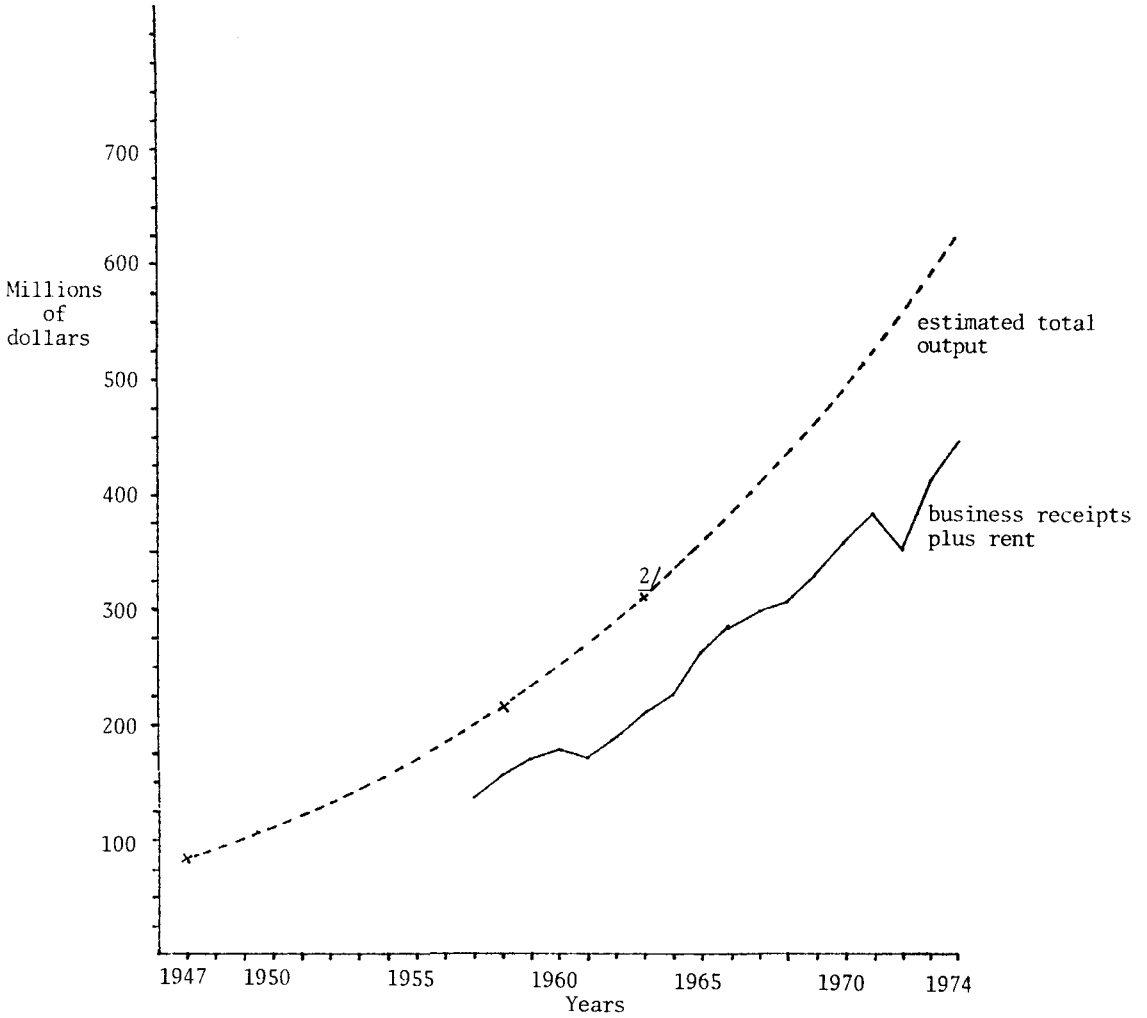
Table C-9. Estimates of total output for finance, insurance, and real estate sector, Idaho, 1947 - 1974

Year	Business receipts plus rent*	Estimated total output
47	$ 51 x 10^6	$ 83 x 10^6
48	62	94
49	70	103
50	75	114
51	82	125
52	90	135
53	100	149
54	107	160
55	113	173
56	125	187
57	139	201
58	153	216
59	170	235
60	177	251
61	171	270
62	187	290
63	213	316
64	223	335
65	262	360
66	285	385
67	294	410
68	307	440
69	330	470
70	358	500
71	381	535
72	352	575
73	410	620
74	450	625

* Source: Business Income Tax Returns, 1971, GPO. U.S. Bureau of the Census.

Survey of Current Business. 54, No. 8: 47-74.

Figure C-9. Estimated value of total output for finance, insurance and real-estate sector, Idaho, 1947-1974.[1/]



[1/] Business Income Tax Returns, 1971, GPO. U.S. Bureau of the Census. Survey of Current Business. 54, No. 8:47-74.

[2/] X=Polenske figures. Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1947).

Income from trade activities showed a very regular and steady growth over time (17), a stability that should provide a fairly good basis to make satisfactory estimates of margins resulting from trade. Table C-10 and Figure -10 present the income data used and estimated gross margins for the period 1947 to 1974.

Services - Sector 11

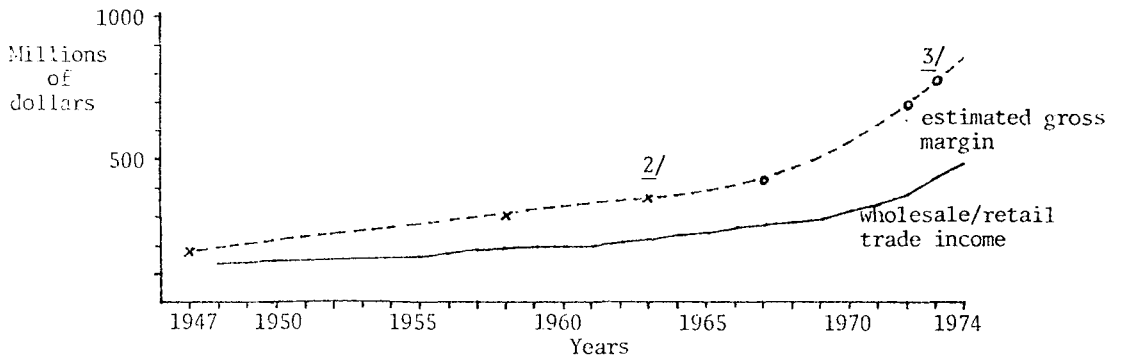
Data were not directly available for total output for personal and business services in Idaho; however, data were available for income from selected services (17). Observations for income from selected services were closely related but at a lower level that were total output estimates made by Polenske (6). For projection purposes, selected service income data were utilized to estimate total output for the service sectors in Idaho between 1947 and 1974. The income data used and the estimated total output for the service sector are shown in Table C-11 and Figure C-11.

Table C-10. Estimates of gross margins for wholesale and retail trade sector, Idaho, 1947 - 1974

Year	Income from wholesale and retail trade*	Estimated gross margin
47	$ 130 x 10^6	$ 179 x 10^6
48	---	197
49	---	200
50	133	205
51	---	200
52	---	215
53	---	247
54	---	250
55	154	260
56	163	287
57	162	290
58	171	295
59	188	300
60	193	310
61	194	340
62	205	350
63	210	376
64	221	380
65	236	395
66	252	400
67	258	410
68	267	490
69	290	540
70	315	595
71	346	640
72	383	700
73	433	770
74	489	847

* Source: U.S. Bureau of the Census. Survey of Current Business. 54, No. 8: 47-74.

Figure C-10. Estimated value of gross margins, wholesale and retail trade sector, Idaho, 1947-1974.[1/]



[1/] Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974). U.S. Bureau of the Census, citation for Survey of Current Business.

[2/] X=Polenske figures. Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

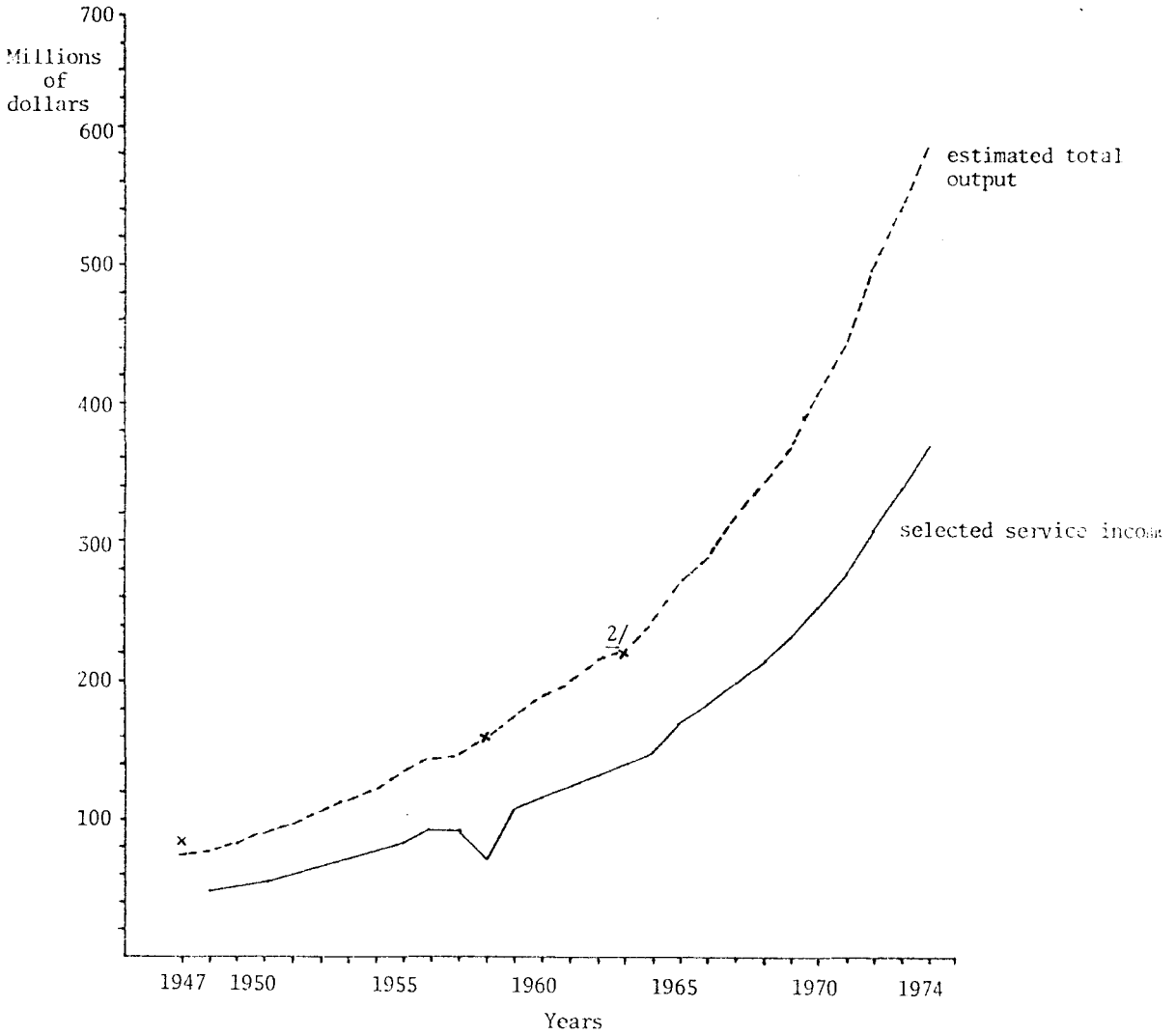
[3/] 0=Estimated "gross margin" figures (20.33%).

Table C-11. Estimated total output for service sector, Idaho, 1947 - 1974

Year	Selected service income*	Estimated total output
47	$ 48 x 10^6	$ 77 x 10^6
48	49	78
49	52	83
50	56	90
51	60	96
52	66	106
53	72	115
54	76	122
55	83	133
56	91	146
57	91	146
58	73	117
59	108	173
60	118	189
61	124	198
62	134	214
63	139	222
64	150	240
65	170	272
66	181	290
67	198	317
68	213	341
69	230	368
70	254	406
71	277	443
72	309	494
73	338	540
74	368	585

* Source: U.S. Bureau of the Census. Survey of Current Business. 54, No. 8: 47-74.

Figure C-11. Estimated value of total output for service sector, Idaho, 1947-1974.[1/]



[1/] U.S. Bureau of the Census. Survey of Current Business. 54, No.8:47-74.

[2/] X=Polenske figures. Karen R. Polenske, State Estimates of Technology, 1963 (Lexington, 1974).

APPENDIX D

ESTIMATION OF INTERREGIONAL SECTOR OUTPUTS

ESTIMATION OF INTERREGIONAL SECTOR OUTPUTS

Introduction

A regional trade flow model requires gross output data for each economic sector. For purposes of this study these outputs are needed for each model sector for each year included in the period of analysis (1947-1970). Forty economic sectors were identified for the twenty-four year simulation period. Unfortunately, no one data source reports individual sector outputs in sufficient detail for use in the interregional trade flow model. Consequently, certain assumptions and procedures had to be implemented in order to estimate sector outputs from available secondary data.

Total output levels for eleven nongovernmental and two government sectors were previously estimated for the state of Idaho. Appendix C includes a complete description of how these estimates were made. Appendix table A-3 summarizes the estimated sector outputs from 1947 to 1973. Personal income (income from business profits, rents, salaries, and wages) for the state has been reported annually in the Survey of Current Business and is summarized in Appendix table A-2. These two tables were the primary data sources for estimating total regional sector outputs for the Boise Region and the rest of Idaho. The interregional model (Boise Region and Rest of Idaho Region) requires the proportioning of state outputs between these two regions. Secondary data source, however, do not report production for these sectors at the regional level. The sector aggregation required by the regional trade flow model differs from those shown in Appendix tables A-2 and A-3. Table D-1 compares state model sector definitions with those used in the interregional model. Right handed brackets indicate disaggregation, whereas left handed brackets represent aggregation of the sectors as defined in Appendix tables A-2 and A-3 in order to meet the interregional model's definitions.

In order to provide an operative interregional trade flow model, estimates of outputs for each of 40 sectors had to be made for each year analyzed. This required dividing the state output for each sector as reported from previous estimates and secondary sources into outputs for 40 sectors of the two regions of the interregional model. Proper aggregation of sectors had to be achieved in order to meet the sectors specified in the trade flow model. The methodology used to obtain these regional outputs are outlined in the following pages. The model's sectors were broken into five groups (livestock, crops, food processing, households, and re-

TABLE D-1 Comparison of economic sectors for Idaho input-output model and interregional trade flow model

Interregional Trade Flow Model Sectors	Initial Input-Output Sectors
Livestock	Livestock
Forage Cereals Potatoes Sugarbeets Vegetables Seed Peas-Lentils	Crops
Livestock processing Grain processing Potato processing Vegetable processing Sugar & miscellaneous processing	Food & kindred products
Manufacturing - mining	Mining Other manufacturing
Utilities	Utilities
Construction	Construction
Trade	Trade
Services	Service industries Transportation & Communications FIRE
Households	Total personal income

maining sectors) in order to conduct the analysis of the impact of the Boise Project Secotrs and food processing sectors on the state of Idaho and the Boise Region.

Livestock Sector

Total state livestock production from Appendix table A-3 was broken into the livestock output from the Boise region (Ada and Canyon counties) and from the Rest of Idaho region. This was accomplished by applying the percentage of the state's livestock production found in the Boise region (as reported by the Census of Agriculture -- 1944, 1949, 1954, 1959, 1964, and 1969) to the state's total livestock production in Appendix table A-3. The percentage factors for intercensus years were estimated from a straight line plot between those points recorded for census years. Figure D-1 shows census data and the plot of percentage factors. Table D-2 shows the conversion of total state livestock production into the proportions for the two regions of the model.

Crop Sectors

The state of Idaho's total crop output (table A-3) had to be distributed among eight crops catagories for the two regions in the trade flow model. In this situation crop outputs for the Boise region had been previously determined (see Economic Subproject Report-Direct Impacts) for more than thirty crops in the Bureau of Reclamation Crop Reports. These thirty crops were then simply summed into the appropriate regional crop catagories identified by the regional model to obtain the crop outputs for the Boise region.

Determination of crop outputs for the Rest of Idaho region was more complicated. Crop production as reported for the state in Appendix A-2 and by the Bureau of Reclamation for the Boise region includes income-in-kind. Detailed data for the Rest of Idaho, however, could only be found in terms of sales (U.S.D.A. Crop Summaries). In order to account for income-in-kind, total production (Appendix table A-2) was proportioned according to the percentage sales of each crop catagory for the state. Boise crop totals could then be subtracted from state totals to obtain the remainder attributable to the Rest of Idaho region. Table D-3 shows the steps used in estimating the crop outputs for the trade flow model.

Figure D-1 Estimates of livestock production in the Boise Region and rest of Idaho, 1947 - 1970.

Livestock Sales [1]

Year	Idaho	Boise Region	Percentage Factor [2]
1944	$ 97,253,732	$ 10,658,716	0.110
1949	150,085,606	15,681,681	0.104
1954	133,889,640	23,078,145	0.172
1959	195,967,328	37,300,393	0.190
1964	206,284,327	40,817,778	0.198
1969	352,071,088	57,547,394	0.163

[1] United States Census of Agriculture, GPO, Washington, D.C., 1944, 1949, 1954, 1959, 1964, 1969.

[2] Percent of state production in the Boise Region.

TABLE D-2 Livestock output estimates for the Boise Region and rest of Idaho *

Year (1)	Total Idaho Output 1/ (2)	Boise Region Factor 2/ (3)	Estimated Boise Region Output (4)=(2)x(3)	Rest of Idaho Output (5)=(2)-(4)
1947	$204	.106	21.62	182.38
1948	233	.105	24.46	208.54
1949	189	.104	19.66	169.34
1950	200	.117	23.40	176.60
1951	244	.130	31.72	212.28
1952	219	.143	31.32	187.68
1953	194	.158	30.65	163.35
1954	195	.172	33.54	161.46
1955	197	.175	34.47	162.52
1956	220	.179	39.38	180.62
1957	239	.182	43.50	195.50
1958	267	.186	49.66	217.34
1959	282	.190	53.58	228.42
1960	268	.191	51.19	216.81
1961	275	.193	53.07	221.93
1962	276	.195	53.82	222.18
1963	272	.196	53.31	218.69
1964	276	.198	54.65	221.35
1965	305	.192	58.56	246.44
1966	336	.185	62.16	273.84
1967	318	.178	56.60	261.40
1968	352	.171	60.19	291.81
1969	390	.163	63.57	326.43
1970	426	.158	67.31	358.69

1/ From Table A-3

2/ Percent of state output derived from the Boise Region, see Figure D-1

* Millions of dollars

Table D-3 Regional crop output estimates for the Boise region and Rest of Idaho, 1947-1970 (millions of dollars).

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Step 1 [1]											
Boise Region Outputs (10^6)											
Forage	6.915	8.915	8.419	7.465	9.150	9.880	4.807	7.119	9.395	9.469	7.428
Cereal	5.111	5.226	4.209	4.891	6.535	6.257	5.566	4.852	5.457	5.722	6.071
Potatoes	1.508	1.844	1.964	0.257	1.633	4.281	1.012	1.480	0.850	1.988	1.469
Sugarbeets	8.418	4.611	5.051	6.436	6.209	5.928	6.325	5.099	5.006	4.933	5.352
Vegetables	1.503	0.922	1.964	0.514	0.980	0.988	0.506	1.262	1.472	1.538	1.661
Seed Crops	4.810	6.148	6.454	4.891	6.209	4.611	5.313	5.014	4.294	4.307	5.329
Fruits	1.804	3.074	1.683	1.287	1.961	0.988	1.771	3.646	2.893	3.956	3.298
Peas-Lentils	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Step 2 [2]											
USDA - State Sales (10^6)											
Forage	22.588	26.656	24.704	25.031	27.554	29.778	21.248	24.600	27.773	33.500	31.131
Cereal	79.153	66.049	76.098	60.382	74.576	83.843	90.243	84.086	78.871	77.628	80.981
Potatoes	37.918	45.636	38.717	23.900	30.608	53.638	37.851	26.994	38.266	44.977	30.763
Sugarbeets	21.526	12.418	10.749	14.692	14.739	13.009	16.752	17.254	15.731	17.697	19.908
Vegetables	6.660	5.653	5.766	3.665	5.931	3.338	4.583	3.909	3.460	3.283	2.497
Seed Crops	49.157	56.196	52.260	38.517	29.998	33.200	30.024	28.207	30.352	33.041	30.253
Fruits	8.471	5.817	4.366	4.682	6.201	7.088	6.293	7.173	5.782	8.115	6.475
Peas-Lentils	7.956	4.855	2.724	2.823	3.190	4.296	4.418	5.021	7.044	9.731	5.360

1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
7.071	11.544	10.548	10.709	8.873	10.160	10.020	9.284	12.526	9.730	10.041	10.851	11.520
5.647	6.079	5.199	5.358	5.926	5.150	4.650	5.481	5.462	5.989	4.902	5.191	4.979
0.982	1.260	2.109	1.346	0.825	1.283	1.952	2.294	2.756	1.912	2.435	3.835	4.539
5.530	5.849	5.338	5.935	5.940	7.173	6.691	7.230	6.405	7.473	8.596	8.591	8.809
2.207	2.133	2.282	3.066	2.246	2.774	2.825	2.668	5.018	4.850	3.882	4.008	2.929
6.951	6.193	6.087	6.885	8.813	8.351	7.614	8.325	7.823	8.921	8.738	8.746	10.020
3.942	4.998	7.777	7.960	6.745	7.364	6.010	7.480	5.864	5.672	6.016	7.013	4.840
-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
31.139	36.474	39.623	39.020	36.450	41.433	39.647	42.711	56.121	50.724	49.531	59.579	57.704
78.921	80.545	69.143	71.415	82.862	83.183	78.905	74.413	76.846	88.128	81.523	80.595	76.556
50.013	46.062	81.791	64.454	58.600	62.501	85.950	110.388	102.325	88.043	96.936	137.327	134.790
24.782	21.291	24.419	19.836	31.984	37.902	33.708	36.634	29.775	38.887	47.347	48.909	45.996
4.762	4.167	3.329	5.475	6.464	6.508	6.658	8.047	10.721	12.478	13.252	12.284	13.173
32.808	33.968	33.426	39.552	38.762	38.460	31.107	29.329	33.376	28.602	39.548	39.688	47.689
6.739	6.156	5.951	8.843	5.287	6.316	6.140	8.182	7.407	9.086	4.865	12.908	7.297
6.215	6.344	4.655	4.051	8.090	7.511	6.406	8.689	5.873	7.178	6.660	9.269	8.345

Table 5. Regional crop output estimates for the Boise region and Rest of Idaho, 1947-1970 (millions of dollars) (continued).

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Step 3 3/											
Sales Percentage											
Forage	.0968	.1193	.1146	.1439	.1429	.1305	.1005	.1247	.1340	.1604	.1501
Cereals	.3391	.2957	.3529	.3471	.3868	.3674	.4269	.4263	.3805	.3717	.3905
Potatoes	.1624	.2043	.1795	.1374	.1588	.2351	.1790	.1369	.1846	.2154	.1484
Sugarbeets	.0922	.0556	.0498	.0845	.0764	.0570	.0792	.0875	.0759	.0847	.0961
Vegetables	.0285	.0253	.0267	.0211	.0308	.0146	.0217	.0198	.0167	.0157	.0120
Seed Crops	.2106	.2516	.2423	.2214	.1556	.1455	.1420	.1430	.1464	.1582	.1459
Fruit	.0363	.0260	.0203	.0269	.0322	.0311	.0298	.0364	.0279	.0389	.0312
Peas-Lentils	.0341	.0217	.0126	.0162	.0165	.0188	.0209	.0255	.0340	.0466	.0259
Step 4 4/											
State Output (Table 1) (10^6)											
Crop, Total	315.000	302.000	284.000	227.000	251.000	293.000	297.000	257.000	273.000	296.000	265.000
Forage	30.483	36.038	32.535	32.663	35.873	38.237	29.851	32.053	36.579	47.484	39.782
Cereals	106.813	89.350	100.218	78.792	97.089	107.657	126.777	109.559	103.879	110.029	103.488
Potatoes	51.169	61.699	50.989	31.188	39.849	68.873	53.175	35.173	50.399	63.750	39.313
Sugarbeets	29.049	16.788	14.155	19.172	19.189	16.704	23.534	22.482	20.500	25.059	25.464
Vegetables	8.987	7.644	7.594	4.783	7.721	4.287	6.439	5.094	4.556	4.653	3.191
Seed Crops	66.336	75.974	68.825	50.260	39.053	42.629	42.180	36.754	39.975	46.833	38.661
Fruits	11.431	7.864	5.751	6.109	8.072	9.101	8.842	9.347	7.614	11.443	8.273
Peas-Lentils	10.735	6.592	3.587	3.684	4.154	5.517	6.207	6.543	9.277	13.794	6.850

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
	.1323	.1552	.1510	.1544	.1357	.1460	.1369	.1342	.1740	.1570	.1458	.1487	.1474
	.3353	.3427	.2636	.2826	.3086	.2931	.2725	.2337	.2383	.2727	.2400	.2021	.1955
	.2125	.1960	.3118	.2554	.2182	.2202	.2969	.3467	.3173	.2725	.2854	.3428	.3442
	.1053	.0906	.0931	.0785	.1191	.1336	.1164	.1151	.0923	.1203	.1934	.1221	.1175
	.0202	.0177	.0127	.0217	.0241	.0229	.0230	.0253	.0332	.0386	.0390	.0307	.0336
	.1394	.1445	.1274	.1565	.1444	.1355	.1109	.0921	.1035	.0885	.1164	.0991	.1218
	.0286	.0262	.0227	.0350	.0197	.0222	.0212	.0257	.0230	.0281	.0143	.0322	.0186
	.0264	.0270	.0177	.0160	.0301	.0265	.0221	.0273	.0182	.0221	.0196	.0231	.0213
	302.000	300.000	340.000	322.000	327.000	423.000	371.000	430.000	423.000	410.000	411.000	493.000	505.000
	39.952	46.560	51.354	49.855	44.390	61.754	50.805	57.685	73.623	64.362	59.932	73.329	74.421
	101.258	102.819	89.614	90.984	100.915	123.977	101.112	100.495	100.809	111.823	98.644	99.645	98.737
	64.169	58.800	106.005	82.242	71.638	93.133	110.139	149.081	134.235	111.713	117.295	169.020	173.846
	31.798	27.180	31.647	25.271	38.952	56.492	43.196	49.476	39.060	49.344	57.289	60.195	59.322
	6.109	5.319	4.315	6.975	7.871	9.699	8.533	10.866	14.065	15.834	16.037	15.120	16.988
	42.093	43.362	43.323	50.390	47.209	57.321	41.144	39.612	43.785	39.293	47.853	48.846	61.509
	8.646	7.857	7.711	11.267	6.439	9.412	7.869	11.501	9.716	11.529	5.886	15.884	9.413
	7.973	8.097	6.032	5.163	9.853	11.193	8.210	11.735	7.703	9.061	8.060	11.408	10.761

Table 5. Regional crop output estimates for the Boise region and Rest of Idaho, 1947-1970 (millions of dollars)(continued).

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Step 5 [5]											
Rest of Idaho Outputs (10^6)											
Forage	23.568	27.123	24.116	25.198	26.723	28.357	25.051	24.934	27.184	38.105	32.354
Cereals	101.702	84.124	96.009	73.901	90.554	101.400	121.211	104.707	98.422	104.307	97.409
Potatoes	49.666	59.855	49.025	30.931	38.216	64.592	52.163	33.693	49.549	61.762	37.844
Sugarbeets	20.631	12.177	9.104	12.736	12.980	10.776	17.209	17.383	15.494	20.126	20.112
Vegetables	7.484	6.722	5.630	4.269	6.741	3.299	5.933	3.832	3.084	3.115	1.530
Seed Crops	61.526	69.826	62.371	45.369	32.844	41.317	43.938	31.740	35.681	42.526	33.332
Fruits	9.627	4.790	4.068	4.822	6.111	8.113	7.071	5.701	4.721	7.487	4.975
Peas-Lentils	10.735	6.592	3.587	30.684	4.154	5.517	6.207	6.543	9.277	13.794	6.850

[1] Step 1 - Crop production reported in Bureau of Reclamation Crop Reports for Boise Project.

[2] Step 2 - Statistical Reporting Service Crop Summaries for State of Idaho.

[3] Step 3 - Crop pattern percent figure on crop sales in Step 2.

[4] Step 4 - Crop percent (Step 5) multiplied times Crop Output (Table 1).

[5] Step 5 - Crop production (Step 4) for Idaho minus crop production (Step 1) for Boise Region.

1958	1959	1969	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
32.881	35.106	40.806	39.146	35.517	51.594	40.785	48.801	61.907	54.902	49.891	62.478	62.901
95.611	96.740	84.256	85.626	95.189	118.827	96.462	95.014	95.347	105.834	93.742	94.454	93.758
63.187	57.540	103.896	80.896	70.543	91.870	108.187	146.787	131.479	109.801	114.860	165.185	169.307
26.268	21.331	26.309	19.336	33.012	49.319	36.505	42.246	32.654	41.871	48.693	51.604	50.513
3.902	3.186	2.033	3.909	5.625	6.925	5.708	8.198	9.047	10.984	12.155	11.112	14.509
35.142	37.169	37.236	43.505	38.396	48.970	33.530	31.287	35.962	27.373	39.215	40.100	51.489
4.704	2.859	-0-	3.307	-0-	2.048	1.859	3.571	3.852	5.857	2.004	8.781	4.573
7.973	8.097	6.032	5.162	9.853	11.193	8.210	11.735	7.703	9.061	8.060	11.408	10.761

Food Processing Sectors

For the regional trade flow model it was necessary to disaggregate the total production from the food and kindred products sector (Appendix table A-3) into both regional shares and also the five types of food processing--livestock, grain, potato, vegetable and fruit, and sugar and miscellaneous products. This was accomplished by a two step process. The first step was to allocate the state total food processing output among the five catagories based on the value-added by these sectors according to the 1967 Survey of Manufactures. The food processing sectors were identified by their standard industrial classifications codes (SIC), see table D-4.

The Idaho Directory of Manufactures - 1967 was next used to divide sector totals into the shares of output produced within the two model regions. This separation was based on employment estimated in each region under the appropriate food processing SIC code. SIC code 203 was further disaggregated based on the Directory's description of individual firms and whether they usually processed potatoes or other vegetables and fruits.

Tables D-4 and D-5 outline the process used to arrive at the outputs required by the regional trade flow model for the food processing sectors.

Household Sector

The output of the household sector represents all personal income, whether earned from business profits, rents, or salaries and wages. Again, no source reports personal income at the regional level so that the state's total personal income (from Appendix table A-2) had to be separated into income derived from the Boise region and Rest of Idaho. The breakdown of state personal income was performed by proportioning total income by the state's population that is found in each region. Population data as found in the U.S. Census of Population (1950, 1960, and 1970) was used to derive regional population weights. Intercensus years were estimated from straight line plots between census years. Figure D-2 shows the derivation of population weights and Table D-6 contains regional estimates for household income.

Remaining Sectors (Manufacturing, Mining, Construction, Trade, Services, and Utilities)

The production from the manufacturing-mining, utilities, construction, trade, and service sectors again has not been recorded at the regional

Table D-4 Computation of regional food processing sector outputs.

Step 1: Income distribution of the Idaho food processing industry (1967).

SIC Code	Sector	Value-Added ($\$10^6$)[1/]	State factor
201,202	Livestock processing	$193.2	0.42191
203	Potato processing[2/]	150.7	0.32809
	Vegetable processing[2/]	9.8	0.02018
204,205	Grain processing	33.7	0.07330
206-209	Sugar & misc. processing	72.1	0.15652
	Total food processing	$459.5	1.00000

Step 2: Regional shares of food processing production based on employment.

		Food Processing Employment [3/]			Boise
SIC Code	Sector	Total	Boise	Rest of State	factor
201,202	Livestock processing	4,549	1,687	2,862	0.37085
203	Potato processing	4,290	728	3,562	0.16976
	Vegetable processing	264	84	180	0.31947
204,205	Grain processing	1,944	472	1,472	0.24820
206-209	Sugar & Misc. processing	2,030	645	1,385	0.31773

[1/] Survey of Manufactures-1967.

[2/] SIC 203 broken down with use of employment data from Step 2.

[3/] Idaho Manufacturing Directory of Idaho, 1967.

Table D-5 Food processing sector outputs for the Boise Region and Rest of Idaho, 1947 - 1970.

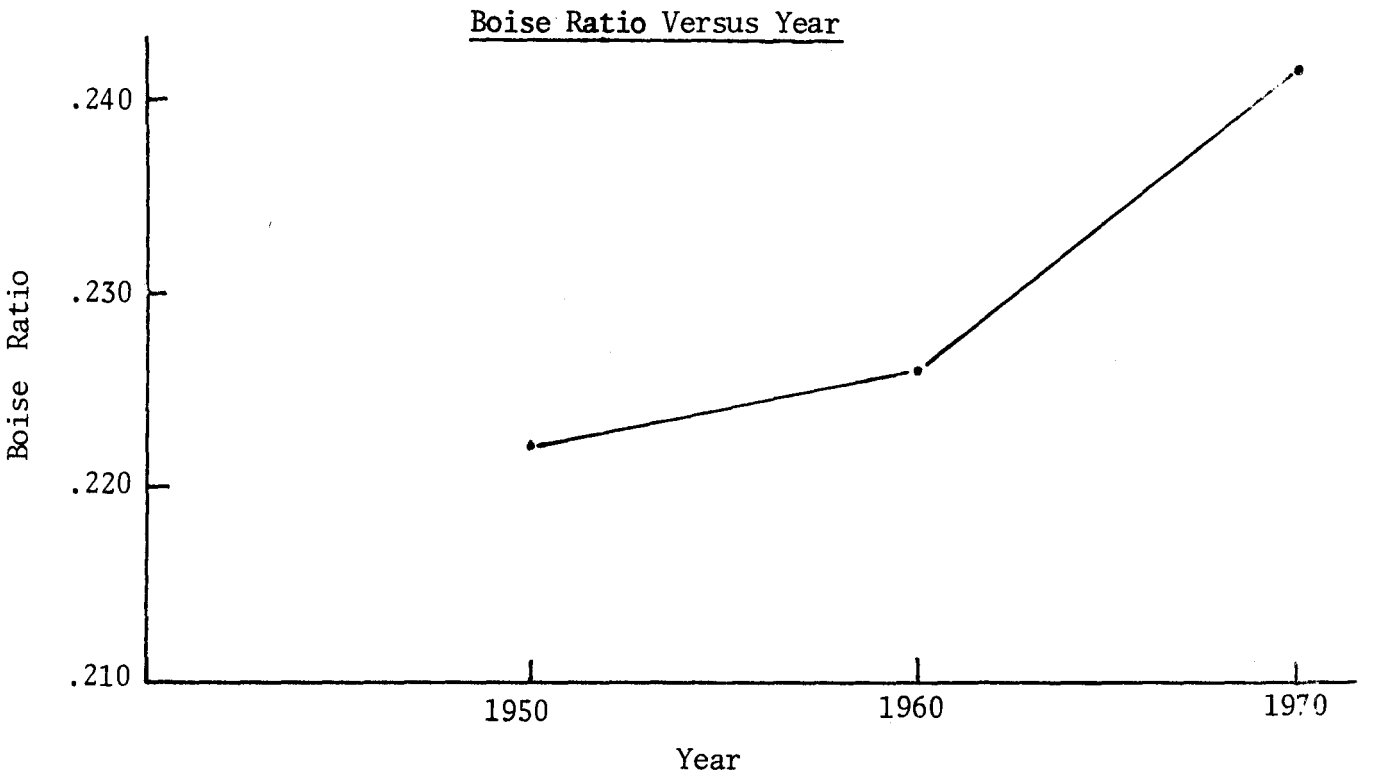
Year	State total [1]	Livestock processing		Grain processing		Potato processing		Vegetable processing		Sugar & misc processing	
		Boise [2]	Rest of State [3]	Boise [2]	Rest of State [3]	Boise [2]	Rest of State [3]	Boise	Rest of State	Boise	Rest of State
1947	175	27.381	46.453	3.184	9.644	9.747	47.669	1.128	2.403	8.703	18.688
1948	179	28.001	47.515	3.257	9.864	9.970	48.750	1.154	2.458	8.902	19.115
1949	187	29.259	49.638	3.402	10.305	10.415	50.938	1.206	2.568	9.300	19.970
1950	190	29.728	50.434	3.457	10.470	10.582	51.755	1.225	2.609	9.449	20.290
1951	200	31.293	53.089	3.639	11.021	11.139	54.479	1.289	2.747	9.946	21.538
1952	205	32.075	54.416	3.730	11.297	11.418	55.841	1.322	2.815	10.195	21.892
1953	212	33.171	56.274	3.857	11.683	11.808	57.747	1.367	2.911	10.543	22.639
1954	224	35.048	59.460	4.075	12.344	12.476	61.016	1.444	3.076	11.140	23.921
1955	232	36.300	61.583	4.221	12.785	12.922	63.195	1.496	3.186	11.538	24.775
1956	245	38.334	65.034	4.457	13.501	13.646	66.736	1.579	3.365	12.184	26.163
1957	257	40.212	68.219	4.676	14.162	14.314	70.005	1.657	3.529	12.781	27.445
1958	270	42.246	71.670	4.912	14.879	15.038	73.546	1.741	3.708	13.427	28.833
1959	287	44.906	76.183	5.221	15.816	15.985	78.177	1.850	3.941	14.273	30.648
1960	301	47.096	79.899	5.476	16.587	16.765	81.990	1.941	4.134	14.969	32.143
1961	324	50.695	86.004	5.895	17.855	18.046	88.255	2.089	4.450	16.113	34.600
1962	347	54.293	92.109	6.313	19.122	19.327	94.521	2.237	4.765	17.257	37.056
1963	362	56.640	96.091	6.586	19.949	20.162	98.606	2.334	4.971	18.003	38.658
1964	387	60.552	102.727	7.041	21.326	21.555	105.416	2.495	5.315	19.246	41.327
1965	413	64.620	109.629	7.514	22.759	23.003	112.499	2.663	5.672	20.539	44.104
1966	440	68.845	116.796	8.005	24.247	24.506	119.853	2.837	6.043	21.882	46.987
1967	475	74.321	126.086	8.642	26.176	26.456	129.387	3.062	6.523	23.622	50.725
1968	510	79.797	135.377	9.278	28.105	28.405	138.921	3.288	7.004	25.363	54.462
1969	549	85.899	145.729	9.988	30.254	30.577	149.544	3.539	7.539	27.302	58.637
1970	590	92.315	156.612	10.734	32.513	32.861	160.712	3.804	8.103	29.341	63.005

[1] From Table 1.

[2] Boise production equals state total production times state factor times Boise factor.

[3] Rest of State equals state total production times state factor minus Boise production.

Figure D-2 Population and ratios for the Boise Region and rest of Idaho, 1947 - 1970.



Population [1]

Year	State	Boise Region	Boise Ratio [2]
1950	590,000	130,900	.222
1960	671,000	151,100	.226
1970	713,000	173,500	.243

1 United States Census of Population, GPO, Washington, D.C., 1950, 1960, 1970.

2 Percent of state population in the Boise Region (Ada and Canyon Counties).

Table D-6 Household sector outputs for the Boise Region and Rest of Idaho, 1947 - 1970.*

Year	State personal income[1/]	Boise weight[2/]	Household output	
			Boise	Rest of State
1947	$ 698	0.221	154.258	543.742
1948	678	0.221	149.838	528.162
1949	671	0.222	148.962	522.038
1950	680	0.222	150.950	529.040
1951	702	0.223	156.546	545.454
1952	730	0.223	162.790	567.210
1953	756	0.223	168.588	587.412
1954	793	0.224	177.632	615.368
1955	823	0.224	184.352	638.648
1956	904	0.225	203.400	700.600
1957	1042	0.225	234.450	807.550
1958	1091	0.226	246.566	844.434
1959	1184	0.226	267.584	916.416
1960	1204	0.226	272.104	931.896
1961	1238	0.228	282.264	955.736
1962	1354	0.230	311.420	1042.580
1963	1367	0.232	317.144	1049.856
1964	1397	0.233	325.501	1071.499
1965	1661	0.235	390.335	1270.665
1966	1721	0.237	407.877	1313.123
1967	1825	0.238	434.350	1390.650
1968	1898	0.240	455.520	1442.480
1969	2149	0.242	520.058	1628.942
1970	2364	0.243	574.452	1789.548

[1/] Table 2.

[2/] Derived from Figure 5.

* millions of dollars

level. Employment found in these sectors has been reported in various secondary sources for some years. The state's output from these sectors was allocated to the two regions according to the proportion of employment data reported in County Business Patterns for the years 1953, 1956, 1959, 1964, 1969, 1970, and 1972. The corresponding percentage of employment found in the Boise region is presented in Table D-7. After examining these employment percentages nonsignificant changes were revealed over time in the employment ratios for construction, services, and utilities sectors. For these three sectors employment was totaled and averaged over time to obtain one constant factor for each sector. The manufacturing-mining and trade sectors did exhibit significant changes over the analysis period. The calculated employment factors (Boise percentage) were plotted and estimated for in-between years from straight line approximations (see Figure D-3). Once having derived a set of employment factors, total state output for these remaining sectors could then be allocated to the two regions as done in previous sections. The results of this procedure are in Table D-8.

Table D-7 Employment in Manufacturing-Mining Construction, Trade, Services and Utility Sectors, by region, 1953 - 1972.[1/]

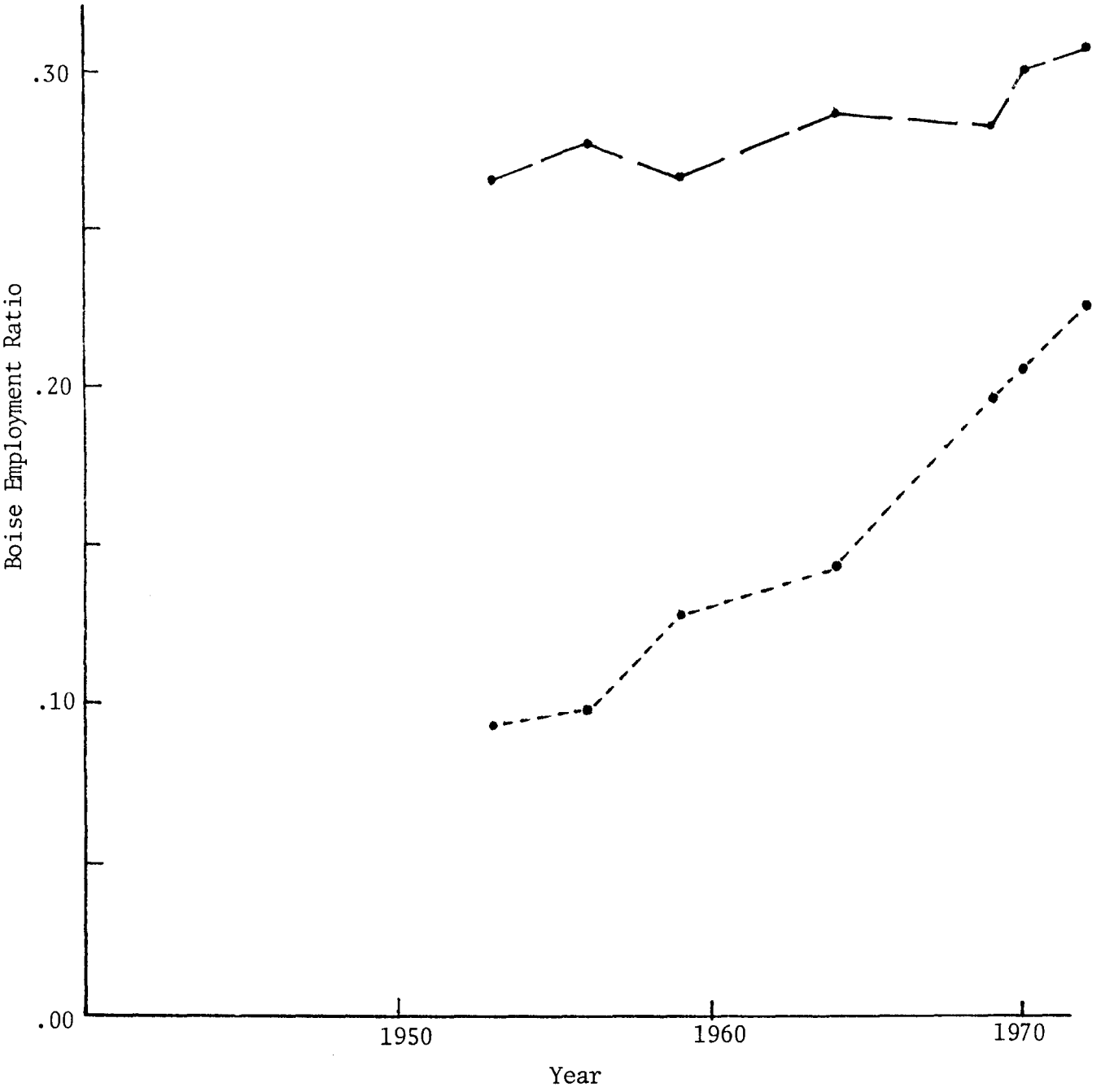
Year	Manufacturing-mining[2/]			Construction [3/]			Trade[2/]			Services[3/]			Utilities[3/]		
	State	Boise	Factor	State	Boise	Factor	State	Boise	Factor	State	Boise	Factor	State	Boise	Factor
1953	20,032	1,806	0.0910	8,485	3,858	0.3969	36,335	9,654	0.3098	15,179	5,161	0.3400	8,202	2,652	0.3233
1956	23,343	2,240	0.0959	6,808	1,909	0.3881	36,690	10,162	0.3005	15,035	4,760	0.3166	7,937	2,569	0.3237
1959	23,160	2,922	0.1264	10,409	4,428	0.4067	41,002	10,908	0.2822	20,120	6,950	0.3454	8,206	2,825	0.3443
1964	22,588	3,199	0.1416	6,658	2,443	0.3669	42,580	12,233	0.2873	24,922	8,761	0.3515	7,646	2,686	0.3513
1969	27,511	5,301	0.1976	10,150	4,128	0.4254	47,637	13,445	0.2822	32,649	11,240	0.3443	9,829	3,317	0.3375
1970	28,822	5,909	0.2050	9,558	3,709	0.2804	52,141	15,667	0.3005	36,260	12,881	0.3552	10,179	3,506	0.3444
1972	31,336	7,070	0.2256	9,888	3,655	0.4546	55,475	17,186	0.3098	40,354	14,881	0.3688	10,665	3,528	0.3308
					average	0.38454					average	0.34597		average	0.33647

[1/] County Business Patterns, 1953, 1956, 1959, 1964, 1969, 1970, 1972.

[2/] Factors plotted to obtain series, 1947 to 1970.

[3/] Factors averaged (total employment over time)

Figure D-3 Manufacturing-mining and trade sector employment factors for the Boise Region, 1947 - 1970. 1/



1 Employment factors (table 9), percent of state employment in sector found in Boise Region.

Table D-8 Output estimates for Manufacturing-Mining, Construction, Trade, Services, and Utility Sectors, Boise Region and Rest of Idaho, 1947 - 1970.

	Manufacturing-mining		Construction		Trade		Services		Utilities	
Year	Boise	Rest of State	Boise	Rest of State	Boise	Rest of State	Boise	Rest of State	Boise	Rest of State
1947	$ 16.640	$191,360	$ 50.375	$ 80.625	$ 47.077	$131.923	$ 90.644	$171.356	$ 5.384	$ 10.616
1948	20.172	225,828	49.990	80.010	52.008	144.992	97.910	185.090	5.720	11.280
1949	23.184	252.816	58.450	93.550	52.800	147.200	106.213	200.787	6.056	11.944
1950	25.840	278.160	68.833	110.167	54.120	150.880	115.208	217.792	6.056	11.944
1951	28.449	298.551	71.909	115.091	52.800	147.200	124.549	235.451	6.729	13.271
1952	30.888	320.112	73.063	116.937	56.975	158.025	133.544	252.456	7.739	15.261
1953	34.125	340.875	74.601	119.399	65.455	181.545	143.924	272.076	8.412	16.588
1954	36.248	357.752	76.139	121.861	66.250	183.750	152.573	288.427	9.085	17.915
1955	39.856	384.144	77.677	124.323	68.900	191.100	163.298	308.702	10.767	21.233
1956	43.008	404.992	90.751	145.249	76.342	210.658	174.715	330.285	12.449	24.551
1957	49.820	420.180	111.517	178.483	77.140	212.860	181.288	342.712	16.487	32.513
1958	54.984	419.016	129.590	207.410	78.470	216.530	192.359	363.641	21.198	41.802
1959	61.488	426.512	106.902	171.098	79.800	220.200	206.198	389.802	19.852	39.148
1960	62.720	427.280	111.517	178.483	82.770	227.230	219.345	414.655	25.235	49.765
1961	69.168	454.832	130.359	208.641	91.460	248.540	231.800	438.200	27.927	55.073
1962	70.065	448.935	162.660	260.339	94.850	255.150	245.985	465.015	33.647	66.353
1963	80.282	505.718	105.749	169.251	102.375	272.625	259.131	489.869	39.031	76.969
1964	87.984	536.016	117.285	187.715	104.120	275.880	273.662	517.338	45.423	89.577
1965	102.969	570.031	155.354	248.646	109.020	285.980	295.112	557.888	52.153	102.847
1966	120.516	605.484	148.048	236.952	110.800	289.200	311.719	589.281	59.219	116.781
1967	137.594	635.406	146.510	234.490	114.390	295.610	332.477	628.523	67.294	132.706
1968	159.936	673.064	143.433	229.567	138.180	351.820	354.273	669.727	75.369	148.631
1969	179.190	725.810	165.352	264.648	156.600	383.400	377.107	712.893	82.435	162.565

APPENDIX E

CONSTRUCTION OF THE INTERREGIONAL TRADE FLOW MODEL FROM A STATE INPUT-OUTPUT MODEL

by

Clarence J. Potratz

Let $\underline{\overline{X}} = A\underline{\overline{X}} + \underline{\overline{Y}}$ represent the input-output model for the state for some given year where $\underline{\overline{X}}$ is the total sales matrix of the n sectors, A is the technical coefficient matrix, and $\underline{\overline{Y}}$ is the final demand matrix.

Suppose that the total sales for the state, $\underline{\overline{X}}$, can be decomposed into the total sales for the Boise Region, $\underline{\overline{X}}_B$, and the total sales for the rest of the state, $\underline{\overline{X}}_R$, that is

$$\underline{\overline{X}} = \underline{\overline{X}}_B + \underline{\overline{X}}_R$$

Using this information we wish to construct a trade model of the form

$$\begin{matrix} \underline{\overline{X}}_B \\ \\ \underline{\overline{X}}_R \end{matrix} = \begin{matrix} A_{BB} & A_{BR} \\ \\ A_{RB} & A_{RR} \end{matrix} \begin{matrix} \underline{\overline{X}}_B \\ \\ \underline{\overline{X}}_R \end{matrix} + \begin{matrix} \underline{\overline{Y}}_B \\ \\ \underline{\overline{Y}}_R \end{matrix}$$

where A_{BB}, A_{BR}, A_{RB}, and A_{RR} represent the trade coefficients corresponding to Boise to Boise, Boise to rest of Idaho, rest of Idaho to Boise, and rest of Idaho to rest of Idaho. The $\underline{\overline{Y}}_B$ and $\underline{\overline{Y}}_R$ would correspond to exports outside the state (outside both regions). The problem then is to compute the A's and Y's.

In order to accomplish the above, one must make the assumption (gravity-flow assumption) that a sector will purchase from within its own region first, and if its needs are not met, will then purchase from the other sector if possible. If the latter is not possible, the commodity will be imported from out of state. In order to distinguish between this type of import and the original state model, a new import now is added to the transactions table and labeled "competitive imports". Competitive imports then represents goods produced in Idaho, but not in sufficient quantity to satisfy its own needs.

The basic idea in constructing the interregional table is straight forward and follows that of Ferguson (2). One begins by computing the immediate demands $A\underline{\overline{X}}_B$ and $A\underline{\overline{X}}_R$ where A is the technical coefficient matrix for the state model. If $\underline{\overline{X}}_{Bi} - A\underline{\overline{X}}_B$ and $\underline{\overline{X}}_{Bi} - A\underline{\overline{X}}_R$ are both positive then the i^{th} region is an exporter and thus $\underline{\overline{Y}}_{Bi} = \underline{\overline{X}}_B - A\underline{\overline{X}}_B$, $\underline{\overline{Y}}_{Ri} = \underline{\overline{X}}_R - A\underline{\overline{X}}_R$, $A_{BBi,j} = A_{RRi,j} = A_{ij}$ for each j and $A_{BRi,j} = A_{RBi,j} = 0$ (for each condi-

tion) indicates there is no trade in this sector commodity between regions.

Another possibility is that $\overline{X}_{Bi} - A\overline{X}_{B}$ is positive and $\overline{X}_{Ri} - A\overline{X}_{Ri}$ is negative. In this case, the rest of Idaho will purchase from the Boise region and if the Boise region can satisfy this need, it will do so and export the rest. If not, the rest of Idaho will purchase what it can and import the remainder from out of state. This, $\overline{Y}_{Ri} = 0$ and $\overline{Y}_{Bi} = (\overline{X}_{Bi} - A\overline{X}_{B}) - (A\overline{X}_{R} - \overline{X}_{Ri})$ or zero when this difference is negative. Furthermore $A_{BRij} = 0$, and $A_{RBij} = 0$ when the two regions do not produce input requirements.

The other two cases, $\overline{X}_{Bi} - A\overline{X}_{Bi}$ negative and $\overline{X}_{Ri} - A\overline{X}_{Ri}$ positive, and when both these terms are negative are handled similarly. The result is an interregional trade table with 20 sectors in each region, with two exogenous rows corresponding to competitive and noncompetitive imports, and final demand columns corresponding to exports outside the state.

APPENDIX F

REGIONAL TRANSACTIONS TABLES

```
JNELLE                START
NELSON
OUTPUT CLASS: A
DEST: CENTRAL

RDR: 00C    WTR: 00E
RDR-08/02/77(214) 13.26.04
WTR-08/02/77(214) 15.07.26
```

```
UNIVERSITY OF IDAHO COMPUTER SERVICES
```


```
JNELLE                START
NELSON
OUTPUT CLASS: A
DEST: CENTRAL

RDR: 00C    WTR: 00E
RDR-08/02/77(214) 13.26.04
WTR-08/02/77(214) 15.07.26
```


```
NN          NN  EEEEEEEEEEEEE
NNN         NN  EEEEEEEEEEEEE
NNNN        NN  EE
NN NN       NN  EE
NN  NN      NN  EE
NN   NN     NN  EEEEEEEE
NN    NN    NN  EEEEEEEE
NN     NN   NN  EE
NN      NNNN    EE
NN       NNN    EE
NN        NN    EEEEEEEEEEEEE
NN         N    EEEEEEEEEEEEE
```

```
JJJJJJJJJJ  NN          NN  EEEEEEEEEEEEE  LL           LL  EEEEEEEEEEEEE
JJJJJJJJJJ  NNN         NN  EEEEEEEEEEEEE  LL           LL  EEEEEEEEEEEEE
    JJ      NNNN        NN  EE             LL           LL  EE
    JJ      NN NN       NN  EE             LL           LL  EE
    JJ      NN  NN      NN  EE             LL           LL  EE
    JJ      NN   NN     NN  EEEEEEEE       LL           LL  EEEEEEEE
    JJ      NN    NN    NN  EEEEEEEE       LL           LL  EEEEEEEE
    JJ      NN     NN   NN  EE             LL           LL  EE
JJ  JJ      NN      NNNN    EE             LL           LL  EE
JJ  JJ      NN       NNN    EE             LL           LL  EE
JJJJJJJJ    NN        NN    EEEEEEEEEEEEE  LLLLLLLLLLLLL  LLLLLLLLLLLLL  EEEEEEEEEEEEE
 JJJJJJ     NN         N    EEEEEEEEEEEEE  LLLLLLLLLLLLL  LLLLLLLLLLLLL  EEEEEEEEEEEEE
```

1970 Leantieff

Revised 8-2-77
(Nelson)

```
//JNELLE  JOB (XXXXXXXX,542-58-6071),'NELSON',MSGLEVEL=(1,1)
LOG IEF403I JNELLE   STARTED  TIME=14.37.14
LOG VI023 JOB 'JNELLE   ' SYSOUT=A.        1,526 RECORDS
LOG IEF404I JNELLE   ENDED    TIME=14.57.59
// EXEC FORTGCLD
***
XXFORTGCLD  PROC  LIB='&&FORTLIB',LIB1='USER.SYSLIB',LIB2='&&SYSLIB'     00001000
XXFORT   EXEC  PGM=IEYFORT,PARM=LOAD                                    52 02000
XXSYSPRINT  DD      SYSOUT=A                                            00003000
XXSYSPUNCH  DD      SYSOUT=B                                            00004000
XXSYSLIN    DD      DSNAME=&LOADSET,DISP=(MOD,PASS),UNIT=SYSSQ,        X00005000
XX          SPACE=(80,(200,100)),                                       51 00000
XX       DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)                           00007000
//FORT.SYSIN DD *
IEF236I ALLOC. FOR JNELLE   FORT
IEF237I 150   ALLOCATED TO SYSLIN
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS77214.T143708.RF106.JNELLE.LOADSET       PASSED
IEF285I   VOL SER NOS= VS0002.
IEF373I STEP /FORT    / START 77214.1437
IEF374I STEP /FORT    / STOP  77214.1454 CPU   0MIN 20.59SEC STOR VIRT 100K

  +++  STEP NAME=FORT       PROGRAM NAME=IEYFORT                        COMPLETION CODE=0000
  +++  SYSIN      319  SYSOUT      510  PAGES IN      151  PAGES OUT     126
  +++  I/O COUNTS  150 00008
  +++  PARTITION SIZE=0192K  MEMORY USED=0100K

XXGO        EXEC    PGM=LOADER,PARM=(MAP,LET,PRINT),COND=(4,LT,FORT)    00008000
XXSYSLIB    DD      DSNAME=&LIB,DISP=(SHR,PASS)                         00009000
IEF653I SUBSTITUTION JCL - DSNAME=&&FCRTLIB,DISP=(SHR,PASS)
XX          DD      DSNAME=&LIB1,DISP=(SHR,PASS)                        00010000
IEF653I SUBSTITUTION JCL - DSNAME=USER.SYSLIB,DISP=(SHR,PASS)
XX          DD      DSNAME=&LIB2,DISP=(SHR,PASS)                        00011000
IEF653I SUBSTITUTION JCL - DSNAME=&&SYSLIB,DISP=(SHR,PASS)
XXSYSLOUT   DD      SYSOUT=A                                            00012000
XXSYSLIN    DD      DSNAME=*.FORT.SYSLIN,DISP=(OLD,DELETE)              00013000
XXFT05F001  DD      DDNAME=SYSIN                                        00014000
XXFT06F001  DD      SYSOUT=A                                            00015000
XXFT07F001  DD      SYSOUT=B                                            00016000
//GO.SYSIN DD *
IEF236I ALLOC. FOR JNELLE   GO
IEF237I 154   ALLOCATED TO SYSLIB
IEF237I 155   ALLOCATED TO
IEF237I 155   ALLOCATED TO
IEF237I 150   ALLOCATED TO SYSLIN
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS1.FORTLIB                                PASSED
IEF285I   VOL SER NOS= VS0000.
IEF285I   USER.SYSLIB                                 PASSED
IEF285I   VOL SER NOS= VS0001.
IEF285I   SYS1.SYSLIB                                 PASSED
IEF285I   VOL SER NOS= VS0001.
IEF285I   SYS77214.T143708.RF106.JNELLE.LOADSET       DELETED
IEF285I   VOL SER NOS= VS0002.
IEF373I STEP /GO      / START 77214.1454
IEF374I STEP /GO      / STOP  77214.1457 CPU   0MIN 25.41SEC STOR VIRT 192K

  +++  STEP NAME=GO         PROGRAM NAME=LOADER                         COMPLETION CODE=0000
  +++  SYSIN      365  SYSOUT    1,016  PAGES IN      208  PAGES OUT     103
  +++  I/O COUNTS  154 00057  155 00000  155 00000  150 00010
  +++  PARTITION SIZE=0192K  MEMORY USED=0192K

IEF285I   SYS1.FORTLIB                                KEPT
```

```
IEF285I   VOL SER NOS= VS0000.
IEF285I   USER.SYSLIB                                   KEPT
IEF285I   VOL SER NOS= VS0001.
IEF285I   SYS1.SYSLIB                                   KEPT
IEF285I   VOL SER NOS= VS0001.
IEF298I  JNELLE   SYSOUT=A.
IEF375I  JOB /JNELLE  / START 77214.1437
IEF376I  JOB /JNELLE  / STOP  77214.1457 CPU   0MIN 46.00SEC
*****************************************************************
*  JOBNAME JNELLE    LOCATION CENTRAL   RDR 00C                  *
*  PAGES IN       359  PAGES OUT       229                       *
*  DISK I/O        75  TAPE I/O          0  OTHER I/O        0   *
*  CARDS INPUT    691  SYSIN          684  SYSOUT       1,526    *
*  CP TIME    0MIN  46.00SEC   JCL TIME   0.60SEC   I/T TIME  3.21SEC *
*  CURRENT FUNDS    $225.00 *FUNDS USED     $43.06 *JOB COST      $4.74*
*                           * ESTIMATED COSTS                    *
*****************************************************************
```

```
C  *****  VARIABLE LIST  ******
C MATRIX=HEADING LABELS          TABLE=TRANSACTION TABLE    COLT=COLUMN TOTAL DCMTRA
C DCMTRA=DIRECT COEF             IDMTRA=IDENTITY MATRIX     SBMTRA=INVERSE MATRIX
C SBMTRC=IDENTITY-DIRECT COE     TCOL=COLUMN TOT SBMTRA     TROW=ROW TOT SBMTRA
C SALES=SECTOR OUTPUTS           IEAR=VECTOR OF YEARS       COLUMN=FINAL DEMANDS
C N2=NO. ROW TABLE               N2=NO. ROW SBMTRA          N3=NO. YEARS ANAYLIZED
C N4=BASE YEAR OF MODEL          XMULT=DIRECT-INDIR MULT    TMULT=TYPE I (INCOME MUL)
C SMULT=INDIRECT MULT            A1MULT=DIR.INDIR.INDUCED   A2MULT=INDUCED MULT
C A3MULT=INDUR-INDUCED MULT      A4MULT=TYPE II MULT        XSALES=EST. OUTPUT
C BCOL=BREG-BREG MULT            RRCOL=RRREG-RREG MULT      RCOL=RREG-RREG MULT
C RBCOL=RREG-BREGMULT
C FOR SOME SUBPROGRAMS VARIABLES ARE DEFINED THROUGH THE CALL STATEMENTS
C  *******  END OD VARIABLE LIST  *****
0001        DIMENSION MATRIX(44,7),TABLE(44,40),COLT(40),DCMTRA(44,40),
           1IDMTRA(44,40),SBMTRA(44,40),SBMTRC(44,40),TCOL(40),TROW(40),
           2SALES(24,40),IEAR(24),COLUMN(44,40)
0002        READ(5,999) N1,N2,N3,N4
0003      999 FORMAT(4I4)
0004        DO 10 I=1,N1
0005       10 READ(5,1000) (TABLE(I,J),J=1,N2)
0006        DO 11 I=1,N1
0007       11 READ (5,1002)(MATRIX(I,J),J=1,7)
0008        DO 12 K=1,N3
0009       12 READ(5,1003) (SALES(K,I),I=1,N2)
C  ***  WRITE OUT TRANSACTION MATRIX  ***
C
0010        WRITE(6,1010) N4
0011        CALL SORT(N1,N2,2,MATRIX,TABLE,IEAR)
C
C
C  ***  COMPUTES DIRECT COEFFICIENTS  ***
C
0012        DO 20 J=1,N2
0013        COLT(J)=TABLE(N1,J)
0014       20 CONTINUE
0015        DO 40 J=1,N2
0016        DO 30 I=1,N2
0017        IF(COLT(J).EQ.0.0) GO TO 25
0018        GO TO 28
0019       25 DCMTRA(I,J)=0.0
0020        GO TO 30
0021       28 DCMTRA(I,J)=TABLE(I,J)/COLT(J)
0022       30 CONTINUE
0023       40 CONTINUE
0024        WRITE(6,1025) N4
0025        CALL SORT(N2,N2,2,MATRIX,DCMTRA,IEAR)
C
C  ***  COMPUTES IDENTITY MATRIX  ***
C
0026        DO 56 I=1,N2
0027        DO 55 J=1,N2
0028       55 IDMTRA(I,J)=0.0
0029       56 CONTINUE
0030        DO 60 J=1,N2
0031       60 IDMTRA(J,J)=1
C
C  ***  COMPUTES THE AFTER SUBTRACTION MATRIX  ***
C
```

```
0032                DO 80 K1=1,N2
0033                DO 70 K2=1,N2
0034                SBMTRA(K1,K2)=IDMTRA(K1,K2)-DCMTRA(K1,K2)
0035             70 CONTINUE
0036             80 CONTINUE
0037                DO 100 I=1,N2
0038                DO 90 J=1,N2
0039             90 SBMTRC(I,J)=SBMTRA(I,J)
0040            100 CONTINUE
                C
                C   ***  COMPUTES THE LEONTIEF MATRIX  ***
                C
0041                CALL MINV(SBMTRA,N2)
0042                WRITE(6,1050) N4
0043                CALL SORT(N2,N2,2,MATRIX,SBMTRA,IEAR)
                C
                C   ***  SUBROUTINE COLROW SUMS OF LEONTIEF MATRIX  ***
                C
0044                CALL COLROW(SBMTRA,TCOL,TROW,N2)
                C
                C   ***  SUBROUTINE ZMULT INCOME/OUTPUT AND INCOME MULTIPLIERS  ***
                C
                C   INTERREGIONAL MULTIPLIERS TO BE USED WITH COLROW SUBROUTINE
0045                CALL RMULT(SBMTRA,TCOL,N2,MATRIX)
0046                CALL EMULT(SBMTRA,N2,MATRIX)
                C
                C   ***  ESTIMATION OF FINAL DEMANDS AND TOTAL SALES 1970-1947 BY TWO METHODS **
                C   ***  METHOD ONE  FINAL DEMAND=SBMTRA*SALES  ***
                C   ***  METHOD TWO  FD=SBMTR*SALES-CAPITAL(CHANGE IN SALES)  ***
                C   ***  SUBROUTINE ESALES AND DSALES MUST FOLLOW DEMAND ***
                C
0047                I=1
0048                IEAR(I)=1963
0049                DO 130 I=2,N3
0050            130 IEAR(I)=IEAR(I-1)+1
0051                CONTINUE
0052                CALL DEMAND(SBMTRC,SALES,IEAR,COLUMN,N2,N3)
0053                WRITE (6,200)
0054            200 FORMAT('1','CHECK OF LEONTIEFF INVERSE')
0055                DO 210 I=1,N2
0056                DO 220 J=1,N2
0057                SUM=0.0
0058                DO 230 K=1,N2
0059            230 SUM=SUM+SBMTRC(I,K)*SBMTRA(K,J)
0060            220 DCMTRA(I,J)=SUM
0061            210 CONTINUE
0062                CALL SORT(N2,N2,2,MATRIX,DCMTRA,IEAR)
                C
                C   ***  FORMATS  ***
                C
0063           1000 FORMAT(8F10.3)
0064           1002 FORMAT(1X,A1,1X,4A4,2A2)
0065           1003 FORMAT(10F8.3)
0066           1010 FORMAT('1',T50,'TRANSACTION MATRIX-',I4)
0067           1025 FORMAT('1',T50,'DIRECT COEFFICIENTS MATRIX-',I4)
0068           1050 FORMAT('1',T50,'LEONTIEF MATRIX-',I4)
0069                STOP
0070                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	118	SORT	11C	MINV	120	COLROW	124	RMULT	128
EMULT	12C	DEMAND	130						

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
N1	1E0	N2	1E4	N3	1E8	N4	1EC	I	1F0
J	1F4	K	1F8	K1	1FC	K2	200	SUM	204

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
MATRIX	208	TABLE	6D8	COLT	2258	DCMTRA	22F8	IDMTRA	3E78
SBMTRA	59F8	SBMTRC	7578	TCOL	90F8	TROW	9198	SALES	9238
IEAR	A138	COLUMN	A198						

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
999	8D18	200	8D1E	1000	8D3F	1002	8D46	1003	8D56
1010	8D50	1025	8D78	1050	8DA1				

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = MAIN , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 70,PROGRAM SIZE = 50280
STATISTICS NO DIAGNOSTICS GENERATED

```
0001            SUBROUTINE MINV(A,N)
0002            DIMENSION A(44,40)
0003            DO 21 I=1,N
0004            IF(A(I,I).EQ.0.0) GO TO 30
0005            T=1.0/A(I,I)
0006            A(I,I)=1.0
0007            DO 55 J=1,N
0008         55 A(I,J)=T*A(I,J)
0009            DO 21 K=1,N
0010            IF(I.EQ.K) GO TO 21
0011            T=A(K,I)
0012            A(K,I)=0.0
0013            DO 71 J=1,N
0014         71 A(K,J)=A(K,J)-T*A(I,J)
0015         21 CONTINUE
0016            GO TO 22
0017         30 WRITE(6,51)
0018         51 FORMAT(///,6X,'MATRIX NOT POSTIVE DEFINETE'//)
0019         22 CONTINUE
0020            RETURN
0021            END
```

134

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	C0								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
I	C4	N	C8	T	CC	J	D0	K	D4

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
A	D8								

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
51	DC								

```
*OPTIONS IN EFFECT*   NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
*OPTIONS IN EFFECT*   NAME = MINV      , LINECNT =      60
*STATISTICS*     SOURCE STATEMENTS =      21,PROGRAM SIZE =     800
*STATISTICS*  NO DIAGNOSTICS GENERATED
```

```
0001            SUBROUTINE COLROW(SAMTRA,TCOL,TROW,N2)
0002            DIMENSION SAMTRA(44,40),TCOL(40),TROW(40)
0003            DO 20 J=1,N2
0004            TCOL(J)=0
0005            DO 10 I=1,N2
0006         10 TCOL(J)=TCOL(J)+SAMTRA(I,J)
0007         20 CONTINUE
0008            WRITE(6,50)
0009            WRITE(6,60)
0010            DO 25 I=1,N2,2
0011            III=I+1
0012         25 WRITE(6,70) I,TCOL(I),III,TCOL(III)
0013            DO 40 I=1,N2
0014            TROW(I)=0
0015            DO 30 J=1,N2
0016         30 TROW(I)=TROW(I)+SAMTRA(I,J)
0017         40 CONTINUE
0018            WRITE(6,80)
0019            WRITE(6,60)
0020            DO 45 I=1,N2,2
0021            III=I+1
0022         45 WRITE(6,70) I,TROW(I),III,TROW(III)
0023         50 FORMAT('1',T40,'COLUMN SUM FOR LEONTIEF MATRIX',/)
0024         60 FORMAT(10X,'SECTOR',30X,'SECTOR')
0025         70 FORMAT(12X,I2,7X,F10.5,17X,I2,7X,F10.5)
0026         80 FORMAT(///,T40,'ROW SUM FOR LEONTIEF MATRIX',/)
0027            RETURN
0028            END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	A8								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
J	AC	N2	80	I	84	III	88		

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
SBMTRA	BC	TCOL	CC	TROW	C4				

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
50	C8	60	F0	70	105	80	11A		

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = COLROW , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 28,PROGRAM SIZE = 1044
STATISTICS NO DIAGNOSTICS GENERATED

```
0001                  SUBROUTINE RMULT(SBMTRA,TCOL,N2,MATRIX)
0002                  DIMENSION SBMTRA(44,40),TCOL(40),BCOL(40),RCOL(40),BRCOL(40),
                     1RBCOL(40),MATRIX(44,7)
0003                  NN=N2/2.
0004                  NM=NN+1
0005                  DO 20 J=1,NN
0006                  BCOL(J)=0.0
0007                  BRCOL(J)=0.0
0008                  DO 10 I=1,NN
0009                10 BCOL(J)=BCOL(J)+SBMTRA(I,J)
0010                  DO 15 I=NM,N2
0011                15 BRCOL(J)=BRCOL(J)+SBMTRA(I,J)
0012                20 CONTINUE
0013                  DO 40 J=NM,N2
0014                  RCOL(J)=0.0
0015                  RBCOL(J)=0.0
0016                  DO 30 I=1,NN
0017                30 RBCOL(J)=RBCOL(J)+SBMTRA(I,J)
0018                  DO 35 I=NM,N2
0019                35 RCOL(J)=RCOL(J)+SBMTRA(I,J)
0020                40 CONTINUE
0021                  WRITE(6,50)
0022                50 FORMAT('1',T46,'DIRECT AND INDIRECT MULTIPLIERS',//,T36,'INTRA-REG
                     1IONAL',T56,'INTER-REGIONAL',T77,'TOTAL',/,T38,'MULTIPLIER',T58,'MU
                     2LTIPLIER',T75,'MULTIPLIER',/)
0023                  WRITE(6,55)
0024                55 FORMAT(T59,'BOISE TO',T77,'BOISE TO',//,1X,'SECTORS',T36,'BOISE TO
                     1 BOISE',T56,'REST OF IDAHO',T75,'ENTIRE STATE',/)
0025                  DO 70 I=1,NN
0026                70 WRITE(6,100) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),BCOL(I),BRCOL(I),
                     1TCOL(I)
0027                  WRITE(6,50)
0028                  WRITE(6,60)
0029                60 FORMAT(T36,'REST OF IDAHO',T56,'REST IF IDAHO',T75, 'REST OF IDAHO
                     1',/,1X,'SECTORS',T35,'TO REST OF IDAHO',T58,'TO BOISE',T75,'TO ENT
                     2IRE STATE',/)
0030                  DO 80 I=NM,N2
0031                80 WRITE(6,100) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),RCOL(I),RBCOL(I),TC
                     1OL(I)
0032               100 FORMAT(1X,A1,I2,4A4,2A2,T39,F8.5,T59,F8.5,T77,F8.5)
0033                  RETURN
0034                  END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	B8								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
NN	BC	N2	C0	NM	C4	J	C8	I	CC

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
SBMTRA	D0	TCOL	D4	BCOL	D8	RCOL	178	BRCOL	218
RBCOL	288	MATRIX	358						

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
50	35C	55	3DF	60	43A	100	4AF		

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = RMULT , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 34,PROGRAM SIZE = 2316
STATISTICS NO DIAGNOSTICS GENERATED

```
FORTRAN IV G LEVEL  21                DEMAND          DATE = 77214          14/37/22                PAGE 0001

0001                  SUBROUTINE DEMAND(SBMTRC,SALES,IEAR,COLUMN,N2,N3)
0002                  DIMENSION SBMTRC(44,40),SALES(24,40),COLUMN(44,40),IEAR(24)
0003                  DO 20 K=1,N3
0004                  DO 10 I=1,N2
0005               10 COLUMN(K,I)=0
0006               20 CONTINUE
0007                  DO 50 K=1,N3
0008                  DO 40 I=1,N2
0009                  DO 30 J=1,N2
0010               30 COLUMN(K,I)=COLUMN(K,I)+SBMTRC(I,J)*SALES(K,J)
0011               40 CONTINUE
0012               50 CONTINUE
0013                  WRITE(6,60)
0014                  CALL SORT(N3,N2,3,SBMTRC,COLUMN,IEAR)
0015               60 FORMAT('1',T30,'FINAL DEMANDS - METHOD ONE',//)
0016                  RETURN
0017                  END
```

13C

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	A4	SORT	A8						

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
K	C4	N3	C8	I	CC	N2	D0	J	D4

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
SBMTRC	D8	SALES	DC	COLUMN	E0	IEAR	E4		

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
60	E8								

```
*OPTIONS IN EFFECT*   NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
*OPTIONS IN EFFECT*   NAME = DEMAND    , LINECNT =      60
*STATISTICS*    SOURCE STATEMENTS =      17,PROGRAM SIZE =     818
*STATISTICS*  NO DIAGNOSTICS GENERATED
```

```
0001            SUBROUTINE WRITE(N1,N2,N5,IX,MA,TA,IY)
0002            DIMENSION MA(44,1),TA(44,40),IY(24)
0003            WRITE(6,100) (MA(K,1),K,K=N5,N2)
0004            IF(IX-2) 50,20,35
0005         20 DO 30 I=1,N1
0006         30 WRITE(6,110) MA(I,1),I,(MA(I,J),J=2,7),(TA(I,J),J=N5,N2)
0007            GO TO 50
0008         35 DO 40 I=1,N1
0009         40 WRITE(6,120) IY(I),(TA(I,J),J=N5,N2)
0010         50 CONTINUE
0011        100 FORMAT(1X,///,1X,'PURCHASES/SALES',T24,10(7X,A1,I2))
0012        110 FORMAT(1X,A1,I2,4A4,2A2,T28,10F10.5)
0013        120 FORMAT(4X,I4,T28,10F10.5)
0014            RETURN
0015            END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	C0								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
K	C4	N5	C8	N2	CC	IX	D0		D4
N1	D8	J	DC						

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
MA	E0	TA	F4	IY	E8				

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
100	EC	110	111	120	124				

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = WRITE , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 15,PROGRAM SIZE = 1700
STATISTICS NO DIAGNOSTICS GENERATED

```
0001            SUBROUTINE SORT(N1,N2,IX,MA,TA,IY)
0002            DIMENSION MA(44,71,TA(44,40),IY(24)
0003            IF(N2.LE.10) GO TO 10
0004            IF(N2.LE.20) GO TO 20
0005            IF(N2.LE.30) GO TO 30
0006            IF(N2.LE.40) GO TO 40
0007            GO TO 70
0008         10 CALL WRITE(N1,N2,1,IX,MA,TA,IY)
0009            GO TO 70
0010         20 CALL WRITE(N1,10,1,IX,MA,TA,IY)
0011            CALL WRITE(N1,N2,11,IX,MA,TA,IY)
0012            GO TO 70
0013         30 CALL WRITE(N1,10,1,IX,MA,TA,IY)
0014            CALL WRITE(N1,20,11,IX,MA,TA,IY)
0015            CALL WRITE(N1,30,N2,IX,MA,TA,IY)
0016            GO TO 70
0017         40 CALL WRITE(N1,10,1,IX,MA,TA,IY)
0018            CALL WRITE(N1,20,11,IX,MA,TA,IY)
0019            CALL WRITE(N1,30,21,IX,MA,TA,IY)
0020            CALL WRITE(N1,N2,31,IX,MA,TA,IY)
0021         70 CONTINUE
0022            RETURN
0023            END
```

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SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
WRITE	C8								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
N2	1E4	N1	1E8	IX	1EC				

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
MA	1E0	IA	1F4	IY	1F8				

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = SORT , LINECNT = 60
STATISTICS SOURCE STATEMENTS = [illegible] PROGRAM SIZE = 1204
STATISTICS NO DIAGNOSTICS GENERATED

```
0001                  SUBROUTINE EMULT(SBMTRA,N2,MATRIX)
0002                  DIMENSION EMTRA(40,40),SBMTRA(44,40),DEMPLO(40),MATRIX(44,7),BEMP(
                     140),REMP(40),BREMP(40),RBEMP(40),TEMP(40),EMMULT(40)
0003                  READ(5,120) (DEMPLO(I),I=1,N2)
0004                  NN=N2/2.
0005                  NM=NN+1
0006                  DO 20 J=1,N2
0007                  DO 15 I=1,N2
0008               15 EMTRA(I,J)=SBMTRA(I,J)*DEMPLO(I)
0009               20 CONTINUE
0010                  DO 35 J=1,NN
0011                  BEMP(J)=0.0
0012                  BREMP(J)=0.0
0013                  DO 30 I=1,NN
0014               30 BEMP(J)=BEMP(J)+EMTRA(I,J)
0015                  DO 32 I=NM,N2
0016               32 BREMP(J)=BREMP(J)+EMTRA(I,J)
0017               35 CONTINUE
0018                  DO 45 J=NM,N2
0019                  REMP(J)=0.0
0020                  RBEMP(J)=0.0
0021                  DO 40 I=1,NN
0022               40 RBEMP(J)=RBEMP(J)+EMTRA(I,J)
0023                  DO 42 I=NM,N2
0024               42 REMP(J)=REMP(J)+EMTRA(I,J)
0025               45 CONTINUE
0026                  DO 50 J=1,NN
0027               50 TEMP(J)=(BEMP(J)+BREMP(J))
0028                  DO 60 J=NM,N2
0029               60 TEMP(J)=REMP(J)+RBEMP(J)
0030                  DO 65 J=1,N2
0031               65 EMMULT(J)=TEMP(J)/DEMPLO(J)
0032                  WRITE(6,100)
0033                  WRITE(6,102)
0034                  DO 70 I=1,NN
0035               70 WRITE(6,110) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),BEMP(I),BREMP(I),
                     1TEMP(I),DEMPLO(I),EMMULT(I)
0036                  WRITE(6,100)
0037                  WRITE(6,105)
0038                  DO 80 I=NM,N2
0039               80 WRITE(6,110) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),REMP(I),RBEMP(I),
                     1TEMP(I),DEMPLO(I),EMMULT(I)
0040              100 FORMAT('1',T38,'DIRECT AND INDIRECT EMPLOYMENT MULTIPLIER',//,T36,
                     1'INTRA-REGIONAL',T56,'INTER-REGIONAL',T77,'TOTAL',/,T38,'MULTIPLIE
                     2R',T58,'MULTIPLIER',T75,'MULTIPLIER',/)
0041              102 FORMAT(T59,'BOISE TO',T77,'BOISE TO',T99,'DIRECT',T113,'EMPLOYMENT
                     1',//,1X,'SECTORS',T36,'BOISE TO BOISE',T56,'REST OF IDAHO',T75,'EN
                     2TIRE STATE',T97,'MULTIPLIER',T113,'MULTIPLIER',/)
0042              105 FORMAT(T36,'REST OF IDAHO',T56,'REST OF IDAHO',T75,'REST OF IDAHO'
                     2,T99,'DIRECT',T113,'EMPLOYMENT',/,1X,'SECTORS',T35,'TO REST OF IDA
                     2HO',T58,'TO BOISE',T75,'TO ENTIRE STATE',T97,'MULTIPLIER',T113,'MU
                     3LTIPLIER',/)
0043              110 FORMAT(1X,A1,I2,4A4,2A2,T38,F9.4,T58,F9.4,T76,F9.4,T98,F9.4,T114,
                     1E9.4)
0044              120 FORMAT(10F8.3)
0045                  RETURN
0046                  END
```

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SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	D4								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
I	D8	N2	[illegible]	N[illegible]	E0	NM	E4	[illegible]	E8

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
EMTRA	EC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1490	TEMP	[illegible]
RBMP	1834	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	EMULT	1DD4

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
100	1E54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OPTIONS IN EFFECT [illegible] NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = EMULT , LINECNT = 60
STATISTICS SOURCE STATEMENTS = [illegible] ,PROGRAM SIZE = [illegible]
STATISTICS NO DIAGNOSTICS GENERATED

STATISTICS NO DIAGNOSTICS THIS STEP

VS LOADER

OPTIONS USED - PRINT,MAP,LET,CALL,RES,NOTERM,SIZE=159744,NAME=**GO

NAME	TYPE	ADDR	NAME	TYPE	ADDR	NAME	TYPE	ADDR	NAME	TYPE	ADDR	NAME	TYPE	ADDR
MAIN	SD	1D1010	MINV	SD	1DD478	COLROW	SD	1DD798	RMULT	SD	1DD8B0	DEMAND	SD	1DE4C0
WRITE	SD	1DE7F8	SORT	SD	1DEBE0	EMULT	SD	1DF098	IHCECOMH*	SD	1E16F8	IBCOM# *	LR	1E16F8
FDIOCS# *	LR	1E1784	INTSWTCH*	LR	1E263E	IHCCOMH2*	SD	1E2660	SE90A SD *	LR	1E29D8	IHCPCVTH*	SD	1E2CC0
ADCON# *	LR	1E2CC0	FCVAOUTP*	LR	1E2D4A	FCVIOUTP*	LR	1E2DFA	FCVZOUTP*	LR	1E2F52	FCVIOUTP*	LR	1E3506
FCVEOUTP*	LR	1E3808	FCVCOUTP*	LR	1E3A22	INT&SWCH*	LR	1E3D08	IHCEFIOS*	SD	1E3E78	FIOCS# *	LR	1E3E78
FIOCSBEP*	LR	1E3E7E	IHCFIOS2*	SD	1E4DA0	IHCEFNTH*	SD	1E5200	ARITH# *	LR	1E52D0	ADJSWTCN*	LR	1E566C
IHCUOPT *	SD	1E5818	IHCERRM *	SD	1E5818	ERRMON *	LR	1E5818	IHCERRE *	LR	1E5830	IHCUATBL*	SD	1E60F8
IHCETRCH*	SD	1E6730	IHCTRCH *	LR	1E6730	ERRTRA *	LR	1E6738						

TOTAL LENGTH 15980
ENTRY ADDRESS 1D1010

TRANSACTION MATRIX-1963

PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	9.84200	0.21800	0.06900	0.01000	0.03200	0.06200	0.03600	0.10600	0.0	42.51199
B 2 . FORAGE	10.66400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	3.75700	0.0	0.06600	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.90600	0.0	0.0	0.11600	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	2.50500	0.0	0.0	0.0	0.21800	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.37700	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	1.95600	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07800	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.54200	0.01900	0.04000	0.00500	0.01600	0.01500	0.00900	0.02600	0.0	3.69400
B11 . GRAIN PROC	2.93100	0.0	0.00500	0.0	0.0	0.0	0.00900	0.0	0.0	0.42100
B12 . POTATO PROC	0.0	0.0	0.0	0.00100	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.00800	0.0	0.01300	0.0	0.0
B14 . SUGAR-MISC PROC	0.38600	0.0	0.0	0.0	0.00400	0.0	0.0	0.0	0.0	0.99700
B15 . MANUFACTURE&MININ	0.03300	0.07000	0.09100	0.05200	0.12300	0.05000	0.10700	0.05900	0.0	2.62400
B16 . UTILITIES	0.26000	0.31700	0.18700	0.10800	0.33600	0.03400	0.30300	0.04200	0.0	0.54800
B17 . CONSTRUCTION	0.36800	0.13600	0.05100	0.04600	0.09000	0.03000	0.10200	0.04900	0.0	0.25100
B18 . TRADE	2.65900	0.47300	0.05100	0.30000	0.12300	0.07700	0.14700	0.16500	0.0	4.21700
B19 . SERVICES	5.21500	1.41400	0.76200	0.44600	0.85400	0.20800	1.35900	1.02700	0.0	10.22700
B20 . HOUSEHOLDS	6.57100	6.16500	1.51500	2.01200	4.47800	1.39000	3.45000	2.48400	0.0	10.87200
R21 . LIVESTOCK	1.09300	0.02500	0.00800	0.00100	0.00400	0.00700	0.00400	0.01200	0.0	4.81700
R22 . FORAGE	0.51100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	6.90500	0.0	0.12000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	2.16700	0.0	0.0	0.27700	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	1.14200	0.0	0.0	0.0	0.10000	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.95000	0.89200	0.21900	0.29100	0.64800	0.20100	0.49900	0.35900	0.0	1.57200
41 . COMPETITIVE IMPOR	4.00900	0.93400	0.23000	0.30500	0.67900	0.21100	0.52300	0.37600	0.0	1.64700
42 . OTHER IMPORTS	4.09300	0.82700	1.57400	0.56000	1.08300	0.25500	1.49100	0.04400	0.0	7.91000
43 . DEPRECIATION	0.0	0.03000	0.02900	0.00800	0.02200	0.00300	0.02700	0.0	0.0	0.00600
44 . TOTAL PURCHASES	67.30800	11.52000	5.01500	4.53900	8.80900	2.92900	10.02000	4.84000	0.0	92.31499

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	0.0	0.0	0.0	0.37300	0.00200	0.00200	0.00500	0.00600	0.03300	14.20000
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.00100	0.0	0.0	0.0	0.85500
B 3 . CEREALS	0.78300	0.0	0.0	0.0	0.00100	0.0	0.0	0.0	0.0	0.37200
B 4 . POTATOES	0.0	3.36200	0.0	0.0	0.00100	0.00100	0.0	0.0	0.0	0.15400
B 5 . SUGARBEETS	0.0	0.0	0.0	6.08300	0.00100	0.00200	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.12300	0.0	0.0	0.0	0.0	0.10700	0.06900	0.81600
B 7 . SEED CROPS	0.42600	0.0	0.0	0.0	0.00200	0.0	0.0	0.0	0.07700	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.01100	0.0	0.0	0.0	0.0	0.08600	0.0	2.12500
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.03100	0.15500	0.04500	0.23200	0.03900	0.02300	0.16600	0.17000	0.49300	3.04500
B11 . GRAIN PROC	0.13100	0.25000	0.01500	0.33500	0.0	0.02300	0.0	0.0	0.0	1.01100

B12 . POTATO PROC	0.05000	0.0	0.0	0.0	0.01400	0.02300	0.0	0.09800	0.28300	2.53300
B13 . VEGETABLE PROC	0.0	0.0	0.05900	0.13300	0.06800	0.0	0.0	0.07000	0.20200	1.01100
B14 . SUGAR-MISC PROC	0.29300	0.0	0.16900	2.34100	0.36700	0.02400	0.16600	0.05500	0.16200	0.51100
B15 . MANUFACTURE&MININ	0.26800	1.62200	0.25500	1.52600	32.75299	0.11500	42.45099	2.71500	4.30000	11.23100
B16 . UTILITIES	0.04500	0.25400	0.02900	0.30900	4.17800	17.02499	0.60500	3.35200	4.74800	16.48600
B17 . CONSTRUCTION	0.02700	0.04500	0.00700	0.04900	0.99200	2.73700	0.04800	0.64600	17.18499	82.38799
B18 . TRADE	0.29400	1.05200	0.08300	0.96400	3.88300	0.53000	15.10200	2.82400	7.98900	105.17099
B19 . SERVICES	0.40300	2.43300	0.11200	0.38400	13.07900	5.30500	17.21399	21.29399	58.44100	156.28000
B20 . HOUSEHOLDS	1.52400	6.44900	1.75400	8.64100	59.72400	39.45999	66.12299	102.68199	201.42499	47.76999
R21 . LIVESTOCK	0.0	0.0	0.0	0.04200	0.0	0.0	0.00100	0.00100	0.00400	1.44900
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04100
R23 . CEREALS	1.43900	0.0	0.0	0.0	0.00100	0.00100	0.0	0.0	0.0	0.68500
R24 . POTATOES	0.0	0.04000	0.0	0.0	0.00100	0.00100	0.0	0.0	0.0	0.26900
R25 . SUGARBEETS	0.0	0.0	0.0	2.77300	0.00100	0.00100	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.76300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.22000	0.93600	0.25400	1.25000	8.63800	5.70700	9.56400	14.85200	29.13300	6.90100
41 . COMPETITIVE IMPOR	0.23100	0.98000	0.26600	1.30900	9.05000	5.97900	10.02000	15.55900	30.52100	7.47100
42 . OTHER IMPORTS	3.80700	7.25700	0.02000	2.59700	70.22299	13.88900	24.50200	7.97200	53.95000	105.71100
43 . DEPRECIATION	0.0	0.00600	0.0	0.00500	1.98200	0.0	0.07100	0.01100	0.05700	0.0
44 . TOTAL PURCHASES	10.73400	32.86099	3.80400	29.34099	205.00000	90.84698	186.11699	178.50000	404.09180	574.45093

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02500	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B17 . CONSTRUCTION	0.12000	0.04600	0.05900	0.10600	0.03200	0.00900	0.03200	0.00300	0.00100	0.02600
B18 . TRADE	0.69500	0.12700	0.04700	0.54900	0.03500	0.01900	0.03700	0.00800	0.00700	0.35100
B19 . SERVICES	2.95600	0.82100	1.52600	1.77100	0.52100	0.11000	0.74300	0.10300	0.13900	1.84500
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	57.20799	1.32700	1.44900	0.41600	0.20500	0.34300	0.20600	0.11100	0.22000	80.29300
R22 . FORAGE	59.55600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	56.81999	0.0	3.50100	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	16.37399	0.0	0.0	14.63700	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	19.43399	0.0	0.0	0.0	1.82300	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	1.86900	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	10.04900	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04900	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.85000	0.0
R30 . LIVESTOCK PROC	2.88700	0.10100	0.75000	0.18100	0.08900	0.07500	0.04500	0.02400	0.04800	6.26600
R31 . GRAIN PROC	15.61700	0.0	0.29500	0.0	0.0	0.0	0.04500	0.0	0.04800	0.71400

R32 .	POTATO PROC	0.0	0.0	0.0	0.04600	0.0	0.0	0.0	0.0	0.0	0.0
R33 .	VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.03700	0.0	0.01200	0.0	0.0
R34 .	SUGAR-MISC PROC	2.05500	0.0	0.0	0.0	0.02300	0.0	0.0	0.0	0.0	1.69100
R35 .	MANUFACTURE&MININ	0.17600	0.38200	1.70500	1.95400	0.70700	0.24600	0.55100	0.05600	0.10300	4.45100
R36 .	UTILITIES	1.38800	1.73000	3.52300	4.02800	1.92500	0.16900	1.55500	0.03900	0.00100	0.93000
R37 .	CONSTRUCTION	1.83800	0.69900	0.89700	1.61900	0.48400	0.13900	0.49500	0.04400	0.01300	0.40000
R38 .	TRADE	13.47300	2.45400	0.91500	10.64300	0.67200	0.36500	0.71900	0.14800	0.13500	6.80500
R39 .	SERVICES	24.83499	6.90100	12.81900	14.47900	4.37600	0.92200	6.23800	0.84700	1.17000	15.50400
R40 .	HOUSEHOLDS	40.08299	38.53099	32.64899	85.92400	29.39299	7.88300	20.28999	2.68600	5.34600	21.11200
41 .	COMPETITIVE IMPOR	21.36200	5.10100	4.32200	11.37500	3.89100	1.04400	2.68600	0.35600	0.70800	2.79500
42 .	OTHER IMPORTS	21.81200	4.51800	29.62999	20.87199	6.20900	1.26600	7.66400	0.04100	1.92800	13.42000
43 .	DEPRECIATION	0.0	0.16500	0.54700	0.30600	0.12800	0.01500	0.13700	0.0	0.04300	0.00900
44 .	TOTAL PURCHASES	358.69092	62.90099	94.43300	169.30699	50.91299	14.50900	51.48900	4.57300	10.76100	156.61200

PURCHASES/SALES		R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 .	LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 .	FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 .	CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 .	POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 .	SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 .	VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 .	SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 .	FRUIT CROPS	0.0	0.0	0.00800	0.0	0.0	0.0	0.0	0.06800	0.0	2.24500
B 9 .	PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 .	LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 .	GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B12 .	POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 .	VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 .	SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 .	MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 .	UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B17 .	CONSTRUCTION	0.00500	0.01300	0.00100	0.00600	0.23700	0.33200	0.00500	0.09300	1.99800	16.39699
B18 .	TRADE	0.04400	0.25200	0.00900	0.10100	0.73900	0.05100	1.19300	0.32300	0.74100	16.17099
B19 .	SERVICES	0.13000	1.26600	0.16100	0.08700	5.39500	1.11300	2.93100	6.77400	10.75000	51.78499
B20 .	HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 .	LIVESTOCK	0.0	0.0	0.0	0.89200	0.00800	0.00400	0.00900	0.01700	0.06900	49.24799
R22 .	FORAGE	0.0	0.0	0.0	0.0	0.0	0.00100	0.0	0.0	0.0	2.79100
R23 .	CEREALS	6.72800	0.0	0.0	0.0	0.00800	0.00200	0.0	0.0	0.0	3.29300
R24 .	POTATOES	0.0	55.76199	0.0	0.0	0.00800	0.00400	0.0	0.0	0.0	1.62800
R25 .	SUGARBEETS	0.0	0.0	0.0	19.01599	0.00800	0.00500	0.0	0.0	0.0	0.0
R26 .	VEGETABLES	0.0	0.0	0.26200	0.0	0.0	0.0	0.0	0.25000	0.13000	2.54100
R27 .	SEED CROPS	1.28900	0.0	0.0	0.0	0.00800	0.0	0.0	0.0	0.14500	0.0
R28 .	FRUIT CROPS	0.0	0.0	0.01600	0.0	0.0	0.0	0.0	0.13200	0.0	4.37600
R29 .	PEAS-LENTILS	2.31100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 .	LIVESTOCK PROC	0.09400	0.76000	0.09500	0.49800	0.15100	0.04500	0.26500	0.39600	0.93200	9.48500
R31 .	GRAIN PROC	0.39800	1.22500	0.03100	0.72000	0.0	0.04500	0.0	0.0	0.0	3.15000
R32 .	POTATO PROC	0.15200	0.0	0.0	0.0	0.05600	0.04500	0.0	0.22900	0.53500	7.89200
R33 .	VEGETABLE PROC	0.0	0.0	0.12700	0.28600	0.26200	0.0	0.0	0.16200	0.38200	3.15000
R34 .	SUGAR-MISC PROC	0.88700	0.0	0.36000	5.02600	1.42300	0.04700	0.26500	0.12900	0.30600	1.59300
R35 .	MANUFACTURE&MININ	0.81100	7.93300	0.54400	3.27800	127.01700	0.22800	67.94398	6.33500	8.12800	34.98599
R36 .	UTILITIES	0.13500	1.24200	0.06200	0.66300	16.20200	33.57300	0.96800	7.82200	8.97600	57.56999
R37 .	CONSTRUCTION	0.07700	0.20500	0.01400	0.09800	3.61100	5.06600	0.07300	1.41500	30.49100	250.20999
R38 .	TRADE	0.84600	4.89000	0.16700	1.96000	14.31800	0.99300	23.10599	6.26600	14.36100	313.26587
R39 .	SERVICES	1.09100	10.63200	1.35500	0.73500	45.32599	9.34800	24.62099	56.91299	90.31499	435.06079
R40 .	HOUSEHOLDS	5.28300	36.21599	4.28100	21.23799	265.11182	89.07199	121.13899	274.24585	435.85376	170.12399
41 .	COMPETITIVE IMPOR	0.69900	4.79400	0.56700	2.81200	35.09599	11.79200	16.03600	36.30499	57.69899	23.27299
42 .	OTHER IMPORTS	11.53200	35.49300	0.04300	5.57700	272.32690	27.38899	39.21599	18.60100	101.98900	329.31299
43 .	DEPRECIATION	0.0	0.02700	0.0	0.01100	7.68800	0.0	0.11300	0.02500	0.10700	0.0
44 .	TOTAL PURCHASES	32.51299	160.71199	8.10300	63.00499	794.99878	179.15300	297.88184	416.49878	763.90576	1789.54590

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PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	0.14325	0.01892	0.01376	0.00220	0.00363	0.02117	0.00359	0.02190	0.0	0.46051
B 2 . FORAGE	0.15844	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.05582	0.0	0.01316	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.01346	0.0	0.0	0.02556	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.03722	0.0	0.0	0.0	0.02475	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.12871	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.19521	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01612	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00805	0.00165	0.00798	0.00110	0.00182	0.00512	0.00090	0.00537	0.0	0.06002
B11 . GRAIN PROC	0.04355	0.0	0.00100	0.0	0.0	0.0	0.00090	0.0	0.0	0.00456
B12 . POTATO PROC	0.0	0.0	0.0	0.00022	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.00273	0.0	0.00269	0.0	0.0
B14 . SUGAR-MISC PROC	0.00573	0.0	0.0	0.0	0.00045	0.0	0.0	0.0	0.0	0.01080
B15 . MANUFACTURE&MININ	0.00049	0.00608	0.01815	0.01146	0.01396	0.01707	0.01068	0.01219	0.0	0.02842
B16 . UTILITIES	0.00386	0.02752	0.03729	0.02379	0.03814	0.01161	0.03024	0.00868	0.0	0.06594
B17 . CONSTRUCTION	0.00547	0.01181	0.01017	0.01013	0.01022	0.01024	0.01018	0.01012	0.0	0.00272
B18 . TRADE	0.03950	0.04106	0.01017	0.06609	0.01396	0.02629	0.01467	0.03409	0.0	0.03568
B19 . SERVICES	0.07748	0.12274	0.15194	0.09826	0.09695	0.07101	0.13563	0.21219	0.0	0.11078
B20 . HOUSEHOLDS	0.09763	0.33516	0.30209	0.44327	0.50834	0.47456	0.34431	0.51322	0.0	0.11777
R21 . LIVESTOCK	0.01624	0.00217	0.00160	0.00022	0.00045	0.00239	0.00040	0.00248	0.0	0.05218
R22 . FORAGE	0.00759	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.10259	0.0	0.02393	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.03220	0.0	0.0	0.06103	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	0.01697	0.0	0.0	0.0	0.01135	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.01411	0.07743	0.04367	0.06411	0.07356	0.06862	0.04980	0.07417	0.0	0.01703

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	0.0	0.0	0.0	0.01271	0.00001	0.00002	0.00003	0.00003	0.00008	0.02472
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.00001	0.0	0.0	0.0	0.00149
B 3 . CEREALS	0.07295	0.0	0.0	0.0	0.00000	0.0	0.0	0.0	0.0	0.00065
B 4 . POTATOES	0.0	0.10231	0.0	0.0	0.00000	0.00001	0.0	0.0	0.0	0.00027
B 5 . SUGARBEETS	0.0	0.0	0.0	0.20732	0.00000	0.00002	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.03233	0.0	0.0	0.0	0.0	0.00060	0.00017	0.00142
B 7 . SEED CROPS	0.03969	0.0	0.0	0.0	0.00001	0.0	0.0	0.0	0.00019	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.00289	0.0	0.0	0.0	0.0	0.00048	0.0	0.00370
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00289	0.00472	0.01183	0.00791	0.00019	0.00025	0.00089	0.00095	0.00122	0.00530
B11 . GRAIN PROC	0.01220	0.00761	0.00394	0.01142	0.0	0.00025	0.0	0.0	0.0	0.00176
B12 . POTATO PROC	0.00466	0.0	0.0	0.0	0.00007	0.00025	0.0	0.00055	0.00070	0.00441
B13 . VEGETABLE PROC	0.0	0.0	0.01551	0.00453	0.00033	0.0	0.0	0.00039	0.00050	0.00176
B14 . SUGAR-MISC PROC	0.02730	0.0	0.04443	0.07979	0.00179	0.00026	0.00089	0.00031	0.00040	0.00089
B15 . MANUFACTURE&MININ	0.02497	0.04936	0.06703	0.05201	0.15977	0.00127	0.22809	0.01521	0.01064	0.01955

B16 . UTILITIES	0.00419	0.00773	0.00762	0.01053	0.02038	0.18740	0.00325	0.01878	0.01175	0.03217
B17 . CONSTRUCTION	0.00252	0.00137	0.00184	0.00167	0.00484	0.03013	0.00026	0.00362	0.04253	0.14898
B18 . TRADE	0.02739	0.03201	0.02182	0.03272	0.01894	0.00583	0.08157	0.01582	0.01977	0.18409
B19 . SERVICES	0.03754	0.07404	0.18717	0.01305	0.06380	0.05839	0.09249	0.15291	0.13230	0.27205
B20 . HOUSEHOLDS	0.14198	0.19686	0.46162	0.29450	0.29134	0.43436	0.35528	0.51525	0.49856	0.08305
R21 . LIVESTOCK	0.0	0.0	0.0	0.00143	0.0	0.0	0.00001	0.00001	0.00001	0.00280
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00007
R23 . CEREALS	0.13406	0.0	0.0	0.0	0.00000	0.00001	0.0	0.0	0.0	0.00119
R24 . POTATOES	0.0	0.24467	0.0	0.0	0.00000	0.00001	0.0	0.0	0.0	0.00064
R25 . SUGARBEETS	0.0	0.0	0.0	0.09451	0.00000	0.00001	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.07108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.02050	0.02848	0.06677	0.04260	0.04214	0.06282	0.05139	0.08320	0.07209	0.01201

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00547	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B17 . CONSTRUCTION	0.00033	0.00073	0.00062	0.00063	0.00063	0.00062	0.00062	0.00066	0.00009	0.00017
B18 . TRADE	0.00194	0.00202	0.00050	0.00324	0.00069	0.00131	0.00072	0.00175	0.00065	0.00224
B19 . SERVICES	0.00824	0.01305	0.01616	0.01046	0.01031	0.00758	0.01443	0.02252	0.01292	0.01178
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	0.15949	0.02110	0.01534	0.00246	0.00406	0.02364	0.00400	0.02427	0.02044	0.51269
R22 . FORAGE	0.16604	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.15841	0.0	0.03707	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.04565	0.0	0.0	0.08645	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	0.05418	0.0	0.0	0.0	0.03609	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.12882	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.19517	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01072	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07899	0.0
R30 . LIVESTOCK PROC	0.00805	0.00161	0.00794	0.00107	0.00176	0.00517	0.00087	0.00525	0.00446	0.04001
R31 . GRAIN PROC	0.04354	0.0	0.00101	0.0	0.0	0.0	0.00087	0.0	0.00446	0.00456
R32 . POTATO PROC	0.0	0.0	0.0	0.00027	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.00255	0.0	0.00262	0.0	0.0
R34 . SUGAR-MISC PROC	0.00573	0.0	0.0	0.0	0.00046	0.0	0.0	0.0	0.0	0.01080
R35 . MANUFACTURE&MININ	0.00049	0.00607	0.01806	0.01154	0.01400	0.01695	0.01073	0.01225	0.00957	0.02842
R36 . UTILITIES	0.00387	0.02750	0.03731	0.02379	0.03811	0.01165	0.03020	0.00853	0.00009	0.00594
R37 . CONSTRUCTION	0.00512	0.01111	0.00950	0.00956	0.00958	0.00958	0.00957	0.00962	0.00121	0.00255
R38 . TRADE	0.03756	0.03901	0.00969	0.06286	0.01330	0.02516	0.01396	0.03236	0.01255	0.04344
R39 . SERVICES	0.06924	0.10971	0.13575	0.08788	0.08663	0.06355	0.12115	0.18959	0.13873	0.09900

R40 . HOUSEHOLDS	0.11175	0.61257	0.34574	0.50750	0.58189	0.54332	0.39406	0.58736	0.49679	0.13480

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.00099	0.0	0.0	0.0	0.0	0.00016	0.0	0.00125
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B17 . CONSTRUCTION	0.00015	0.00008	0.00012	0.00010	0.00030	0.00185	0.00002	0.00022	0.00262	0.00916
B18 . TRADE	0.00135	0.00157	0.00111	0.00160	0.00093	0.00028	0.00400	0.00078	0.00097	0.00904
B19 . SERVICES	0.00400	0.00788	0.01987	0.00138	0.00679	0.00621	0.00984	0.01626	0.01407	0.02894
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	0.0	0.0	0.0	0.01416	0.00001	0.00002	0.00003	0.00004	0.00009	0.02752
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.00001	0.0	0.0	0.0	0.00156
R23 . CEREALS	0.20693	0.0	0.0	0.0	0.00001	0.00001	0.0	0.0	0.0	0.00184
R24 . POTATOES	0.0	0.34697	0.0	0.0	0.00001	0.00002	0.0	0.0	0.0	0.00091
R25 . SUGARBEETS	0.0	0.0	0.0	0.30182	0.00001	0.00003	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.03233	0.0	0.0	0.0	0.0	0.00060	0.00017	0.00142
R27 . SEED CROPS	0.03965	0.0	0.0	0.0	0.00001	0.0	0.0	0.0	0.00019	0.0
R28 . FRUIT CROPS	0.0	0.0	0.00197	0.0	0.0	0.0	0.0	0.00032	0.0	0.00245
R29 . PEAS-LENTILS	0.07108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.00289	0.00473	0.01172	0.00790	0.00019	0.00025	0.00089	0.00095	0.00122	0.00530
R31 . GRAIN PROC	0.01224	0.00762	0.00383	0.01143	0.0	0.00025	0.0	0.0	0.0	0.00176
R32 . POTATO PROC	0.00468	0.0	0.0	0.0	0.00007	0.00025	0.0	0.00055	0.00070	0.00441
R33 . VEGETABLE PROC	0.0	0.0	0.01567	0.00454	0.00033	0.0	0.0	0.00039	0.00050	0.00176
R34 . SUGAR-MISC PROC	0.02728	0.0	0.04443	0.07977	0.00179	0.00026	0.00089	0.00031	0.00040	0.00089
R35 . MANUFACTURE&MININ	0.02494	0.04936	0.06714	0.05203	0.15977	0.00127	0.22809	0.01521	0.01064	0.01955
R36 . UTILITIES	0.00415	0.00773	0.00765	0.01052	0.02038	0.18740	0.00325	0.01878	0.01175	0.03217
R37 . CONSTRUCTION	0.00237	0.00128	0.00173	0.00156	0.00454	0.02828	0.00025	0.00340	0.03991	0.13982
R38 . TRADE	0.02602	0.03043	0.02061	0.03111	0.01801	0.00554	0.07757	0.01504	0.01880	0.17505
R39 . SERVICES	0.03356	0.06616	0.16722	0.01167	0.05701	0.05218	0.08265	0.13665	0.11823	0.24311
R40 . HOUSEHOLDS	0.16249	0.22535	0.52832	0.33708	0.33347	0.49718	0.40667	0.65846	0.57056	0.09507

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PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	1.21017	0.07140	0.05377	0.04592	0.05050	0.07864	0.04763	0.08018	0.0	0.59933
B 2 . FORAGE	0.19314	1.01347	0.00999	0.00919	0.01003	0.01456	0.00942	0.01499	0.0	0.09646
B 3 . CEREALS	0.07316	0.00543	1.01741	0.00377	0.00411	0.00583	0.00394	0.00602	0.0	0.03703
B 4 . POTATOES	0.01750	0.00214	0.00154	1.02790	0.00178	0.00221	0.00167	0.00233	0.0	0.00911
B 5 . SUGARBEETS	0.04856	0.00344	0.00259	0.00236	1.02804	0.00375	0.00243	0.00387	0.0	0.02693
B 6 . VEGETABLES	0.00192	0.00189	0.00197	0.00258	0.00268	1.15063	0.00250	0.00316	0.0	0.00207
B 7 . SEED CROPS	0.00287	0.00047	0.00040	0.00038	0.00040	0.00047	1.24301	0.00053	0.0	0.00180
B 8 . FRUIT CROPS	0.00452	0.00633	0.00433	0.00574	0.00593	0.00615	0.00547	1.02306	0.0	0.00471
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0
B10 . LIVESTOCK PROC	0.01797	0.01222	0.01571	0.01034	0.01157	0.01637	0.01021	0.01695	0.0	1.05452
B11 . GRAIN PROC	0.05539	0.00594	0.00533	0.00449	0.00485	0.00620	0.00565	0.00650	0.0	0.03342
B12 . POTATO PROC	0.00500	0.00720	0.00495	0.00661	0.00671	0.00695	0.00628	0.00765	0.0	0.00526
B13 . VEGETABLE PROC	0.00219	0.00321	0.00222	0.00285	0.00299	0.00628	0.00281	0.00621	0.0	0.00241
B14 . SUGAR-MISC PROC	0.01116	0.00333	0.00251	0.00284	0.00350	0.00351	0.00286	0.00379	0.0	0.01906
B15 . MANUFACTURE&MININ	0.09306	0.13310	0.11048	0.12610	0.13279	0.14460	0.12686	0.14934	0.0	0.13169
B16 . UTILITIES	0.07432	0.11676	0.10438	0.10407	0.12480	0.09653	0.11872	0.00990	0.0	0.07827
B17 . CONSTRUCTION	0.18597	0.27190	0.19172	0.24151	0.25341	0.26182	0.24106	0.28805	0.0	0.19653
B18 . TRADE	0.27509	0.36511	0.23382	0.35553	0.31633	0.34423	0.29985	0.37874	0.0	0.30795
B19 . SERVICES	0.57316	0.74754	0.59404	0.66184	0.67758	0.68243	0.71645	0.88744	0.0	0.65354
B20 . HOUSEHOLDS	0.94328	1.45413	0.98680	1.28595	1.36114	1.40994	1.42851	1.53256	0.0	1.00864
R21 . LIVESTOCK	0.05630	0.02932	0.02244	0.02725	0.02573	0.02983	0.02316	0.03162	0.0	0.10546
R22 . FORAGE	0.01958	0.00631	0.00479	0.00582	0.00552	0.00643	0.00498	0.00681	0.0	0.02302
R23 . CEREALS	0.15092	0.01666	0.03777	0.01322	0.01347	0.01749	0.01257	0.01826	0.0	0.09037
R24 . POTATOES	0.05042	0.00852	0.00621	0.07588	0.00733	0.00868	0.00675	0.00922	0.0	0.03075
R25 . SUGARBEETS	0.02663	0.00362	0.00275	0.00302	0.01512	0.00380	0.00275	0.00398	0.0	0.01924
R26 . VEGETABLES	0.00121	0.00098	0.00073	0.00105	0.00094	0.00096	0.00084	0.00104	0.0	0.00110
R27 . SEED CROPS	0.00025	0.00015	0.00012	0.00016	0.00014	0.00015	0.00013	0.00017	0.0	0.00034
R28 . FRUIT CROPS	0.00159	0.00130	0.00096	0.00139	0.00125	0.00127	0.00111	0.00138	0.0	0.00145
R29 . PEAS-LENTILS	0.00057	0.00063	0.00055	0.00052	0.00053	0.00066	0.00058	0.00069	0.0	0.00303
R30 . LIVESTOCK PROC	0.00598	0.00371	0.00297	0.00398	0.00355	0.00365	0.00314	0.00394	0.0	0.00549
R31 . GRAIN PROC	0.00386	0.00228	0.00175	0.00226	0.00209	0.00229	0.00187	0.00244	0.0	0.00585
R32 . POTATO PROC	0.00306	0.00246	0.00182	0.00265	0.00237	0.00240	0.00210	0.00260	0.0	0.00279
R33 . VEGETABLE PROC	0.00133	0.00107	0.00079	0.00115	0.00103	0.00105	0.00092	0.00113	0.0	0.00121
R34 . SUGAR-MISC PROC	0.00159	0.00112	0.00084	0.00117	0.00106	0.00110	0.00094	0.00119	0.0	0.00184
R35 . MANUFACTURE&MININ	0.05335	0.03908	0.02964	0.04294	0.03771	0.03822	0.03334	0.04136	0.0	0.04723
R36 . UTILITIES	0.04401	0.02819	0.02212	0.03200	0.02748	0.02763	0.02396	0.02987	0.0	0.03760
R37 . CONSTRUCTION	0.10228	0.08053	0.06300	0.08693	0.07750	0.07868	0.06881	0.08517	0.0	0.09256
R38 . TRADE	0.13408	0.10413	0.07742	0.11549	0.10007	0.10179	0.08889	0.11016	0.0	0.12274
R39 . SERVICES	0.24928	0.17722	0.13530	0.19569	0.17077	0.17347	0.15097	0.18760	0.0	0.22240
R40 . HOUSEHOLDS	0.62666	0.51187	0.37847	0.54692	0.49202	0.49982	0.43779	0.54121	0.0	0.57052

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	0.02487	0.02997	0.05849	0.06185	0.03079	0.04337	0.04135	0.05076	0.04591	0.06989
B 2 . FORAGE	0.00487	0.00596	0.01149	0.01157	0.00625	0.00883	0.00838	0.01030	0.00930	0.01423
B 3 . CEREALS	0.07686	0.00301	0.00504	0.00558	0.00259	0.00366	0.00346	0.00425	0.00383	0.00587
B 4 . POTATOES	0.00134	0.10606	0.00200	0.00181	0.00118	0.00168	0.00156	0.00196	0.00179	0.00263
B 5 . SUGARBEETS	0.00766	0.00161	0.01346	0.23416	0.00210	0.00236	0.00247	0.00271	0.00249	0.00359
B 6 . VEGETABLES	0.00127	0.00164	0.04068	0.00254	0.00185	0.00256	0.00248	0.00369	0.00291	0.00410
B 7 . SEED CROPS	0.05015	0.00063	0.00070	0.00100	0.00028	0.00038	0.00036	0.00044	0.00064	0.00055
B 8 . FRUIT CROPS	0.00310	0.00408	0.00949	0.00544	0.00402	0.00566	0.00537	0.00706	0.00591	0.00874
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00853	0.01093	0.02392	0.01808	0.00678	0.00947	0.00975	0.01170	0.01095	0.01453
B11 . GRAIN PROC	1.01517	0.01060	0.01012	0.01764	0.00315	0.00472	0.00419	0.00514	0.00464	0.00711
B12 . POTATO PROC	0.00785	1.00412	0.00746	0.00592	0.00465	0.00671	0.00614	0.00804	0.00744	0.01026
B13 . VEGETABLE PROC	0.00156	0.00185	1.01945	0.00763	0.00244	0.00284	0.00284	0.00375	0.00352	0.00451
B14 . SUGAR-MISC PROC	0.03157	0.00221	0.05281	1.09037	0.00432	0.00316	0.00416	0.00363	0.00347	0.00432
B15 . MANUFACTURE&MININ	0.09047	0.13249	0.21378	0.17323	1.26954	0.11961	0.37658	0.14647	0.13891	0.16931

B16 . UTILITIES	0.04858	0.06152	0.09901	0.09406	0.08203	1.30330	0.08175	0.10886	0.09211	0.11414
B17 . CONSTRUCTION	0.12034	0.15419	0.27268	0.21701	0.17084	0.26685	1.22132	0.27452	0.28598	0.36251
B18 . TRADE	0.17472	0.22739	0.35997	0.30675	0.22736	0.29691	0.35979	1.35129	0.32485	0.49713
B19 . SERVICES	0.35044	0.46658	0.84832	0.55695	0.46963	0.61816	0.64251	0.79759	1.71707	0.83975
B20 . HOUSEHOLDS	0.62632	0.81073	1.49134	1.18985	0.92416	[illegible]	1.22953	1.51615	[illegible]	[illegible]
R21 . LIVESTOCK	0.02771	0.03116	0.02818	[illegible]	0.01637	[illegible]	0.02183	[illegible]	0.02419	0.02509
R22 . FORAGE	0.00561	0.00653	0.00605	0.00677	[illegible]	0.00496	0.00469	0.00577	[illegible]	[illegible]
R23 . CEREALS	0.15275	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.01139	[illegible]	[illegible]	[illegible]
R24 . POTATOES	0.00630	0.28118	0.00815	0.00800	0.00479	0.00680	0.00636	[illegible]	[illegible]	[illegible]
R25 . SUGARBEETS	0.00554	0.00298	0.00831	0.11297	0.00213	0.00272	0.00268	0.00314	[illegible]	[illegible]
R26 . VEGETABLES	0.00096	0.00134	0.00101	0.00115	0.00061	0.00086	0.00081	0.00100	0.00090	0.00078
R27 . SEED CROPS	0.00018	0.00020	0.00016	0.00018	0.00009	0.00013	0.00012	[illegible]	0.00014	0.00013
R28 . FRUIT CROPS	0.00126	0.00175	0.00134	0.00152	0.00081	0.00115	0.00108	[illegible]	[illegible]	[illegible]
R29 . PEAS-LENTILS	0.07856	[illegible]	[illegible]	[illegible]	0.00035	0.00051	0.00046	[illegible]	[illegible]	[illegible]
R30 . LIVESTOCK PROC	0.00513	[illegible]	[illegible]	[illegible]	0.00229	0.00322	0.00304	[illegible]	[illegible]	[illegible]
R31 . GRAIN PROC	0.00268	0.00270	0.00227	0.00256	0.00134	0.00189	0.00178	0.00220	0.00198	0.00190
R32 . POTATO PROC	0.00241	0.00341	0.00254	0.00288	0.00154	0.00217	0.00205	0.00282	0.00227	0.00195
R33 . VEGETABLE PROC	0.00106	0.00146	0.00111	0.00125	0.00067	0.00094	0.00089	0.00116	0.00099	0.00085
R34 . SUGAR-MISC PROC	0.00114	0.00148	0.00114	0.00135	0.00068	0.00096	0.00091	0.00112	0.00101	0.00090
R35 . MANUFACTURE&MININ	0.04300	0.05774	0.04042	0.04788	0.02635	0.03434	0.03238	0.03986	0.03586	0.03110
R36 . UTILITIES	0.03429	0.04614	0.02924	0.03803	0.01748	0.02464	0.02324	0.02861	0.02574	0.02261
R37 . CONSTRUCTION	0.08086	0.11214	0.08324	0.09537	0.05028	0.07092	0.06687	0.08233	0.07406	0.06384
R38 . TRADE	0.10405	0.15772	0.10753	0.12291	0.06494	0.09160	0.08636	0.10634	0.09565	0.08272
R39 . SERVICES	0.20380	0.26640	0.18313	0.21733	0.11818	0.15240	0.14651	0.18041	0.16229	0.14136
R40 . HOUSEHOLDS	0.49544	0.68832	0.52906	0.59610	0.32004	0.45145	0.42565	0.52408	0.47138	0.40494

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	0.00521	0.00596	0.00449	0.00561	0.00546	0.00559	0.00542	0.00711	0.00519	0.00549
B 2 . FORAGE	0.00105	0.00120	0.00091	0.00113	0.00110	0.00113	0.00110	0.00143	0.00105	0.00111
B 3 . CEREALS	0.00043	0.00050	0.00037	0.00047	0.00045	0.00047	0.00045	0.00059	0.00043	0.00046
B 4 . POTATOES	0.00020	0.00023	0.00017	0.00022	0.00021	0.00021	0.00021	0.00027	0.00020	0.00021
B 5 . SUGARBEETS	0.00028	0.00033	0.00025	0.00031	0.00030	0.00031	0.00030	0.00039	0.00028	0.00030
B 6 . VEGETABLES	0.00033	0.00038	0.00029	0.00036	0.00035	0.00036	0.00035	0.00044	0.00033	0.00035
B 7 . SEED CROPS	0.00006	0.00007	0.00006	0.00007	0.00007	0.00007	0.00007	0.00008	0.00006	0.00007
B 8 . FRUIT CROPS	0.00249	0.00307	0.00216	0.00287	0.00288	0.00297	0.00267	0.00891	0.00265	0.00253
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00123	0.00141	0.00106	0.00132	0.00129	0.00132	0.00128	0.00167	0.00122	0.00130
B11 . GRAIN PROC	0.00052	0.00060	0.00045	0.00056	0.00055	0.00056	0.00054	0.00071	0.00052	0.00055
B12 . POTATO PROC	0.00082	0.00094	0.00071	0.00088	0.00086	0.00088	0.00085	0.00109	0.00082	0.00087
B13 . VEGETABLE PROC	0.00039	0.00045	0.00034	0.00042	0.00041	0.00042	0.00041	0.00054	0.00039	0.00041
B14 . SUGAR-MISC PROC	0.00040	0.00046	0.00035	0.00043	0.00042	0.00043	0.00042	0.00054	0.00040	0.00042
B15 . MANUFACTURE&MININ	0.01932	0.02244	0.01673	0.02107	0.02067	0.02118	0.02025	0.02560	0.01937	0.02014
B16 . UTILITIES	0.01045	0.01194	0.00900	0.01125	0.01092	0.01119	0.01084	0.01391	0.01039	0.01101
B17 . CONSTRUCTION	0.04610	0.05404	0.04002	0.05064	0.04999	0.05123	0.04858	0.06081	0.04644	0.04772
B18 . TRADE	0.05513	0.06318	0.04553	0.06090	0.05724	0.05958	0.05555	0.07090	0.05376	0.05802
B19 . SERVICES	0.15768	0.17860	0.13811	0.16682	0.16370	0.16631	0.16521	0.20838	0.15746	0.16717
B20 . HOUSEHOLDS	0.15315	0.17503	0.13210	0.16484	0.16024	0.16401	0.15915	0.20441	0.15237	0.16143
R21 . LIVESTOCK	1.26126	0.09472	0.07166	0.06759	0.07070	0.10307	0.06535	0.10446	0.08878	0.69928
R22 . FORAGE	0.21168	1.01857	0.01386	0.01388	0.01443	0.01989	0.01330	0.02033	0.01720	0.11837
R23 . CEREALS	0.22364	0.02159	1.05478	0.01653	0.01711	0.02289	0.01604	0.02365	0.02092	0.12694
R24 . POTATOES	0.06771	0.01044	0.00757	1.10344	0.00890	0.01068	0.00821	0.01127	0.00937	0.03964
R25 . SUGARBEETS	0.07490	0.00673	0.00509	0.00507	1.04286	0.00725	0.00488	0.00745	0.00628	0.04586
R26 . VEGETABLES	0.00280	0.00349	0.00241	0.00327	0.00327	1.15136	0.00299	0.00375	0.00300	0.00282
R27 . SEED CROPS	0.00305	0.00055	0.00047	0.00047	0.00048	0.00056	1.24300	0.00061	0.00074	0.00208
R28 . FRUIT CROPS	0.00362	0.00456	0.00314	0.00426	0.00431	0.00445	0.00391	1.01560	0.00393	0.00363
R29 . PEAS-LENTILS	0.00457	0.00063	0.00055	0.00052	0.00053	0.00066	0.00058	0.00069	1.08671	0.00303
R30 . LIVESTOCK PROC	0.02270	0.01447	0.01758	0.01296	0.01376	0.01875	0.01203	0.01908	0.01618	1.05870
R31 . GRAIN PROC	0.05871	0.00762	0.00664	0.00618	0.00638	0.00794	0.00694	0.00823	0.01180	0.03871
R32 . POTATO PROC	0.00724	0.00873	0.00607	0.00844	0.00822	0.00848	0.00753	0.00916	0.00754	0.00718
R33 . VEGETABLE PROC	0.00313	0.00383	0.00268	0.00358	0.00361	0.00669	0.00332	0.00674	0.00331	0.00321
R34 . SUGAR-MISC PROC	0.01234	0.00399	0.00300	0.00358	0.00414	0.00417	0.00338	0.00443	0.00367	0.02048
R35 . MANUFACTURE&MININ	0.12708	0.14974	0.12325	0.14814	0.15085	0.16155	0.13995	0.16515	0.13329	0.15876
R36 . UTILITIES	0.10788	0.13299	0.11749	0.12485	0.14131	0.11309	0.13176	0.11564	0.08582	0.10486
R37 . CONSTRUCTION	0.24213	0.29840	0.21159	0.27794	0.28089	0.28939	0.26124	0.31247	0.24913	0.24136
R38 . TRADE	0.35401	0.40601	0.26564	0.41024	0.35915	0.38684	0.33312	0.41791	0.33008	0.37265
R39 . SERVICES	0.66471	0.74613	0.59102	0.69101	0.68457	0.69011	0.70197	0.86635	0.66637	0.70873

R40 . HOUSEHOLDS	1.41672	1.79086	1.23282	1.66856	1.69277	1.74668	...			

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.00334	0.00472	0.00650	0.00512	0.00373	0.00508	0.00516	0.00619	0.00566	0.00657
B 2 . FORAGE	0.00072	0.00095	0.00131	0.00104	0.00075	0.00103	0.00104	0.00125	0.00114	0.00133
B 3 . CEREALS	0.00029	0.00039	0.00054	0.00043	0.00031	0.00042	0.00043	0.00052	0.00047	0.00055
B 4 . POTATOES	0.00014	0.00018	0.00025	0.00020	0.00014	0.00020	0.00020	0.00024	0.00022	0.00025
B 5 . SUGARBEETS	0.00019	0.00026	0.00035	0.00028	0.00020	0.00028	0.00028	0.00034	0.00031	0.00036
B 6 . VEGETABLES	0.00023	0.00030	0.00041	0.00033	0.00024	0.00032	0.00033	0.00039	0.00036	0.00042
B 7 . SEED CROPS	0.00004	0.00006	0.00008	0.00006	0.00005	0.00006	0.00006	0.00008	0.00007	0.00008
B 8 . FRUIT CROPS	0.00176	0.00236	0.00421	0.00277	0.00194	0.00272	0.00261	0.00335	0.00287	0.00385
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00084	0.00111	0.00153	0.00121	0.00088	0.00120	0.00122	0.00146	0.00134	0.00155
B11 . GRAIN PROC	0.00036	0.00047	0.00065	0.00051	0.00038	0.00051	0.00052	0.00062	0.00057	0.00066
B12 . POTATO PROC	0.00056	0.00074	0.00102	0.00081	0.00059	0.00080	0.00081	0.00098	0.00089	0.00103
B13 . VEGETABLE PROC	0.00027	0.00035	0.00049	0.00038	0.00028	0.00038	0.00039	0.00047	0.00043	0.00049
B14 . SUGAR-MISC PROC	0.00027	0.00036	0.00050	0.00040	0.00029	0.00040	0.00040	0.00048	0.00044	0.00051
B15 . MANUFACTURE&MININ	0.01320	0.01757	0.02397	0.01941	0.01406	0.01970	0.01914	0.02316	0.02172	0.02528
B16 . UTILITIES	0.00709	0.00946	0.01296	0.01026	0.00748	0.01017	0.01035	0.01238	0.01134	0.01314
B17 . CONSTRUCTION	0.03162	0.04202	0.05718	0.04652	0.03388	0.04830	0.04569	0.05561	0.05290	0.06171
B18 . TRADE	0.03750	0.05064	0.06653	0.05559	0.03950	0.05344	0.05656	0.06411	0.05890	0.07083
B19 . SERVICES	0.10661	0.14156	0.19693	0.15127	0.11194	0.15067	0.15339	0.18733	0.16979	0.19272
B20 . HOUSEHOLDS	0.10397	0.13866	0.19017	0.15033	0.10965	0.14919	0.15149	0.18168	0.16635	0.19268
R21 . LIVESTOCK	0.04903	0.05642	0.08010	0.08856	0.04343	0.06136	0.05802	0.07142	0.06443	0.08840
R22 . FORAGE	0.00976	0.01154	0.01622	0.01730	0.00902	0.01275	0.01203	0.01482	0.01335	0.01838
R23 . CEREALS	0.22924	0.01539	0.02021	0.02274	0.01081	0.01530	0.01442	0.01773	0.01599	0.02184
R24 . POTATOES	0.00751	0.38704	0.00990	0.00961	0.00582	0.00828	0.00772	0.00969	0.00880	0.01165
R25 . SUGARBEETS	0.01300	0.00434	0.02141	0.34683	0.00403	0.00478	0.00486	0.00552	0.00504	0.00662
R26 . VEGETABLES	0.00200	0.00267	0.04129	0.00336	0.00222	0.00310	0.00297	0.00430	0.00345	0.00446
R27 . SEED CROPS	0.05023	0.00077	0.00077	0.00112	0.00033	0.00045	0.00042	0.00052	0.00070	0.00060
R28 . FRUIT CROPS	0.00260	0.00348	0.00669	0.00418	0.00289	0.00409	0.00385	0.00504	0.00424	0.00592
R29 . PEAS-LENTILS	0.07856	0.00103	0.00095	0.00156	0.00035	0.00051	0.00046	0.00057	0.00051	0.00069
R30 . LIVESTOCK PROC	0.01283	0.01502	0.02609	0.02135	0.00819	0.01149	0.01156	0.01398	0.01298	0.01596
R31 . GRAIN PROC	1.01753	0.01285	0.01161	0.01970	0.00412	0.00609	0.00546	0.00671	0.00605	0.00834
R32 . POTATO PROC	0.00972	1.00680	0.00899	0.00799	0.00560	0.00808	0.00737	0.00958	0.00881	0.01118
R33 . VEGETABLE PROC	0.00234	0.00295	1.02023	0.00851	0.00283	0.00340	0.00334	0.00437	0.00408	0.00486
R34 . SUGAR-MISC PROC	0.03242	0.00332	0.05346	1.09131	0.00471	0.00372	0.00467	0.00427	0.00403	0.00471
R35 . MANUFACTURE&MININ	0.12021	0.17268	0.23035	0.20171	1.27983	0.13425	0.38981	0.16318	0.15304	0.17514
R36 . UTILITIES	0.07570	0.09819	0.11532	0.12180	0.09203	1.31777	0.09464	0.12509	0.10652	0.12361
R37 . CONSTRUCTION	0.16954	0.22431	0.29873	0.26541	0.18724	0.28947	1.24251	0.30124	0.30714	0.36465
R38 . TRADE	0.24120	0.33444	0.40084	0.37403	0.25279	0.33505	0.38959	1.39352	0.36160	0.46901
R39 . SERVICES	0.44750	0.59163	0.83439	0.62293	0.46786	0.62284	0.63566	0.79066	1.70957	0.78838
R40 . HOUSEHOLDS	1.01754	1.36040	1.83229	1.63546	1.13453	1.60685	1.50371	1.85656	1.66631	2.33141

COLUMN SUM FOR LEONTIEF MATRIX

SECTOR		SECTOR	
1	5.32538	2	5.24517
3	4.13138	4	5.05943
5	4.98582	6	5.24045
7	4.97090	8	5.59108
9	1.00000	10	5.65373
11	3.89036	12	4.71742
13	5.59583	14	5.31276
15	3.84489	16	4.89459
17	4.84311	18	5.33940
19	4.95242	20	5.02984
21	5.32515	22	5.24489
23	4.13038	24	5.06071
25	4.98535	26	5.24247
27	4.96987	28	5.58960
29	4.74118	30	5.65353
31	3.89766	32	4.71746
33	5.59542	34	5.31277
35	3.84489	36	4.89449
37	4.84314	38	5.33942
39	4.95241	40	5.02981

ROW SUM FOR LEONTIEF MATRIX

SECTOR		SECTOR	
1	2.80257	2	1.48418
3	1.27982	4	1.19232
5	1.40044	6	1.24097
7	1.30677	8	1.18672
9	1.00000	10	1.31590
11	1.22104	12	1.14215
13	1.08964	14	1.26089
15	4.38337	16	3.21863
17	6.44958	18	8.09620
19	16.73259	20	26.97496
21	3.89545	22	1.73452
23	2.57247	24	2.29304
25	1.85041	26	1.26725
27	1.31100	28	1.11857
29	1.28060	30	1.42933
31	1.30359	32	1.20870
33	1.11701	34	1.29133
35	5.22776	36	4.00925
37	7.82719	38	10.16229
39	17.95209	40	41.37213

DIRECT AND INDIRECT MULTIPLIERS

SECTORS	INTRA-REGIONAL MULTIPLIER BOISE TO BOISE	INTER-REGIONAL MULTIPLIER BOISE TO REST OF IDAHO	TOTAL MULTIPLIER BOISE TO ENTIRE STATE
B 1 . LIVESTOCK	3.78062	1.53696	5.32538
B 2 . FORAGE	4.22600	1.01918	5.24517
B 3 . CEREALS	3.34395	0.78744	4.13138
B 4 . POTATOES	3.89998	1.15946	5.05943
B 5 . SUGARBEETS	4.00014	0.98568	4.98582
B 6 . VEGETABLES	4.24108	0.99937	5.24045
B 7 . SEED CROPS	4.10552	0.86559	4.97090
B 8 . FRUIT CROPS	4.51127	1.07982	5.59108
B 9 . PEAS-LENTILS	1.00000	0.0	1.00000
B10 . LIVESTOCK PROC	4.26873	1.38501	5.65373
B11 . GRAIN PROC	2.64[illegible]	1.25271	3.89936
B12 . POTATO PROC	3.03557	1.68186	4.71742
B13 . VEGETABLE PROC	4.54243	1.05341	5.59583
B14 . SUGAR-MISC PROC	4.00143	1.31173	5.31316
B15 . MANUFACTURE&MININ	3.21393	0.63097	3.84489
B16 . UTILITIES	4.00480	0.88980	4.89459
B17 . CONSTRUCTION	4.00397	0.83915	4.84311
B18 . TRADE	4.30632	1.03308	5.33940
B19 . SERVICES	4.02301	0.92942	4.95242
B20 . HOUSEHOLDS	4.21232	0.81753	5.02984

DIRECT AND INDIRECT MULTIPLIERS

SECTORS	INTRA-REGIONAL MULTIPLIER REST OF IDAHO TO REST OF IDAHO	INTER-REGIONAL MULTIPLIER REST IF IDAHO TO BOISE	TOTAL MULTIPLIER REST OF IDAHO TO ENTIRE STATE
R21 . LIVESTOCK	4.86988	0.45527	5.32515
R22 . FORAGE	4.72406	0.52083	5.24489
R23 . CEREALS	3.73729	0.39309	4.13038
R24 . POTATOES	4.57051	0.49019	5.06071
R25 . SUGARBEETS	4.50623	0.47711	4.98535
R26 . VEGETABLES	4.75448	0.48819	5.24267
R27 . SEED CROPS	4.49624	0.47363	4.96987
R28 . FRUIT CROPS	4.98184	0.60776	5.58960
R29 . PEAS-LENTILS	4.28785	0.45333	4.74118
R30 . LIVESTOCK PROC	5.17397	0.47955	5.65353
R31 . GRAIN PROC	3.58846	0.30920	3.89766
R32 . POTATO PROC	4.30527	0.41219	4.71746
R33 . VEGETABLE PROC	5.02984	0.56559	5.59542
R34 . SUGAR-MISC PROC	4.86546	0.44731	5.31277
R35 . MANUFACTURE&MININ	3.51861	0.32629	3.84489
R36 . UTILITIES	4.44963	0.44486	4.89449
R37 . CONSTRUCTION	4.39308	0.45006	4.84314
R38 . TRADE	4.79879	0.54063	5.33942
R39 . SERVICES	4.45665	0.49576	4.95241
R40 . HOUSEHOLDS	4.45580	0.57401	5.02981

DIRECT AND INDIRECT EMPLOYMENT MULTIPLIER

SECTORS	INTRA-REGIONAL MULTIPLIER: BOISE TO BOISE	INTER-REGIONAL MULTIPLIER: BOISE TO REST OF IDAHO	TOTAL MULTIPLIER: BOISE TO ENTIRE STATE	DIRECT MULTIPLIER	EMPLOYMENT MULTIPLIER
B 1 . LIVESTOCK	235.9379	89.7724	325.7102	76.7010	4.2465
B 2 . FORAGE	232.6091	57.0422	289.6511	66.2030	4.3752
B 3 . CEREALS	212.2897	44.6757	256.9153	90.2840	2.8456
B 4 . POTATOES	185.9299	63.9870	249.9169	35.2130	7.0973
B 5 . SUGARBEETS	233.5942	55.4229	289.0168	81.0930	3.5640
B 6 . VEGETABLES	299.4795	56.0018	355.4812	123.4430	2.8797
B 7 . SEED CROPS	212.0790	48.3426	260.4214	51.9180	5.0160
B 8 . FRUIT CROPS	367.0935	60.4718	427.5652	181.7140	2.3530
B 9 . PEAS-LENTILS	22.9850	0.0	22.9850	22.9850	1.0000
B10 . LIVESTOCK PROC	200.7476	81.5665	282.3140	10.4480	27.0209
B11 . GRAIN PROC	155.1618	70.9765	226.1384	66.4130	3.4050
B12 . POTATO PROC	157.8830	90.9449	248.8279	52.9390	4.7007
B13 . VEGETABLE PROC	239.8053	59.0057	298.8108	55.0920	5.4239
B14 . SUGAR-MISC PROC	194.0978	76.8179	270.9155	35.5460	7.6215
B15 . MANUFACTURE&MININ	146.2292	35.2150	181.4442	35.8200	5.0654
B16 . UTILITIES	196.3901	49.6504	246.0405	46.9800	5.2371
B17 . CONSTRUCTION	178.0297	46.8312	224.8609	23.7830	9.4547
B18 . TRADE	287.7075	57.6469	345.3542	119.0170	2.9017
B19 . SERVICES	231.3988	51.8644	283.2632	77.7990	3.6410
B20 . HOUSEHOLDS	206.2654	45.8751	252.1405	26.2230	9.6152

DIRECT AND INDIRECT EMPLOYMENT MULTIPLIER

SECTORS	INTRA-REGIONAL MULTIPLIER: REST OF IDAHO TO REST OF IDAHO	INTER-REGIONAL MULTIPLIER: REST OF IDAHO TO BOISE	TOTAL MULTIPLIER: REST OF IDAHO TO ENTIRE STATE	DIRECT MULTIPLIER	EMPLOYMENT MULTIPLIER
R21 . LIVESTOCK	314.3101	26.2871	340.5969	76.7980	4.4350
R22 . FORAGE	284.6121	30.0244	314.6362	66.2850	4.7461
R23 . CEREALS	230.3052	22.6058	252.9110	66.4160	3.8080
R24 . POTATOES	243.3564	28.3245	271.6809	35.2440	7.7042
R25 . SUGARBEETS	284.2480	27.4591	311.7070	81.1740	3.8400
R26 . VEGETABLES	349.8364	28.1337	377.9700	123.2580	3.0665
R27 . SEED CROPS	257.5920	27.2507	284.8425	51.9830	5.4795
R28 . FRUIT CROPS	421.5564	35.6084	457.1648	181.5470	2.5182
R29 . PEAS-LENTILS	211.0633	26.1184	237.1817	21.0930	11.2446
R30 . LIVESTOCK PROC	276.7891	27.7254	304.5144	12.9460	23.5219
R31 . GRAIN PROC	179.8353	17.8451	197.6804	29.4630	6.7094
R32 . POTATO PROC	235.8475	23.8219	259.6692	49.9300	5.2007
R33 . VEGETABLE PROC	320.0972	32.7031	352.8003	80.1390	4.4024
R34 . SUGAR-MISC PROC	268.5259	25.8218	294.3477	41.3440	7.1195
R35 . MANUFACTURE&MININ	176.9486	18.8072	195.7558	34.6180	5.6547
R36 . UTILITIES	245.9678	25.5127	271.4805	50.7710	5.3472
R37 . CONSTRUCTION	236.0271	26.0721	262.0991	40.1740	6.5241
R38 . TRADE	338.0073	31.1543	369.1616	116.1060	3.1795
R39 . SERVICES	324.3833	28.4431	352.8264	122.8490	2.8720
R40 . HOUSEHOLDS	246.8099	33.0615	279.8713	23.5240	11.8973

FINAL DEMANDS - METHOD ONE

PURCHASES/SALES	1	2	3	4	5	6	7	8	9	10
1963	1.65895	3.25933	3.50449	0.13968	5.60038	1.01025	3.72724	0.41968	0.0	24.86041
1964	3.86395	4.81579	3.45692	0.40721	1.74058	0.50528	4.79974	1.72692	0.0	25.44209
1965	-0.78824	5.08301	2.71171	0.54356	2.26613	1.41082	5.03863	0.37220	0.0	26.67184
1966	2.20345	3.53285	3.17043	-1.18785	3.44661	0.14168	3.77682	-0.03304	0.0	27.04343
1967	8.37958	3.89134	4.31148	-0.01751	2.81252	0.53689	4.82851	0.57871	0.0	28.52363
1968	7.52780	4.67589	4.04894	2.53800	2.50182	0.52989	3.53711	-0.44589	0.0	29.12909
1969	6.40635	-0.30739	3.39112	-0.67998	2.84156	0.09338	4.09502	0.27825	0.0	30.14185
1970	7.69766	1.54058	2.50355	-0.33360	1.41463	0.73478	3.84407	2.05786	0.0	31.83980
1971	7.71488	3.65842	3.03338	-1.00755	1.20656	0.90311	3.25674	1.26556	0.0	32.97008
1972	10.46785	2.92693	2.99154	-0.04387	0.81884	0.92446	3.25563	2.14093	0.0	34.72890
1973	12.39613	0.18723	3.07786	-0.68178	0.95032	0.98340	4.06812	1.25710	0.0	36.29730
1974	16.41278	-1.16445	2.28240	-1.31670	0.76045	1.43651	5.36196	1.79946	0.0	38.08929
1975	17.98245	2.69652	2.45384	-1.20109	0.75034	1.33549	4.73697	2.67869	0.0	40.47141
1976	14.68991	2.03272	1.69740	-0.42267	0.19659	1.45192	4.63902	5.38336	0.0	42.52688
1977	14.35237	1.87960	1.71180	-1.32541	0.47132	2.10846	5.26218	5.47544	0.0	45.84479
1978	12.66405	-0.11790	1.98400	-1.98206	0.21117	1.34335	6.79452	4.07785	0.0	49.07890
1979	10.95204	1.24101	1.42027	-1.61600	1.27773	1.78537	6.40926	4.63841	0.0	51.31235
1980	10.11205	0.87683	0.81363	-1.12695	0.50006	1.80920	5.79523	3.24702	0.0	54.97238
1981	9.93628	-0.57554	1.33877	-1.01202	0.61184	1.56828	6.34443	4.18944	0.0	58.39818
1982	10.55104	2.06990	1.07182	-0.76892	-0.60442	3.58136	5.91761	2.47753	0.0	62.28325
1983	2.63803	0.11468	1.83831	-1.72334	0.28195	3.38440	6.77186	2.07858	0.0	67.38477
1984	2.65942	-0.17438	0.50513	-1.46728	0.88239	2.48564	6.59497	2.27300	0.0	72.42911
1985	1.07121	0.00429	0.50810	-0.38822	0.34955	2.48068	6.56870	2.81749	0.0	77.80492
1986	0.00042	0.00000	0.00047	-0.00100	0.00000	1.43700	7.55900	0.19399	0.0	83.55017

PURCHASES/SALES	11	12	13	14	15	16	17	18	19	20
1963	1.61840	8.95982	0.72132	7.18384	-4.45812	-4.39080	16.77496	1.53350	-15.12475	19.82137
1964	1.56625	9.19377	0.74524	7.33592	-1.49784	-4.21014	16.75612	6.77434	-9.39318	7.64047
1965	1.90724	9.63539	0.79160	7.69394	-1.05356	-4.08508	25.02280	7.00637	-2.50586	-1.30373
1966	1.79055	9.78650	0.80524	7.78173	-1.33889	-4.33206	34.63551	6.75078	2.97665	-7.90475
1967	1.57790	10.31155	0.84806	8.15086	-0.23137	-4.34810	36.10246	2.96748	6.36057	-13.04649
1968	1.66715	10.55299	0.86408	8.35392	1.22192	-3.97963	35.60500	5.11405	9.90324	-16.26668
1969	1.79912	10.90524	0.88623	8.64121	3.22945	-3.77717	35.60406	12.16368	14.80154	-19.30664
1970	1.85283	11.52543	0.93097	9.12782	4.22932	-3.73888	35.05782	10.28510	17.78224	-19.94403
1971	1.93028	11.93162	0.96238	9.44956	6.53321	-2.90305	34.74614	10.75110	22.56468	-24.00873
1972	1.89309	12.55756	0.99494	9.94226	5.41787	-2.62131	43.66234	11.91743	19.92346	-25.09982
1973	1.85238	13.08121	1.00995	10.37582	5.58171	-0.66489	58.33998	3.76246	10.80748	-11.54892
1974	1.77105	13.74077	1.05740	10.86047	5.25447	2.37426	73.46094	-0.00195	11.22150	-18.64194
1975	1.83984	14.58306	1.11166	11.55865	15.08798	0.16534	46.23938	-2.24284	15.26910	-4.56360
1976	2.16332	15.32943	1.17412	12.16046	14.62614	4.16177	49.18307	-1.35096	22.30562	-14.25681
1977	2.43579	16.54924	1.28235	13.09943	15.00566	5.41693	65.49312	2.70113	23.86250	-28.05518
1978	2.72159	17.68654	1.36834	14.02644	7.38497	8.73512	91.76416	-3.46157	20.26695	-24.32739
1979	2.97697	18.47952	1.43437	14.69654	28.38618	12.50948	32.94588	6.83226	30.93314	-17.50415
1980	3.30982	19.82013	1.56552	15.73149	31.63863	17.03976	42.10686	4.93210	37.86153	-27.47876
1981	3.44442	20.95953	1.58982	16.70399	33.64334	19.51047	67.22070	-8.90268	23.38879	-5.23315
1982	3.69375	22.36720	1.70726	17.80322	49.17952	23.99124	55.70209	-11.54818	28.59435	-7.35425
1983	4.45421	24.17798	1.85782	19.28494	62.70151	29.00523	48.18121	-14.28754	33.98064	-3.65283
1984	4.82758	25.99864	2.00925	20.70512	80.79308	33.64404	39.89256	3.32621	37.05322	-20.09521
1985	5.19867	27.85324	2.10569	22.24547	89.71820	36.06317	48.83147	3.92314	22.34972	-3.38403
1986	5.60304	29.85895	2.24000	23.86597	104.55563	39.68828	58.15453	10.24136	15.10548	0.01147

PURCHASES/SALES	21	22	23	24	25	26	27	28	29	30
1963	108.81607	-7.73644	63.09158	16.73820	3.07756	5.56182	49.10126	8.14767	8.97524	38.24417

1964	130.99805	-8.52176	41.70551	24.32448	-6.64170	4.90814	55.76971	3.39635	5.13866	39.26907
1965	97.19603	-4.97547	59.77708	15.50789	-7.69979	3.95795	49.74895	2.69614	2.32937	41.55353
1966	102.47560	-5.13772	36.88184	-1.70171	-4.78218	2.75590	36.05515	3.42369	27.27034	42.25487
1967	130.58833	-9.62610	46.19702	1.87268	-6.98830	4.88090	25.94926	4.65964	2.78384	44.34509
1968	108.28880	-3.93941	60.46823	26.37769	-7.95506	1.83981	32.75418	6.58342	4.01310	45.32285
1969	85.96985	-3.23178	83.34319	15.57588	-0.68759	4.08526	34.84444	5.49554	4.61213	47.17175
1970	82.20453	-3.10148	67.26249	-2.66181	-0.89623	2.20577	24.99760	4.07084	4.85911	50.21805
1971	81.23935	-1.07223	60.74917	10.89209	-3.08532	1.50965	28.14784	3.04186	7.33543	52.09081
1972	92.14984	6.70911	62.72346	19.52116	-0.16360	1.42749	33.62422	5.62018	11.42797	54.70320
1973	100.37648	-1.71318	52.89246	-4.52462	-1.50183	-0.11394	26.19588	2.87255	4.96992	57.14881
1974	115.52888	-4.91702	46.81757	16.01448	2.66200	1.88859	27.62025	2.51274	5.93648	59.98349
1975	120.26704	-4.67554	45.34406	8.28920	-3.39511	1.14842	29.20946	0.50987	5.96211	63.78945
1976	108.13809	2.94546	35.20035	49.66158	1.56117	0.10728	29.22809	-2.35895	3.98730	67.34317
1977	108.32523	0.38427	35.13727	25.88655	-6.32616	1.68075	34.21857	0.84694	3.06611	72.89763
1978	102.56065	-3.43032	43.70717	13.83925	5.98006	3.03368	30.05141	-2.63870	7.26680	78.06177
1979	98.26120	13.21852	66.85916	31.83740	21.32735	4.13450	38.52364	-0.62739	8.42277	81.56012
1980	94.95370	1.92263	44.37991	43.80888	7.89051	3.02579	26.03691	-0.87900	5.54517	87.90536
1981	106.09154	5.02806	37.78586	74.74463	11.03134	4.88773	24.16684	0.32373	8.65426	92.99911
1982	123.73657	13.07979	32.92378	56.39473	-0.74871	5.54781	27.66411	0.49614	4.80207	99.34462
1983	105.95445	8.87022	44.89114	33.51582	7.59846	7.09916	20.86719	2.28710	5.87041	107.71942
1984	125.15260	-1.29995	27.48204	32.75520	11.15946	7.98942	30.31332	-1.67012	4.76616	116.01778
1985	142.56064	5.21738	21.36891	72.52547	10.59091	6.77242	30.93167	4.56724	7.64649	124.33493
1986	159.04831	0.00084	14.28071	70.03897	6.20998	9.45700	39.99797	-0.00000	6.83700	133.43025

PURCHASES/SALES	31	32	33	34	35	36	37	38	39	40
1963	-0.37613	45.00375	1.07898	14.26098	118.93883	-27.56226	-7.71361	3.77844	-72.03658	13.46436
1964	-1.25982	46.13828	1.14993	14.43097	148.19032	-27.31290	-6.96703	17.07663	-59.63988	-27.60254
1965	0.86420	48.33186	1.25218	15.34178	167.59238	-27.02733	6.98648	20.67796	-43.61743	-45.90845
1966	0.60150	49.10641	1.26197	15.50377	185.12010	-26.52803	22.24489	21.83316	-31.08270	-61.82397
1967	-0.37000	51.74135	1.34026	16.17046	200.30237	-27.24207	23.72267	12.37964	-22.69415	-65.63306
1968	0.88756	52.97906	1.35018	16.70862	216.54254	-28.33000	21.35458	17.25955	-19.61314	-91.24829
1969	2.23526	54.76909	1.37594	17.42480	231.92311	-29.64540	19.97646	37.24323	-12.71144	-112.29150
1970	2.89187	57.90256	1.47768	18.49066	245.12959	-28.65007	18.23105	35.07069	-1.39630	-86.40918
1971	3.19351	59.95158	1.52389	19.15004	265.62500	-27.90500	16.25005	35.89290	6.30022	-104.15820
1972	2.91170	63.18452	1.55212	20.13013	275.71338	-29.67052	26.84596	39.33116	-2.71101	-121.47778
1973	2.71764	65.97232	1.51804	21.00522	278.93237	-26.06206	44.72232	20.92326	-17.59343	-34.29639
1974	2.34384	69.32147	1.60616	22.02135	269.54297	-21.10182	66.92171	12.50185	-16.58946	-56.97681
1975	2.57987	73.61198	1.69025	23.48956	282.00195	-25.93343	19.52985	5.25241	-9.75931	4.22290
1976	3.77479	77.31653	1.84122	24.82315	279.53711	-19.24240	23.07434	5.50693	3.72694	-34.25830
1977	4.65350	83.44524	2.05654	26.82870	294.31177	-16.60223	48.73058	19.61098	11.15379	-60.44067
1978	5.60724	89.30031	2.19286	28.83812	274.60254	-11.20587	86.83315	6.46149	6.54839	-36.40625
1979	6.45330	93.30989	2.32892	30.20499	340.80103	-7.16333	-7.75975	24.99750	17.38373	-89.44580
1980	7.59151	99.98723	2.59593	32.42188	361.22070	2.89970	6.48799	21.20204	36.76709	-96.37329
1981	7.42990	106.13403	2.53790	34.38631	370.02661	4.21886	36.69292	-14.39473	6.90308	-31.81445
1982	7.51897	113.26924	2.78372	36.64418	400.65820	13.03218	17.11295	-20.20874	19.30469	-32.36523
1983	9.65699	122.42111	3.06059	39.83456	423.29761	22.32704	1.78517	-27.67366	31.72534	-6.55664
1984	9.98975	131.64969	3.37810	42.77455	452.71582	30.88177	-13.07280	15.29243	41.84619	-54.54492
1985	10.37909	141.37187	3.49122	45.89114	482.47070	31.82878	-7.48839	2.97925	11.45093	-27.24292
1986	10.42562	151.75694	3.68499	49.19994	527.47583	36.67712	0.00290	0.00610	0.09009	0.23535

CHECK OF LEONTIEFF INVERSE

PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	0.99998	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000
B 2 . FORAGE	0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B 3 . CEREALS	0.00000	0.00000	0.99999	0.00000	-0.00000	0.0	0.00000	0.00000	0.0	-0.00000
B 4 . POTATOES	0.00000	0.00000	-0.00000	0.99999	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000
B 5 . SUGARBEETS	0.00000	0.00000	-0.00000	-0.00000	0.99999	0.00000	-0.00000	0.00000	0.0	-0.00000
B 6 . VEGETABLES	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.99999	0.00000	0.00000	0.0	0.0
B 7 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	0.0	-0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	0.0	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0
B10 . LIVESTOCK PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.99999
B11 . GRAIN PROC	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.00000
B12 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B13 . VEGETABLE PROC	-0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000
B14 . SUGAR-MISC PROC	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B16 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B18 . TRADE	-0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000
B19 . SERVICES	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000
B20 . HOUSEHOLDS	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00001	-0.00000	0.0	0.00000
R21 . LIVESTOCK	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000
R22 . FORAGE	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R23 . CEREALS	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R24 . POTATOES	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.0	0.00000
R25 . SUGARBEETS	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R27 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.0
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R31 . GRAIN PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.00000
R32 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R34 . SUGAR-MISC PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R35 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R40 . HOUSEHOLDS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000

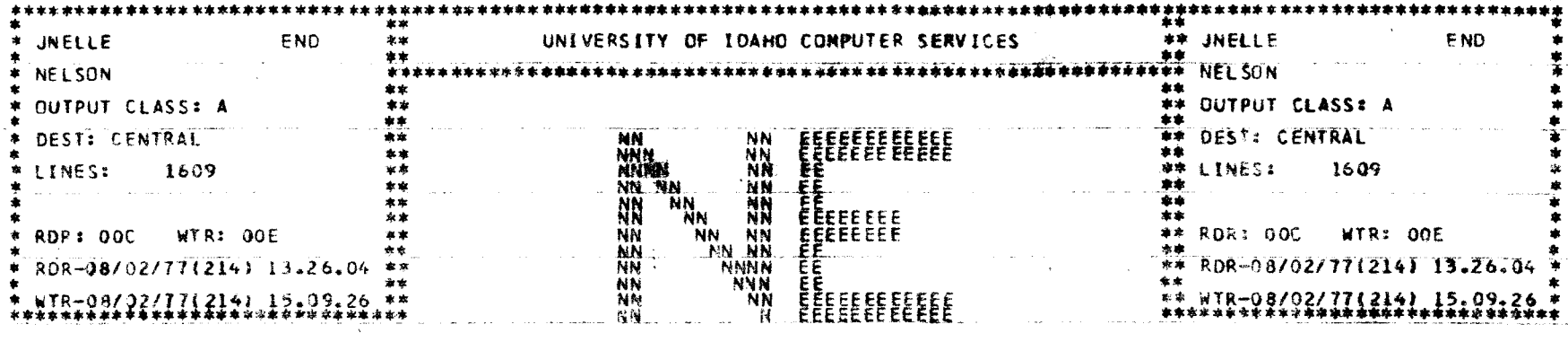
PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B 2 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
B 3 . CEREALS	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
B 4 . POTATOES	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
B 6 . VEGETABLES	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B 7 . SEED CROPS	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B11 . GRAIN PROC	0.99999	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
B12 . POTATO PROC	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B13 . VEGETABLE PROC	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B14 . SUGAR-MISC PROC	0.00000	-0.00000	0.00000	0.99999	-0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	-0.00000	0.00000	-0.00000	-0.00000	-0.00000

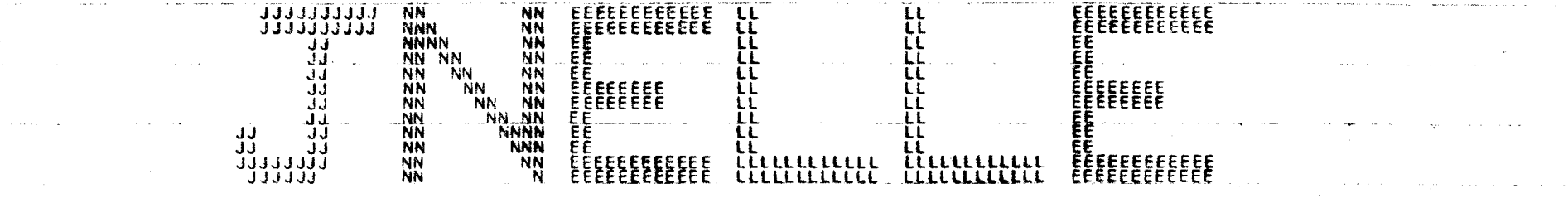
B16 . UTILITIES	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99997	-0.00000	-0.00000	-0.00000
B18 . TRADE	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.99998	-0.00000	-0.00000
B19 . SERVICES	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.99998	0.00000
B20 . HOUSEHOLDS	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.99999
R21 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R22 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R23 . CEREALS	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R24 . POTATOES	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
R25 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
R26 . VEGETABLES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R27 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R31 . GRAIN PROC	-0.00000	0.0	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R32 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R34 . SUGAR-MISC PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R35 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R40 . HOUSEHOLDS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 2 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 3 . CEREALS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 4 . POTATOES	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	0.00000	-0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 6 . VEGETABLES	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 7 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B11 . GRAIN PROC	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B12 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B13 . VEGETABLE PROC	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B14 . SUGAR-MISC PROC	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B16 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B18 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B19 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B20 . HOUSEHOLDS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R21 . LIVESTOCK	0.99999	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R22 . FORAGE	0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R23 . CEREALS	0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R24 . POTATOES	0.00000	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R25 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000
R27 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99999
R31 . GRAIN PROC	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000
R32 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R34 . SUGAR-MISC PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
R35 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

R40 . HOUSEHOLDS	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 2 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 3 . CEREALS	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 4 . POTATOES	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 6 . VEGETABLES	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 7 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B11 . GRAIN PROC	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B12 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B13 . VEGETABLE PROC	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B14 . SUGAR-MISC PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B16 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B18 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B19 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B20 . HOUSEHOLDS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R21 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R22 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R23 . CEREALS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R24 . POTATOES	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R25 . SUGARBEETS	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R27 . SEED CROPS	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R31 . GRAIN PROC	0.99999	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R32 . POTATO PROC	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R34 . SUGAR-MISC PROC	0.00000	-0.00000	0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R35 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	-0.00000	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000
R40 . HOUSEHOLDS	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0	1.00000


JNELLE END
NELSON
OUTPUT CLASS: A
DEST: CENTRAL
LINES: 1609
RDR: 00C WTR: 00E
RDR-08/02/77(214) 13.26.04
WTR-08/02/77(214) 15.09.26
UNIVERSITY OF IDAHO COMPUTER SERVICES
JNELLE END
NELSON
OUTPUT CLASS: A
DEST: CENTRAL
LINES: 1609
RDR: 00C WTR: 00E
RDR-08/02/77(214) 13.26.04
WTR-08/02/77(214) 15.09.26



```
JNELLE                START
NELSON
OUTPUT CLASS: A
DEST: CENTRAL

RDR: 00C    WTR: 00E
RDR-08/03/77(215) 13.47.39
WTR-08/03/77(215) 15.25.52
```

```
          UNIVERSITY OF IDAHO COMPUTER SERVICES
```

```
JNELLE                START
NELSON
OUTPUT CLASS: A
DEST: CENTRAL

RDR: 00C    WTR: 00E
RDR-08/03/77(215) 13.47.39
WTR-08/03/77(215) 15.25.52
```

```
NN          NN  EEEEEEEEEEEE
NNN         NN  EEEEEEEEEEEE
NNNN        NN  EE
NN NN       NN  EE
NN  NN      NN  EE
NN   NN     NN  EEEEEEEE
NN    NN    NN  EEEEEEEE
NN     NN NN NN  EE
NN      NNNN     EE
NN       NNN     EE
NN         N     EEEEEEEEEEEE
```

```
JJJJJJJJJJ  NN          NN  EEEEEEEEEEEE  LL            LL            EEEEEEEEEEEE
JJJJJJJJJJ  NNN         NN  EEEEEEEEEEEE  LL            LL            EEEEEEEEEEEE
      JJ    NNNN        NN  EE            LL            LL            EE
      JJ    NN NN       NN  EE            LL            LL            EE
      JJ    NN  NN      NN  EE            LL            LL            EE
      JJ    NN   NN     NN  EEEEEEEE      LL            LL            EEEEEEEE
      JJ    NN    NN    NN  EEEEEEEE      LL            LL            EEEEEEEE
      JJ    NN     NN NN  EE            LL            LL            EE
JJ    JJ    NN      NNNN  EE            LL            LL            EE
JJ    JJ    NN       NNN  EE            LL            LL            EE
JJJJJJJJ    NN         NN  EEEEEEEEEEEE  LLLLLLLLLLLL  LLLLLLLLLLLL  EEEEEEEEEEEE
 JJJJJJ     NN          N  EEEEEEEEEEEE  LLLLLLLLLLLL  LLLLLLLLLLLL  EEEEEEEEEEEE
```

1947 Intensional Model

Revised 8-1-77 (Nelson)

```
//JNELLE  JOB (XXXXXXXX,542-58-6071),'NELSON',MSGLEVEL=(1,1)
LOG IEF403I JNELLE   STARTED  TIME=15.14.03
LOG UI023 JOB 'JNELLE   ' SYSOUT=A.        1,526 RECORDS
LOG IEF404I JNELLE   ENDED    TIME=15.17.40
// EXEC FORTGCLD
***
XXFORTGCLD  PROC  LIB='&&FORTLIB',LIB1='USER.SYSLIB',LIB2='&&SYSLIB'     00001000
XXFORT    EXEC  PGM=IEYFORT,PARM=LOAD                                   52 02000
XXSYSPRINT  DD      SYSOUT=A                                            00003000
XXSYSPUNCH  DD      SYSOUT=B                                            00004000
XXSYSLIN    DD      DSNAME=&LOADSET,DISP=(MOD,PASS),UNIT=SYSSQ,        X00005000
XX            SPACE=(80,(200,100)),                                     51 06000
XX        DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)                        00007000
//FORT.SYSIN DD *
IEF236I ALLOC. FOR JNELLE   FORT
IEF237I 150   ALLOCATED TO SYSLIN
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS77215.T151358.RF107.JNELLE.LOADSET         PASSED
IEF285I   VOL SER NOS= VS0002.
IEF373I STEP /FORT    / START 77215.1514
IEF374I STEP /FORT    / STOP  77215.1515 CPU    0MIN 20.62SEC STOR VIRT 102K

  +++  STEP NAME=FORT       PROGRAM NAME=IEYFORT                        COMPLETION CODE=0000
  +++  SYSIN      319  SYSOUT      510  PAGES IN      149  PAGES OUT    94
  +++  I/O COUNTS  150 00008
  +++  PARTITION SIZE=0192K  MEMORY USED=0102K

XXGO        EXEC    PGM=LOADER,PARM=(MAP,LET,PRINT),COND=(4,LT,FORT)    00008000
XXSYSLIB    DD      DSNAME=&LIB,DISP=(SHR,PASS)                         00009000
IEF653I SUBSTITUTION JCL - DSNAME=&&FORTLIB,DISP=(SHR,PASS)
XX          DD      DSNAME=&LIB1,DISP=(SHR,PASS)                        00010000
IEF653I SUBSTITUTION JCL - DSNAME=USER.SYSLIB,DISP=(SHR,PASS)
XX          DD      DSNAME=&LIB2,DISP=(SHR,PASS)                        00011000
IEF653I SUBSTITUTION JCL - DSNAME=&&SYSLIB,DISP=(SHR,PASS)
XXSYSLOUT   DD      SYSOUT=A                                            00012000
XXSYSLIN    DD      DSNAME=*.FORT.SYSLIN,DISP=(OLD,DELETE)              00013000
XXFT05F001  DD      DDNAME=SYSIN                                        00014000
XXFT06F001  DD      SYSOUT=A                                            00015000
XXFT07F001  DD      SYSOUT=B                                            00016000
//GO.SYSIN DD *
IEF236I ALLOC. FOR JNELLE   GO
IEF237I 154   ALLOCATED TO SYSLIB
IEF237I 155   ALLOCATED TO
IEF237I 155   ALLOCATED TO
IEF237I 150   ALLOCATED TO SYSLIN
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS1.FORTLIB                                  PASSED
IEF285I   VOL SER NOS= VS0000.
IEF285I   USER.SYSLIB                                   PASSED
IEF285I   VOL SER NOS= VS0001.
IEF285I   SYS1.SYSLIB                                   PASSED
IEF285I   VOL SER NOS= VS0001.
IEF285I   SYS77215.T151358.RF107.JNELLE.LOADSET         DELETED
IEF285I   VOL SER NOS= VS0002.
IEF373I STEP /GO      / START 77215.1515
IEF374I STEP /GO      / STOP  77215.1517 CPU    0MIN 25.79SEC STOR VIRT 192K

  +++  STEP NAME=GO         PROGRAM NAME=LOADER                         COMPLETION CODE=0000
  +++  SYSIN      365  SYSOUT     1,016  PAGES IN      134  PAGES OUT    78
  +++  I/O COUNTS  154 00057  155 00000  155 00000  150 00010
  +++  PARTITION SIZE=0192K  MEMORY USED=0192K

IEF285I   SYS1.FORTLIB                                  KEPT
```

```
IEF285I   VOL SER NOS= VS0000.
IEF285I   USER.SYSLIB                                    KEPT
IEF285I   VOL SER NOS= VS0001.
IEF285I   SYS1.SYSLIB                                    KEPT
IEF285I   VOL SER NOS= VS0001.
IEF2981  JNELLE   SYSOUT=A.
IEF3751  JOB /JNELLE  / START 77215.1514
IEF3761  JOB /JNELLE  / STOP  77215.1517 CPU    0MIN 46.41SEC
*********************************************************************
*  JOBNAME JNELLE    LOCATION CENTRAL   RDR 00C                      *
*  PAGES IN        283  PAGES OUT       172                          *
*  DISK I/O         75  TAPE I/O          0  OTHER I/O          0    *
*  CARDS INPUT     691  SYSIN          684  SYSOUT      1,526        *
*  CP TIME    0MIN  46.41SEC   JCL TIME    0.58SEC   I/T TIME   3.06SEC  *
*  CURRENT FUNDS    $225.00 *FUNDS USED      $95.59 *JOB COST       $4.74*
*                           * ESTIMATED COSTS                       *
*********************************************************************
```

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```
C  *****  VARIABLE LIST  ******
C MATRIX=HEADING LABELS        TABLE=TRANSACTION TABLE    COLT=COLUMN TOTAL DCMTRA
C DCMTRA=DIRECT COEF           IDMTRA=IDENTITY MATRIX     SBMTRA=INVERSE MATRIX
C SBMTRC=IDENTITY-DIRECT COE   TCOL=COLUMN TOT SBMTRA     IROW=ROW TOT SBMTRA
C SALES=SECTOR OUTPUTS         IEAR=VECTOR OF YEARS       COLUMN=FINAL DEMANDS
C N2=NO. ROW TABLE             N2=NO. ROW SBMTRA          N3=NO. YEARS ANAYLIZED
C N4=BASE YEAR OF MODEL        XMULT=DIRECT-INDIR MULT    TMULT=TYPE I (INCOME MUL)
C SMULT=INDIRECT MULT          A1MULT=DIR,INDIR,INDUCED   A2MULT=INDUCED MULT
C A3MULT=INDIR-INDUCED MULT    A4MULT=TYPE II MULT        XSALES=EST. OUTPUT
C BCOL=BREG-BREG MULT          BRCOL=BRREG-RREG MULT      RCOL=RREG-RREG MULT
C RBCOL=RREG-BREGMULT
C FOR SOME SUBPROGRAMS VARIABLES ARE DEFINED THROUGH THE CALL STATEMENTS
C  *******  END OD VARIABLE LIST  *****
0001          DIMENSION MATRIX(44,7),TABLE(44,40),COLT(40),DCMTRA(44,40),
             1IDMTRA(44,40),SBMTRA(44,40),SBMTRC(44,40),TCOL(40),TROW(40),
             2SALES(24,40),IEAR(24),COLUMN(44,40)
0002          READ(5,999) N1,N2,N3,N4
0003        999 FORMAT(4I4)
0004          DO 10 I=1,N1
0005         10 READ(5,1000) (TABLE(I,J),J=1,N2)
0006          DO 11 I=1,N1
0007         11 READ (5,1002)(MATRIX(I,J),J=1,7)
0008          DO 12 K=1,N3
0009         12 READ(5,1003) (SALES(K,I),I=1,N2)
C  ***  WRITE OUT TRANSACTION MATRIX  ***
C
0010          WRITE(6,1010) N4
0011          CALL SORT(N1,N2,2,MATRIX,TABLE,IEAR)
C
C
C  ***  COMPUTES DIRECT COEFFICIENTS  ***
C
0012          DO 20 J=1,N2
0013          COLT(J)=TABLE(N1,J)
0014         20 CONTINUE
0015          DO 40 J=1,N2
0016          DO 30 I=1,N2
0017          IF(COLT(J).EQ.0.0) GO TO 25
0018          GO TO 28
0019         25 DCMTRA(I,J)=0.0
0020          GO TO 30
0021         28 DCMTRA(I,J)=TABLE(I,J)/COLT(J)
0022         30 CONTINUE
0023         40 CONTINUE
0024          WRITE(6,1025) N4
0025          CALL SORT(N2,N2,2,MATRIX,DCMTRA,IEAR)
C
C  ***  COMPUTES IDENTITY MATRIX  ***
C
0026          DO 56 I=1,N2
0027          DO 55 J=I,N2
0028         55 IDMTRA(I,J)=0.0
0029         56 CONTINUE
0030          DO 60 J=1,N2
0031         60 IDMTRA(J,J)=1
C
C  ***  COMPUTES THE AFTER SUBTRACTION MATRIX  ***
C
```

```
0032                DO 80 K1=1,N2
0033                DO 70 K2=1,N2
0034                SBMTRA(K1,K2)=IOMTRA(K1,K2)-DCMTRA(K1,K2)
0035             70 CONTINUE
0036             80 CONTINUE
0037                DO 100 I=1,N2
0038                DO 90 J=1,N2
0039             90 SBMTRC(I,J)=SBMTRA(I,J)
0040            100 CONTINUE
                C
                C   ***  COMPUTES THE LEONTIEF MATRIX  ***
                C
0041                CALL MINV(SBMTRA,N2)
0042                WRITE(6,1050) N4
0043                CALL SORT(N2,N2,2,MATRIX,SBMTRA,IEAR)
                C
                C   ***  SUBROUTINE COLROW SUMS OF LEONTIEF MATRIX  ***
                C
0044                CALL COLROW(SBMTRA,TCOL,TROW,N2)
                C
                C   ***  SUBROUTINE ZMULT INCOME/OUTPUT AND INCOME MULTIPLIERS  ***
                C
                C   INTERREGIONAL MULTIPLIERS TO BE USED WITH COLROW SUBROUTINE
0045                CALL RMULT(SBMTRA,TCOL,N2,MATRIX)
0046                CALL EMULT(SBMTRA,N2,MATRIX)
                C
                C   ***  ESTIMATION OF FINAL DEMANDS AND TOTAL SALES 1970-1947 BY TWO METHODS **
                C   ***  METHOD ONE  FINAL DEMAND=SBMTRA*SALES  ***
                C   ***  METHOD TWO  FD=SBMTR*SALES-CAPITAL(CHANGE IN SALES)  ***
                C   ***  SUBROUTINE ESALES AND DSALES MUST FOLLOW DEMAND ***
                C
0047                I=1
0048                IEAR(I)=1963
0049                DO 130 I=2,N3
0050           130  IEAR(I)=IEAR(I-1)+1
0051                CONTINUE
0052                CALL DEMAND(SBMTRC,SALES,IEAR,COLUMN,N2,N3)
0053                WRITE (6,200)
0054           200  FORMAT('1','CHECK OF LEONTIEFF INVERSE')
0055                DO 210 I=1,N2
0056                DO 220 J=1,N2
0057                SUM=0.0
0058                DO 230 K=1,N2
0059           230  SUM=SUM+SBMTRC(I,K)*SBMTRA(K,J)
0060           220  DCMTRA(I,J)=SUM
0061           210  CONTINUE
0062                CALL SORT(N2,N2,2,MATRIX,DCMTRA,IEAR)
                C
                C   ***  FORMATS  ***
                C
0063          1000  FORMAT(8F10.3)
0064          1002  FORMAT(1X,A1,1X,4A4,2A2)
0065          1003  FORMAT(10F8.3)
0066          1010  FORMAT('1',T50,'TRANSACTION MATRIX-',I4)
0067          1025  FORMAT('1',T50,'DIRECT COEFFICIENTS MATRIX-',I4)
0068          1050  FORMAT('1',T50,'LEONTIEF MATRIX-',I4)
0069                STOP
0070                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	118	SORT	11C	MINV	120	COLROW	124	RMULT	128
EMULT	12C	DEMAND	130						

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
N1	1E0	N2	1E4	N3	1E8	N4	1EC	I	1F0
J	1F4	K	1F8	K1	1FC	K2	200	SUM	204

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
MATRIX	208	TABLE	608	COLT	2258	DCMTRA	22F8	IDMTRA	3E78
SBMTRA	59F8	SBMTRC	7578	TCOL	90F8	TROW	9198	SALES	9238
IEAR	A138	COLUMN	A198						

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
999	BD18	200	BD1E	1000	BD3F	1002	BD46	1003	BD56
1010	BD5D	1025	BD78	1050	BDA1				

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = MAIN , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 70,PROGRAM SIZE = 50280
STATISTICS NO DIAGNOSTICS GENERATED

```
0001                SUBROUTINE MINV(A,N)
0002                DIMENSION A(44,40)
0003                DO 21 I=1,N
0004                IF(A(I,I).EQ.0.0) GO TO 30
0005                T=1.0/A(I,I)
0006                A(I,I)=1.0
0007                DO 55 J=1,N
0008             55 A(I,J)=T*A(I,J)
0009                DO 21 K=1,N
0010                IF(I.EQ.K) GO TO 21
0011                T=A(K,I)
0012                A(K,I)=0.0
0013                DO 71 J=1,N
0014             71 A(K,J)=A(K,J)-T*A(I,J)
0015             21 CONTINUE
0016                GO TO 22
0017             30 WRITE(6,51)
0018             51 FORMAT(///,6X,'MATRIX NOT POSTIVE DEFINETE'//)
0019             22 CONTINUE
0020                RETURN
0021                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	C0								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
I	C4	N	C8	T	CC	J	D0	K	D4

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
A	D8								

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
51	DC								

```
*OPTIONS IN EFFECT*   NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
*OPTIONS IN EFFECT*   NAME = MINV      , LINECNT =      60
*STATISTICS*     SOURCE STATEMENTS =       21,PROGRAM SIZE =      800
*STATISTICS*   NO DIAGNOSTICS GENERATED
```

```
0001            SUBROUTINE COLROW(SBMTRA,TCOL,TROW,N2)
0002            DIMENSION SBMTRA(44,40),TCOL(40),TROW(40)
0003            DO 20 J=1,N2
0004            TCOL(J)=0
0005            DO 10 I=1,N2
0006         10 TCOL(J)=TCOL(J)+SBMTRA(I,J)
0007         20 CONTINUE
0008            WRITE(6,50)
0009            WRITE(6,60)
0010            DO 25 I=1,N2,2
0011            III=I+1
0012         25 WRITE(6,70) I,TCOL(I),III,TCOL(III)
0013            DO 40 I=1,N2
0014            TROW(I)=0
0015            DO 30 J=1,N2
0016         30 TROW(I)=TROW(I)+SBMTRA(I,J)
0017         40 CONTINUE
0018            WRITE(6,80)
0019            WRITE(6,60)
0020            DO 45 I=1,N2,2
0021            III=I+1
0022         45 WRITE(6,70) I,TROW(I),III,TROW(III)
0023         50 FORMAT('1',T40,'COLUMN SUM FOR LEONTIEF MATRIX',/)
0024         60 FORMAT(10X,'SECTOR',30X,'SECTOR')
0025         70 FORMAT(12X,I2,7X,F10.5,17X,I2,7X,F10.5)
0026         80 FORMAT(///,T40,'ROW SUM FOR LEONTIEF MATRIX',/)
0027            RETURN
0028            END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	A8								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
J	AC	N2	B0	I	B4	III	B8		

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
SBMTRA	BC	TCOL	C0	TROW	C4				

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
50	C8	60	F0	70	106	80	11A		

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = COLROW , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 28,PROGRAM SIZE = 1044
STATISTICS NO DIAGNOSTICS GENERATED

163.

```
0001                SUBROUTINE RMULT(SBMTRA,TCOL,N2,MATRIX)
0002                DIMENSION SBMTRA(44,40),TCOL(40),BCOL(40),RCOL(40),BRCOL(40),
                   1RBCOL(40),MATRIX(44,7)
0003                NN=N2/2.
0004                NM=NN+1
0005                DO 20 J=1,NN
0006                BCOL(J)=0.0
0007                BRCOL(J)=0.0
0008                DO 10 I=1,NN
0009             10 BCOL(J)=BCOL(J)+SBMTRA(I,J)
0010                DO 15 I=NM,N2
0011             15 BRCOL(J)=BRCOL(J)+SBMTRA(I,J)
0012             20 CONTINUE
0013                DO 40 J=NM,N2
0014                RCOL(J)=0.0
0015                RBCOL(J)=0.0
0016                DO 30 I=1,NN
0017             30 RBCOL(J)=RBCOL(J)+SBMTRA(I,J)
0018                DO 35 I=NM,N2
0019             35 RCOL(J)=RCOL(J)+SBMTRA(I,J)
0020             40 CONTINUE
0021                WRITE(6,50)
0022             50 FORMAT('1',T46,'DIRECT AND INDIRECT MULTIPLIERS',//,T36,'INTRA-REG
                   1IONAL',T56,'INTER-REGIONAL',T77,'TOTAL',/,T38,'MULTIPLIER',T58,'MU
                   2LTIPLIER',T75,'MULTIPLIER',/)
0023                WRITE(6,55)
0024             55 FORMAT(T59,'BOISE TO',T77,'BOISE TO',//,1X,'SECTORS',T36,'BOISE TO
                   1 BOISE',T56,'REST OF IDAHO',T75,'ENTIRE STATE',/)
0025                DO 70 I=1,NN
0026             70 WRITE(6,100) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),BCOL(I),BRCOL(I),
                   1TCOL(I)
0027                WRITE(6,50)
0028                WRITE(6,60)
0029             60 FORMAT(T36,'REST OF IDAHO',T56,'REST IF IDAHO',T75, 'REST OF IDAHO
                   1',/,1X,'SECTORS',T35,'TO REST OF IDAHO',T58,'TO BOISE',T75,'TO ENT
                   2IRE STATE',/)
0030                DO 80 I=NM,N2
0031             80 WRITE(6,100) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),RCOL(I),RBCOL(I),TC
                   1OL(I)
0032            100 FORMAT(1X,A1,I2,4A4,2A2,T39,F8.5,T59,F8.5,T77,F8.5)
0033                RETURN
0034                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	88								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
NN	BC	N2	C0	NM	C4	J	C8	I	CC

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
SBMTRA	D0	TCOL	D4	BCOL	D8	RCOL	178	BRCOL	218
RBCOL	2B8	MATRIX	358						

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
50	35C	55	3DF	60	43A	100	4AF		

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = RMULT , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 34,PROGRAM SIZE = 2316
STATISTICS NO DIAGNOSTICS GENERATED

```
0001                SUBROUTINE DEMAND(SBMTRC,SALES,IEAR,COLUMN,N2,N3)
0002                DIMENSION SBMTRC(44,40),SALES(24,40),COLUMN(44,40),IEAR(24)
0003                DO 20 K=1,N3
0004                DO 10 I=1,N2
0005             10 COLUMN(K,I)=0
0006             20 CONTINUE
0007                DO 50 K=1,N3
0008                DO 40 I=1,N2
0009                DO 30 J=1,N2
0010             30 COLUMN(K,I)=COLUMN(K,I)+SBMTRC(I,J)*SALES(K,J)
0011             40 CONTINUE
0012             50 CONTINUE
0013                WRITE(6,60)
0014                CALL SORT(N3,N2,3,SBMTRC,COLUMN,IEAR)
0015             60 FORMAT('1',T30,'FINAL DEMANDS - METHOD ONE',//)
0016                RETURN
0017                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	A4	SORT	A8						

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
K	C4	N3	C8	I	CC	N2	D0	J	D4

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
SBMTRC	D8	SALES	DC	COLUMN	E0	IEAR	E4		

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
60	E8								

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = DEMAND , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 17,PROGRAM SIZE = 818
STATISTICS NO DIAGNOSTICS GENERATED

```
0001                SUBROUTINE WRITE(N1,N2,N5,IX,MA,TA,IY)
0002                DIMENSION MA(44,7),TA(44,40),IY(24)
0003                WRITE(6,100) ((MA(K,I),I,K=N5,N2)
0004                IF(IX-2) 50,20,35
0005             20 DO 30 I=1,N1
0006             30 WRITE(6,110) MA(I,1),I,(MA(I,J),J=2,7),(TA(I,J),J=N5,N2)
0007                GO TO 50
0008             35 DO 40 I=1,N1
0009             40 WRITE(6,120) IY(I),(TA(I,J),J=N5,N2)
0010             50 CONTINUE
0011            100 FORMAT(1X,///,1X,'PURCHASES/SALES',T24,10(7X,A1,I2))
0012            110 FORMAT(1X,A1,I2,4A4,2A2,T28,10F10.5)
0013            120 FORMAT(4X,I4,T28,10F10.5)
0014                RETURN
0015                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	C0								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
K	C4	N5	C8	N2	CC	IX	D0	I	D4
N1	D8	J	DC						

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
MA	E0	TA	E4	IY	E8				

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
100	EC	110	111	120	128				

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = WRITE , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 15,PROGRAM SIZE = 1000
STATISTICS NO DIAGNOSTICS GENERATED

```
0001              SUBROUTINE SORT(N1,N2,IX,MA,TA,IY)
0002              DIMENSION MA(44,7),TA(44,40),IY(24)
0003              IF(N2.LE.10) GO TO 10
0004              IF(N2.LE.20) GO TO 20
0005              IF(N2.LE.30) GO TO 30
0006              IF(N2.LE.40) GO TO 40
0007              GO TO 70
0008           10 CALL WRITE(N1,N2,1,IX,MA,TA,IY)
0009              GO TO 70
0010           20 CALL WRITE(N1,10,1,IX,MA,TA,IY)
0011              CALL WRITE(N1,N2,11,IX,MA,TA,IY)
0012              GO TO 70
0013           30 CALL WRITE(N1,10,1,IX,MA,TA,IY)
0014              CALL WRITE(N1,20,11,IX,MA,TA,IY)
0015              CALL WRITE(N1,30,N2,IX,MA,TA,IY)
0016              GO TO 70
0017           40 CALL WRITE(N1,10,1,IX,MA,TA,IY)
0018              CALL WRITE(N1,20,11,IX,MA,TA,IY)
0019              CALL WRITE(N1,30,21,IX,MA,TA,IY)
0020              CALL WRITE(N1,N2,31,IX,MA,TA,IY)
0021           70 CONTINUE
0022              RETURN
0023              END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
WRITE	C8								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
N2	1E4	N1	1E8	IX	1EC				

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
MA	1F0	TA	1F4	IY	1F8				

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = SORT , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 23,PROGRAM SIZE = 1204
STATISTICS NO DIAGNOSTICS GENERATED

```
0001                SUBROUTINE EMULT(SBMTRA,N2,MATRIX)
0002                DIMENSION EMTRA(40,40),SBMTRA(44,40),DEMPLO(40),MATRIX(44,7),BEMP(
                   140),REMP(40),BREMP(40),RBEMP(40),TEMP(40),EMMULT(40)
0003                READ(5,120) (DEMPLO(I),I=1,N2)
0004                NN=N2/2.
0005                NM=NN+1
0006                DO 20 J=1,N2
0007                DO 15 I=1,N2
0008             15 EMTRA(I,J)=SBMTRA(I,J)*DEMPLO(I)
0009             20 CONTINUE
0010                DO 35 J=1,NN
0011                BEMP(J)=0.0
0012                BREMP(J)=0.0
0013                DO 30 I=1,NN
0014             30 BEMP(J)=BEMP(J)+EMTRA(I,J)
0015                DO 32 I=NM,N2
0016             32 BREMP(J)=BREMP(J)+EMTRA(I,J)
0017             35 CONTINUE
0018                DO 45 J=NM,N2
0019                REMP(J)=0.0
0020                RBEMP(J)=0.0
0021                DO 40 I=1,NN
0022             40 RBEMP(J)=RBEMP(J)+EMTRA(I,J)
0023                DO 42 I=NM,N2
0024             42 REMP(J)=REMP(J)+EMTRA(I,J)
0025             45 CONTINUE
0026                DO 50 J=1,NN
0027             50 TEMP(J)=(BEMP(J)+BREMP(J))
0028                DO 60 J=NM,N2
0029             60 TEMP(J)=REMP(J)+RBEMP(J)
0030                DO 65 J=1,N2
0031             65 EMMULT(J)=TEMP(J)/DEMPLO(J)
0032                WRITE(6,100)
0033                WRITE(6,102)
0034                DO 70 I=1,NN
0035             70 WRITE(6,110) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),BEMP(I),BREMP(I),
                   1TEMP(I),DEMPLO(I),EMMULT(I)
0036                WRITE(6,100)
0037                WRITE(6,105)
0038                DO 80 I=NM,N2
0039             80 WRITE(6,110) MATRIX(I,1),I,(MATRIX(I,J),J=2,7),REMP(I),RBEMP(I),
                   1TEMP(I),DEMPLO(I),EMMULT(I)
0040            100 FORMAT('1',T38,'DIRECT AND INDIRECT EMPLOYMENT MULTIPLIER',//,T36,
                   1'INTRA-REGIONAL',T56,'INTER-REGIONAL',T77,'TOTAL',/,T38,'MULTIPLIE
                   2R',T58,'MULTIPLIER',T75,'MULTIPLIER',/)
0041            102 FORMAT(T59,'BOISE TO',T77,'BOISE TO',T99,'DIRECT',T113,'EMPLOYMENT
                   1',//,1X,'SECTORS',T36,'BOISE TO BOISE',T56,'REST OF IDAHO',T75,'EN
                   2TIRE STATE',T97,'MULTIPLIER',T113,'MULTIPLIER',/)
0042            105 FORMAT(T36,'REST OF IDAHO',T56,'REST OF IDAHO',T75,'REST OF IDAHO'
                   2,T99,'DIRECT',T113,'EMPLOYMENT',/,1X,'SECTORS',T35,'TO REST OF IDA
                   2HO',T58,'TO BOISE',T75,'TO ENTIRE STATE',T97,'MULTIPLIER',T113,'MU
                   3LTIPLIER',/)
0043            110 FORMAT(1X,A1,I2,4A4,2A2,T38,F9.4,T58,F9.4,T76,F9.4,T98,F9.4,T114,
                   1F9.4)
0044            120 FORMAT(10F8.3)
0045                RETURN
0046                END
```

SUBPROGRAMS CALLED

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
IBCOM#	D4								

SCALAR MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
I	D8	N2	DC	NN	E0	NM	E4	J	E8

ARRAY MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
EMTRA	EC	SBMTRA	19EC	DEMPLD	19F0	MATRIX	1A90	BEMP	1A94
REMP	1B34	BREMP	1BD4	RBEMP	1C74	TEMP	1D14	EMMULT	1DB4

FORMAT STATEMENT MAP

SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION	SYMBOL	LOCATION
100	1E54	102	1EE1	105	1F70	110	2019	120	2042

OPTIONS IN EFFECT NOID,EBCDIC,SOURCE,NOLIST,NODECK,LOAD,MAP
OPTIONS IN EFFECT NAME = EMULT , LINECNT = 60
STATISTICS SOURCE STATEMENTS = 46,PROGRAM SIZE = 9820
STATISTICS NO DIAGNOSTICS GENERATED

STATISTICS NO DIAGNOSTICS THIS STEP

VS LOADER

OPTIONS USED - PRINT,MAP,LET,CALL,RES,NOTERM,SIZE=157016,NAME=**GO

NAME	TYPE	ADDR	NAME	TYPE	ADDR	NAME	TYPE	ADDR	NAME	TYPE	ADDR	NAME	TYPE	ADDR
MAIN	SD	1A0288	MINV	SD	1AC720	COLROW	SD	1ACA40	RMULT	SD	1ACE58	DEMAND	SD	1AD768
WRITE	SD	1ADAA0	SORT	SD	1ADE88	EMULT	SD	1AE340	IHCECOMH*	SD	1B09A0	IBCOM# *	LR	1B09A0
FDIOCS# *	LR	1B0A5C	INTSWTCH*	LR	1B18E6	IHCCOMH2*	SD	1B1908	SEQDASD *	LR	1B1C80	IHCFCVTH*	SD	1B1F68
ADCON# *	LR	1B1F68	FCVAOUTP*	LR	1B2012	FCVLOUTP*	LR	1B20A2	FCVZOUTP*	LR	1B21FA	FCVIOUTP*	LR	1B25AE
FCVEOUTP*	LR	1B2A80	FCVCOUTP*	LR	1B2CCA	INT6SWCH*	LR	1B2F83	IHCEFIOS*	SD	1B3120	FIOCS# *	LR	1B3120
FIOCSBEP*	LR	1B3126	IHCFIOS2*	SD	1B4048	IHCEFNTH*	SD	1B4578	ARITH# *	LR	1B4578	ADJSWTCH*	LR	1B4914
IHCUOPT *	SD	1B4AC0	IHCERRM *	SD	1B4DC0	ERRMON *	LR	1B4DC0	IHCERRE *	LR	1B4DD8	IHCUATBL*	SD	1B53A0
IHCETRCH*	SD	1B59D8	IHCTRCH *	LR	1B59D8	ERRTRA *	LR	1B59E0						

TOTAL LENGTH 15980
ENTRY ADDRESS 1A0288

TRANSACTION MATRIX-1963

PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	3.35500	0.14200	0.07700	0.00400	0.03300	0.03500	0.01900	0.04300	0.0	13.65600
B 2 . FORAGE	3.13100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	3.42500	0.0	0.19100	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.32100	0.0	0.0	0.04200	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	1.17200	0.0	0.0	0.0	0.30400	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.19400	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.93900	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32900	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.17400	0.01100	0.04100	0.00200	0.01500	0.00800	0.00400	0.01000	0.0	1.09600
B11 . GRAIN PROC	0.94200	0.0	0.00500	0.0	0.0	0.0	0.00400	0.0	0.0	0.12500
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.00400	0.0	0.00500	0.0	0.0
B14 . SUGAR-MISC PROC	0.12400	0.0	0.0	0.0	0.00400	0.0	0.0	0.0	0.0	0.29600
B15 . MANUFACTURE&MININ	0.00800	0.03300	0.07300	0.01400	0.09300	0.02000	0.04100	0.01700	0.0	0.61400
B16 . UTILITIES	0.02800	0.06300	0.06400	0.01200	0.10700	0.00600	0.04800	0.00500	0.0	0.05400
B17 . CONSTRUCTION	0.11800	0.08200	0.05200	0.01500	0.08600	0.01500	0.04900	0.01800	0.0	0.07400
B18 . TRADE	0.85400	0.28400	0.05200	0.10000	0.11800	0.04000	0.07100	0.06200	0.0	1.25100
B19 . SERVICES	1.25700	0.63700	0.58700	0.11100	0.61200	0.08000	0.48900	0.28700	0.0	2.27500
B20 . HOUSEHOLDS	2.42200	4.24600	1.78400	0.76700	4.91000	0.81900	1.90000	1.06200	0.0	3.70000
R21 . LIVESTOCK	0.09400	0.00400	0.00200	0.0	0.00100	0.00100	0.00100	0.00100	0.0	0.38200
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.66600	0.0	0.0	0.08600	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.00200	0.00900	0.02000	0.00400	0.02500	0.00500	0.01100	0.00500	0.0	0.16400
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.11400	0.20000	0.08400	0.03600	0.23200	0.03900	0.09000	0.05000	0.0	0.17500
41 . COMPETITIVE IMPOR	2.10200	0.68900	0.47100	0.12400	0.82300	0.10600	0.41700	0.19400	0.0	1.17200
42 . OTHER IMPORTS	1.31500	0.49700	1.61500	0.18600	1.03500	0.13100	0.71600	0.01600	0.0	2.34600
43 . DEPRECIATION	0.0	0.01800	0.03000	0.00300	0.02100	0.00200	0.01300	0.0	0.0	0.00200
44 . TOTAL PURCHASES	21.62399	6.91500	5.14800	1.50800	8.41800	1.50300	4.81000	1.80400	0.0	27.38100

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	0.0	0.0	0.0	0.12000	0.0	0.0	0.00100	0.00200	0.00800	4.13000
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21000
B 3 . CEREALS	0.65900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28400
B 4 . POTATOES	0.0	1.09900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04600
B 5 . SUGARBEETS	0.0	0.0	0.0	2.62700	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.03600	0.0	0.0	0.0	0.0	0.02800	0.01500	0.21900
B 7 . SEED CROPS	0.12600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01700	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.00300	0.0	0.0	0.0	0.0	0.02300	0.0	0.57100
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00900	0.04600	0.01300	0.06900	0.00300	0.00100	0.04500	0.04500	0.11100	0.81800
B11 . GRAIN PROC	0.03900	0.07400	0.00400	0.00900	0.0	0.00100	0.0	0.0	0.0	0.27100

PURCHASES/SALES	B12	B13	B14	B15	B16	B17	B18	B19	B20	R21
B12 . POTATO PROC	0.01500	0.0	0.0	0.0	0.00100	0.00100	0.0	0.00600	0.00800	0.00100
B13 . VEGETABLE PROC	0.0	0.0	0.01800	0.04000	0.00500	0.0	0.0	0.01800	0.04500	0.27100
B14 . SUGAR-MISC PROC	0.08700	0.0	0.05000	0.69400	0.03000	0.00100	0.04500	0.01500	0.03600	0.13700
B15 . MANUFACTURE&MININ	0.06300	0.37900	0.06000	0.35700	2.09700	0.30500	9.06200	0.56500	0.76100	2.37800
B16 . UTILITIES	0.00400	0.02500	0.00300	0.03100	0.11300	0.33600	0.05500	0.29500	0.35500	1.65500
B17 . CONSTRUCTION	0.00800	0.01300	0.00200	0.01400	0.08100	0.16200	0.01300	0.17000	3.85500	22.98099
B18 . TRADE	0.08700	0.31200	0.02400	0.28500	0.31500	0.03100	4.10900	0.74500	1.79200	28.39699
B19 . SERVICES	0.09000	0.54100	0.15800	0.08500	0.79600	0.23600	3.49500	5.40000	8.99600	31.47899
B20 . HOUSEHOLDS	0.51900	2.20200	0.59700	2.94100	5.56200	2.68300	20.53400	31.07100	51.84000	14.69900
R21 . LIVESTOCK	0.0	0.0	0.0	0.00300	0.0	0.0	0.0	0.0	0.0	0.11500
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.0	2.28300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09500
R25 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.22600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.01700	0.10200	0.01600	0.09600	0.56200	0.00100	2.42800	0.15100	0.20400	0.63700
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.02400	0.10400	0.02800	0.13900	0.26200	0.12700	0.96900	1.46600	2.44600	0.69300
41 . COMPETITIVE IMPOR	0.08200	0.41200	0.10800	0.33200	0.95000	0.97300	2.96800	4.95200	7.98500	15.10300
42 . OTHER IMPORTS	1.12900	2.15300	0.00600	0.77000	5.70000	0.82300	6.63200	2.10200	12.10200	28.38699
43 . DEPRECIATION	0.0	0.00200	0.0	0.00200	0.16100	0.0	0.01900	0.00300	0.01300	0.0
44 . TOTAL PURCHASES	3.18400	9.74700	1.12800	8.70300	16.64000	5.38400	50.37500	47.07700	90.64400	154.25800

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	3.47700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.29800	0.0	0.00400	0.0	0.0	0.0	0.00200	0.0	0.00200	0.00800
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.03900	0.03600	0.21200	0.06600	0.04400	0.00500	0.10300	0.00500	0.0	0.01500
B17 . CONSTRUCTION	0.14300	0.04000	0.14900	0.07300	0.03300	0.01100	0.09000	0.01400	0.00200	0.01800
B18 . TRADE	0.15200	0.02000	0.02200	0.06900	0.00600	0.00400	0.01900	0.00700	0.00300	0.04500
B19 . SERVICES	1.71300	0.35100	1.88600	0.59200	0.24200	0.06400	1.01100	0.24800	0.15800	0.62400
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	29.08699	0.49700	1.57100	0.12200	0.08400	0.17700	0.24600	0.23500	0.22000	23.81599
R22 . FORAGE	22.92599	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	28.89000	0.0	3.79800	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	8.32500	0.0	0.0	4.29400	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	9.88100	0.0	0.0	0.0	0.74400	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.96400	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	12.00800	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15600	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.84800	0.0
R30 . LIVESTOCK PROC	1.46800	0.03800	0.81400	0.05300	0.03700	0.03800	0.05400	0.05100	0.04800	1.85900
R31 . GRAIN PROC	7.64200	0.0	0.09900	0.0	0.0	0.0	0.05200	0.0	0.04600	0.20400

R32 . POTATO PROC	0.0	0.0	0.0	0.01300	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.01900	0.0	0.02600	0.0	0.0
R34 . SUGAR-MISC PROC	1.04500	0.0	0.0	0.0	0.00900	0.0	0.0	0.0	0.0	0.50200
R35 . MANUFACTURE&MININ	0.08900	0.14300	1.85000	0.57300	0.28900	0.12700	0.65800	0.11800	0.10200	1.32000
R36 . UTILITIES	0.19600	0.18000	1.06200	0.32800	0.21800	0.02400	0.51600	0.02300	0.0	0.07700
R37 . CONSTRUCTION	0.85300	0.23900	0.88800	0.43300	0.18000	0.06500	0.53800	0.08400	0.01100	0.10800
R38 . TRADE	7.05200	0.94600	1.02100	3.21400	0.28300	0.19400	0.88400	0.32200	0.13900	2.07700
R39 . SERVICES	8.88600	1.82000	9.78600	3.07200	1.25800	0.33500	5.24600	1.28400	0.82200	3.23600
R40 . HOUSEHOLDS	21.39200	15.15400	37.17299	26.45699	12.60100	4.26800	25.44899	5.93600	5.59800	6.57300
41 . COMPETITIVE IMPOR	17.72899	2.34900	9.36500	4.09300	2.01700	0.52700	5.32900	1.03300	0.76800	1.98800
42 . OTHER IMPORTS	11.09000	1.69300	32.14099	6.12300	2.53600	0.65300	9.15800	0.08700	1.92400	3.98100
43 . DEPRECIATION	0.0	0.06200	0.59300	0.09000	0.05200	0.00800	0.16400	0.0	0.04300	0.00300
44 . TOTAL PURCHASES	182.37599	23.56799	102.43399	49.66599	20.63100	7.48400	61.52599	9.62700	10.73500	46.45299

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09700
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.00400	0.01400	0.0	0.00800	0.0	0.0	0.0	0.0	0.0	0.03600
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.00200	0.02000	0.00100	0.01100	0.21700	0.11100	0.01500	0.13800	0.11200	0.97300
B17 . CONSTRUCTION	0.00300	0.00900	0.00100	0.00400	0.13300	0.04600	0.00300	0.06900	1.04600	11.62400
B18 . TRADE	0.00600	0.03200	0.00100	0.01300	0.07600	0.00100	0.13900	0.04400	0.07100	2.11300
B19 . SERVICES	0.04400	0.42800	0.05500	0.03000	1.48000	0.07500	0.90400	2.44500	2.74800	17.93300
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	0.0	0.0	0.0	0.26400	0.00200	0.0	0.00200	0.00500	0.01500	14.96400
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.64200
R23 . CEREALS	1.99600	0.0	0.0	0.0	0.00200	0.0	0.0	0.0	0.0	1.00000
R24 . POTATOES	0.0	16.53999	0.0	0.0	0.00200	0.0	0.0	0.0	0.0	0.49500
R25 . SUGARBEETS	0.0	0.0	0.0	5.64000	0.00200	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.07800	0.0	0.0	0.0	0.0	0.07900	0.02900	0.77200
R27 . SEED CROPS	0.38200	0.0	0.0	0.0	0.00200	0.0	0.0	0.0	0.03300	0.0
R28 . FRUIT CROPS	0.0	0.0	0.00700	0.0	0.0	0.0	0.0	0.06300	0.0	2.01200
R29 . PEAS-LENTILS	0.68500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.02800	0.22500	0.02800	0.14800	0.03600	0.00300	0.07200	0.12500	0.20900	2.88200
R31 . GRAIN PROC	0.11400	0.35000	0.00900	0.20600	0.0	0.00300	0.0	0.0	0.0	0.92100
R32 . POTATO PROC	0.04500	0.0	0.0	0.0	0.01300	0.00300	0.0	0.07300	0.12000	2.39800
R33 . VEGETABLE PROC	0.0	0.0	0.03800	0.08500	0.06300	0.0	0.0	0.05100	0.08600	0.95700
R34 . SUGAR-MISC PROC	0.26300	0.0	0.10700	1.49100	0.34300	0.00300	0.07200	0.04100	0.06900	0.48400
R35 . MANUFACTURE&MININ	0.24100	2.35300	0.16100	0.97200	30.57399	0.01300	18.39000	2.00700	1.82300	10.63000
R36 . UTILITIES	0.01100	0.10200	0.00500	0.05500	1.08400	0.55300	0.07300	0.68800	0.55900	4.86000
R37 . CONSTRUCTION	0.02100	0.05600	0.00400	0.02700	0.79300	0.27400	0.01800	0.40900	6.24200	69.38300
R38 . TRADE	0.25800	1.49300	0.05100	0.59900	3.54800	0.06100	6.43800	2.04300	3.31600	97.98499
R39 . SERVICES	0.22800	2.21900	0.28300	0.15300	7.67800	0.39000	4.69000	12.68600	14.25700	93.02800
R40 . HOUSEHOLDS	1.64500	11.27600	1.33300	6.61200	66.98199	5.54000	34.41499	91.17799	102.62299	54.25800
41 . COMPETITIVE IMPOR	0.24700	2.01600	0.23000	0.71300	10.92900	1.91800	4.75000	13.87800	15.09500	53.23599
42 . OTHER IMPORTS	3.42100	10.52800	0.01300	1.65400	65.54999	1.62300	10.61400	5.89200	22.87799	100.05899
43 . DEPRECIATION	0.0	0.00800	0.0	0.00300	1.85000	0.0	0.03100	0.00800	0.02400	0.0
44 . TOTAL PURCHASES	9.64400	47.66899	2.40300	18.68799	191.35999	10.61600	80.62500	131.92299	171.35599	543.74097

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PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	0.15515	0.02054	0.01496	0.00265	0.00392	0.02329	0.00395	0.02384	0.0	0.49874
B 2 . FORAGE	0.14479	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.15839	0.0	0.03710	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.01484	0.0	0.0	0.02785	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.05420	0.0	0.0	0.0	0.03611	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.12908	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.19522	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01608	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00805	0.00159	0.00796	0.00133	0.00178	0.00532	0.00083	0.00554	0.0	0.04003
B11 . GRAIN PROC	0.04356	0.0	0.00097	0.0	0.0	0.0	0.00083	0.0	0.0	0.00457
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.00266	0.0	0.00277	0.0	0.0
B14 . SUGAR-MISC PROC	0.00573	0.0	0.0	0.0	0.00048	0.0	0.0	0.0	0.0	0.01081
B15 . MANUFACTURE&MININ	0.00037	0.00477	0.01418	0.00928	0.01105	0.01331	0.00852	0.00942	0.0	0.02242
B16 . UTILITIES	0.00129	0.00911	0.01243	0.00796	0.01271	0.00399	0.00998	0.00277	0.0	0.00197
B17 . CONSTRUCTION	0.00546	0.01186	0.01010	0.00995	0.01022	0.00998	0.01019	0.00998	0.0	0.00270
B18 . TRADE	0.03949	0.04107	0.01010	0.06631	0.01402	0.02661	0.01476	0.03437	0.0	0.04569
B19 . SERVICES	0.05813	0.09212	0.11402	0.07361	0.07270	0.05323	0.10166	0.15909	0.0	0.08309
B20 . HOUSEHOLDS	0.11201	0.61403	0.34654	0.50862	0.58327	0.54491	0.39501	0.58869	0.0	0.13513
R21 . LIVESTOCK	0.00435	0.00058	0.00039	0.0	0.00012	0.00067	0.00021	0.00055	0.0	0.01395
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.03080	0.0	0.0	0.05836	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.00009	0.00130	0.00389	0.00265	0.00297	0.00333	0.00229	0.00277	0.0	0.00599
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.00527	0.02892	0.01632	0.02387	0.02756	0.02595	0.01871	0.02772	0.0	0.00639

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	0.0	0.0	0.0	0.01379	0.0	0.0	0.00002	0.00004	0.00009	0.02677
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00136
B 3 . CEREALS	0.20697	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00184
B 4 . POTATOES	0.0	0.11275	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00030
B 5 . SUGARBEETS	0.0	0.0	0.0	0.00185	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.03191	0.0	0.0	0.0	0.0	0.00059	0.00017	0.00142
B 7 . SEED CROPS	0.03957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00019	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.00266	0.0	0.0	0.0	0.0	0.00049	0.0	0.00370
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00283	0.00472	0.01152	0.00793	0.00018	0.00019	0.00089	0.00096	0.00122	0.00530
B11 . GRAIN PROC	0.01225	0.00759	0.00355	0.01138	0.0	0.00019	0.0	0.0	0.0	0.00176
B12 . POTATO PROC	0.00471	0.0	0.0	0.0	0.00006	0.00019	0.0	0.00055	0.00017	0.00441
B13 . VEGETABLE PROC	0.0	0.0	0.01596	0.00460	0.00030	0.0	0.0	0.00033	0.00050	0.00176
B14 . SUGAR-MISC PROC	0.02732	0.0	0.04433	0.07974	0.00180	0.00019	0.00089	0.00032	0.00040	0.00089
B15 . MANUFACTURE&MININ	0.01979	0.03888	0.05319	0.04102	0.12602	0.00093	0.17989	0.01200	0.00840	0.01542

B16 . UTILITIES	0.00126	0.00256	0.00266	0.00356	0.00879	0.00241	0.00107	0.00827	0.00372	0.01973
B17 . CONSTRUCTION	0.00251	0.00133	0.00177	0.00161	0.00487	0.03009	0.00026	0.00361	0.04253	0.14898
B18 . TRADE	0.02732	0.03201	0.02128	0.03275	0.01893	0.00576	0.08157	0.01583	0.01977	0.18409
B19 . SERVICES	0.02827	0.05550	0.14007	0.00977	0.04784	0.04383	0.06938	0.11471	0.09925	0.20407
B20 . HOUSEHOLDS	0.16300	0.22592	0.52926	0.33793	0.33425	0.49833	0.40762	0.66200	0.57191	0.09529
R21 . LIVESTOCK	0.0	0.0	0.0	0.00034	0.0	0.0	0.0	0.0	0.0	0.00075
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.0	0.23423	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00062
R25 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R29 . PEAS-LENTILS	0.07098	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R31 . GRAIN PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R32 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R34 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R35 . MANUFACTURE&MININ	0.00534	0.01046	0.01418	0.01103	0.03377	0.00019	0.04823	0.00321	0.00225	0.00413
R36 . UTILITIES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R37 . CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R38 . TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R39 . SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R40 . HOUSEHOLDS	0.00754	0.01067	0.02482	0.01597	0.01575	0.02359	0.01924	0.03114	0.02698	0.00449

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	0.01907	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.00163	0.0	0.00004	0.0	0.0	0.0	0.00003	0.0	0.00019	0.00017
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.00021	0.00153	0.00207	0.00133	0.00213	0.00067	0.00167	0.00052	0.0	0.00032
B17 . CONSTRUCTION	0.00078	0.00170	0.00145	0.00147	0.00145	0.00147	0.00146	0.00145	0.00019	0.00039
B18 . TRADE	0.00083	0.00085	0.00021	0.00139	0.00029	0.00053	0.00031	0.00073	0.00028	0.00097
B19 . SERVICES	0.00939	0.01489	0.01841	0.01192	0.01173	0.00855	0.01643	0.02576	0.01472	0.01343
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	0.15949	0.02109	0.01534	0.00246	0.00407	0.02365	0.00400	0.02441	0.02049	0.51269
R22 . FORAGE	0.12571	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R23 . CEREALS	0.15841	0.0	0.03708	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R24 . POTATOES	0.04565	0.0	0.0	0.08646	0.0	0.0	0.0	0.0	0.0	0.0
R25 . SUGARBEETS	0.05418	0.0	0.0	0.0	0.03606	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.12881	0.0	0.0	0.0	0.0
R27 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.19517	0.0	0.0	0.0
R28 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01620	0.0	0.0
R29 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07899	0.0
R30 . LIVESTOCK PROC	0.00805	0.00161	0.00795	0.00107	0.00179	0.00508	0.00088	0.00530	0.00447	0.04002
R31 . GRAIN PROC	0.04190	0.0	0.00097	0.0	0.0	0.0	0.00085	0.0	0.00429	0.00439
R32 . POTATO PROC	0.0	0.0	0.0	0.00026	0.0	0.0	0.0	0.0	0.0	0.0
R33 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.00254	0.0	0.00270	0.0	0.0
R34 . SUGAR-MISC PROC	0.00573	0.0	0.0	0.0	0.00044	0.0	0.0	0.0	0.0	0.01081
R35 . MANUFACTURE&MININ	0.00049	0.00607	0.01806	0.01154	0.01401	0.01697	0.01069	0.01226	0.00950	0.02842
R36 . UTILITIES	0.00107	0.00764	0.01037	0.00660	0.01057	0.00321	0.00839	0.00239	0.0	0.00166
R37 . CONSTRUCTION	0.00468	0.01014	0.00867	0.00872	0.00872	0.00869	0.00874	0.00873	0.00102	0.00232
R38 . TRADE	0.03867	0.04014	0.00997	0.06471	0.01372	0.02592	0.01437	0.03345	0.01295	0.04471
R39 . SERVICES	0.04872	0.07722	0.09553	0.06185	0.06093	0.04476	0.08526	0.13337	0.07657	0.06966

R40 . HOUSEHOLDS	1.11730	0.64299	0.36290	0.55270	0.61078	0.57028	0.41303	0.61580	0.52147	0.14150

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 2 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00018
B 3 . CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 4 . POTATOES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 5 . SUGARBEETS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 6 . VEGETABLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 7 . SEED CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 8 . FRUIT CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B11 . GRAIN PROC	0.00041	0.00029	0.0	0.00043	0.0	0.0	0.0	0.0	0.0	0.00007
B12 . POTATO PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B13 . VEGETABLE PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B14 . SUGAR-MISC PROC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B15 . MANUFACTURE&MININ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B16 . UTILITIES	0.00021	0.00042	0.00042	0.00059	0.00113	0.01046	0.00019	0.00105	0.00065	0.00179
B17 . CONSTRUCTION	0.00031	0.00019	0.00042	0.00021	0.00070	0.00433	0.00004	0.00052	0.00610	0.02138
B18 . TRADE	0.00062	0.00067	0.00042	0.00070	0.00040	0.00009	0.00172	0.00033	0.00041	0.00389
B19 . SERVICES	0.00456	0.00898	0.02289	0.00161	0.00773	0.00706	0.01121	0.01853	0.01604	0.03298
B20 . HOUSEHOLDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R21 . LIVESTOCK	0.0	0.0	0.0	0.01413	0.00001	0.0	0.00002	0.00004	0.00009	0.02752
R22 . FORAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00118
R23 . CEREALS	0.20697	0.0	0.0	0.0	0.00001	0.0	0.0	0.0	0.0	0.00184
R24 . POTATOES	0.0	0.34698	0.0	0.0	0.00001	0.0	0.0	0.0	0.0	0.00091
R25 . SUGARBEETS	0.0	0.0	0.0	0.30180	0.00001	0.0	0.0	0.0	0.0	0.0
R26 . VEGETABLES	0.0	0.0	0.03246	0.0	0.0	0.0	0.0	0.00060	0.00017	0.00142
R27 . SEED CROPS	0.03961	0.0	0.0	0.0	0.00001	0.0	0.0	0.0	0.00019	0.0
R28 . FRUIT CROPS	0.0	0.0	0.00291	0.0	0.0	0.0	0.0	0.00048	0.0	0.00370
R29 . PEAS-LENTILS	0.07103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R30 . LIVESTOCK PROC	0.00290	0.00472	0.01165	0.00792	0.00019	0.00028	0.00089	0.00095	0.00122	0.00530
R31 . GRAIN PROC	0.01182	0.00734	0.00375	0.01102	0.0	0.00028	0.0	0.0	0.0	0.00169
R32 . POTATO PROC	0.00467	0.0	0.0	0.0	0.00007	0.00028	0.0	0.00055	0.00070	0.00441
R33 . VEGETABLE PROC	0.0	0.0	0.01581	0.00455	0.00033	0.0	0.0	0.00039	0.00050	0.00176
R34 . SUGAR-MISC PROC	0.02727	0.0	0.04453	0.07978	0.00179	0.00028	0.00089	0.00031	0.00040	0.00089
R35 . MANUFACTURE&MININ	0.02499	0.04936	0.06700	0.05201	0.15977	0.00122	0.22809	0.01521	0.01064	0.01955
R36 . UTILITIES	0.00114	0.00214	0.00208	0.00294	0.00566	0.05209	0.00091	0.00522	0.00326	0.00894
R37 . CONSTRUCTION	0.00218	0.00117	0.00166	0.00144	0.00414	0.02581	0.00022	0.00310	0.03643	0.12760
R38 . TRADE	0.02675	0.03132	0.02122	0.03205	0.01854	0.00575	0.07985	0.01549	0.01935	0.18021
R39 . SERVICES	0.02364	0.04655	0.11777	0.00819	0.04012	0.03674	0.05817	0.09616	0.08320	0.17109
R40 . HOUSEHOLDS	0.17057	0.23655	0.55472	0.35381	0.35003	0.52185	0.42685	0.69115	0.59889	0.09979

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PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	1.23867	0.08038	0.05984	0.05256	0.05748	0.09005	0.05240	0.08975	0.0	0.66342
B 2 . FORAGE	0.18114	1.01389	0.01016	0.00967	0.01043	0.01528	0.00947	0.01535	0.0	0.09814
B 3 . CEREALS	0.21808	0.01749	1.05146	0.01224	0.01329	0.01914	0.01227	0.01927	0.0	0.11907
B 4 . POTATOES	0.01988	0.00253	0.00178	1.03060	0.00210	0.00266	0.00189	0.00274	0.0	0.01111
B 5 . SUGARBEETS	0.07325	0.00554	0.00411	0.00382	1.04178	0.00617	0.00379	0.00620	0.0	0.04342
B 6 . VEGETABLES	0.00213	0.00292	0.00193	0.00261	0.00273	1.15119	0.00245	0.00316	0.0	0.00219
B 7 . SEED CROPS	0.00291	0.00044	0.00037	0.00035	0.00037	0.00045	1.24297	0.00049	0.0	0.00191
B 8 . FRUIT CROPS	0.00420	0.00586	0.00384	0.00519	0.00549	0.00580	0.00489	1.02244	0.0	0.00428
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0
B10 . LIVESTOCK PROC	0.02003	0.01233	0.01579	0.01070	0.01173	0.01702	0.00992	0.01718	0.0	1.05606
B11 . GRAIN PROC	0.05708	0.00644	0.00560	0.00488	0.00526	0.00687	0.00577	0.00701	0.0	0.03655
B12 . POTATO PROC	0.00550	0.00726	0.00482	0.00643	0.00679	0.00716	0.00611	0.00762	0.0	0.00553
B13 . VEGETABLE PROC	0.00236	0.00317	0.00212	0.00282	0.00297	0.00623	0.00268	0.00621	0.0	0.00247
B14 . SUGAR-MISC PROC	0.01149	0.00327	0.00238	0.00277	0.00347	0.00352	0.00269	0.00368	0.0	0.01955
B15 . MANUFACTURE&MININ	0.07731	0.09899	0.08028	0.09432	0.10015	0.10964	0.09163	0.10960	0.0	0.10243
B16 . UTILITIES	0.02533	0.03387	0.03003	0.03057	0.03647	0.02877	0.03354	0.02856	0.0	0.02481
B17 . CONSTRUCTION	0.19863	0.26717	0.18155	0.23803	0.24977	0.26280	0.22856	0.27937	0.0	0.20036
B18 . TRADE	0.29467	0.36505	0.22609	0.35498	0.31749	0.35122	0.29011	0.37478	0.0	0.31865
B19 . SERVICES	0.45157	0.53942	0.42048	0.47823	0.48994	0.50169	0.50369	0.63621	0.0	0.49350
B20 . HOUSEHOLDS	1.07626	1.20633	0.98998	1.33169	1.41586	1.49031	1.26044	1.57028	0.0	1.09418
R21 . LIVESTOCK	0.01536	0.00924	0.00644	0.01079	0.00810	0.00967	0.00743	0.00977	0.0	0.02933
R22 . FORAGE	0.00215	0.00137	0.00095	0.00164	0.00121	0.00142	0.00111	0.00144	0.0	0.00390
R23 . CEREALS	0.00310	0.00201	0.00139	0.00242	0.00178	0.00208	0.00163	0.00212	0.0	0.00551
R24 . POTATOES	0.04646	0.00670	0.00469	0.07136	0.00563	0.00702	0.00539	0.00721	0.0	0.02721
R25 . SUGARBEETS	0.00101	0.00065	0.00045	0.00078	0.00058	0.00068	0.00053	0.00069	0.0	0.00183
R26 . VEGETABLES	0.00036	0.00033	0.00023	0.00045	0.00031	0.00033	0.00028	0.00035	0.0	0.00035
R27 . SEED CROPS	0.00006	0.00005	0.00003	0.00006	0.00004	0.00005	0.00004	0.00005	0.0	0.00009
R28 . FRUIT CROPS	0.00073	0.00067	0.00046	0.00092	0.00063	0.00068	0.00057	0.00071	0.0	0.00070
R29 . PEAS-LENTILS	0.00448	0.00055	0.00047	0.00044	0.00045	0.00059	0.00049	0.00060	0.0	0.00294
R30 . LIVESTOCK PROC	0.00143	0.00121	0.00083	0.00170	0.00113	0.00123	0.00102	0.00127	0.0	0.00150
R31 . GRAIN PROC	0.00102	0.00071	0.00049	0.00089	0.00064	0.00073	0.00059	0.00075	0.0	0.00159
R32 . POTATO PROC	0.00090	0.00062	0.00056	0.00114	0.00078	0.00083	0.00070	0.00087	0.0	0.00087
R33 . VEGETABLE PROC	0.00039	0.00037	0.00025	0.00050	0.00035	0.00037	0.00031	0.00039	0.0	0.00038
R34 . SUGAR-MISC PROC	0.00048	0.00042	0.00030	0.00054	0.00039	0.00043	0.00036	0.00045	0.0	0.00059
R35 . MANUFACTURE&MININ	0.03864	0.04373	0.03401	0.04794	0.04338	0.04695	0.03948	0.04806	0.0	0.04601
R36 . UTILITIES	0.00284	0.00237	0.00165	0.00362	0.00224	0.00242	0.00201	0.00252	0.0	0.00274
R37 . CONSTRUCTION	0.02661	0.02418	0.01654	0.03356	0.02280	0.02451	0.02045	0.02552	0.0	0.02570
R38 . TRADE	0.04220	0.03644	0.02499	0.05352	0.03433	0.03700	0.03080	0.03849	0.0	0.04045
R39 . SERVICES	0.04817	0.04144	0.02853	0.06039	0.03906	0.04215	0.03508	0.04382	0.0	0.04683
R40 . HOUSEHOLDS	0.18750	0.17361	0.11858	0.23633	0.16372	0.17585	0.14679	0.18312	0.0	0.18107

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	0.03543	0.03385	0.06517	0.07557	0.03359	0.04393	0.04559	0.05763	0.05223	0.07392
B 2 . FORAGE	0.00643	0.00647	0.01172	0.01302	0.00626	0.00815	0.00848	0.01067	0.00966	0.01365
B 3 . CEREALS	0.22569	0.00949	0.01580	0.01906	0.00798	0.01049	0.01081	0.01367	0.01237	0.01759
B 4 . POTATOES	0.00176	0.11723	0.00232	0.00235	0.00132	0.00173	0.00177	0.00230	0.00210	0.00288
B 5 . SUGARBEETS	0.01196	0.00257	0.02012	0.34578	0.00318	0.00330	0.00379	0.00435	0.00400	0.00540
B 6 . VEGETABLES	0.00149	0.00164	0.04021	0.00286	0.00179	0.00231	0.00244	0.00372	0.00294	0.00388
B 7 . SEED CROPS	0.00033	0.00061	0.00064	0.00102	0.00024	0.00031	0.00032	0.00041	0.00060	0.00048
B 8 . FRUIT CROPS	0.00296	0.00325	0.00866	0.00538	0.00357	0.00467	0.00483	0.00657	0.00548	0.00790
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.01051	0.01100	0.02357	0.01947	0.00658	0.00849	0.00958	0.01182	0.01108	0.01378
B11 . GRAIN PROC	1.01611	0.01085	0.01007	0.01857	0.00327	0.00444	0.00440	0.00555	0.00502	0.00713
B12 . POTATO PROC	0.00846	1.00439	0.00739	0.00668	0.00449	0.00597	0.00609	0.00839	0.00749	0.00967
B13 . VEGETABLE PROC	0.00177	0.00180	1.01980	0.00798	0.00229	0.00251	0.00269	0.00369	0.00348	0.00418
B14 . SUGAR-MISC PROC	0.03182	0.00213	0.05254	1.09061	0.00411	0.00266	0.00390	0.00355	0.00339	0.00397
B15 . MANUFACTURE&MININ	0.07703	0.09977	0.15884	0.14000	1.21097	0.07937	0.28182	0.10885	0.10358	0.11846

B16 . UTILITIES	0.01768	0.01907	0.02844	0.03119	0.02303	1.03545	0.02293	0.03154	0.02674	0.03398
B17 . CONSTRUCTION	0.13783	0.15427	0.26350	0.23764	0.16196	0.23442	1.21208	0.26926	0.28199	0.33546
B18 . TRADE	0.19729	0.22337	0.35360	0.33752	0.21850	0.26491	0.35073	1.35065	0.32501	0.42955
B19 . SERVICES	0.29668	0.33954	0.60541	0.44546	0.32720	0.39712	0.45273	0.57500	1.51812	0.57099
B20 . HOUSEHOLDS	0.76010	0.83380	1.52360	1.37916	0.91894	1.20580	1.23538	1.56639	1.41167	2.03921
R21 . LIVESTOCK	0.01040	0.01859	0.00931	0.00902	0.00639	0.00665	0.00871	0.00871	0.00791	0.00763
R22 . FORAGE	0.00153	0.00286	0.00139	0.00134	0.00097	0.00100	0.00132	0.00131	0.00119	0.00112
R23 . CEREALS	0.00231	0.00424	0.00205	0.00197	0.00143	0.00147	0.00195	0.00193	0.00175	0.00164
R24 . POTATOES	0.00504	0.26882	0.00626	0.00627	0.00370	0.00465	0.00499	0.00616	0.00562	0.00729
R25 . SUGARBEETS	0.00073	0.00135	0.00068	0.00065	0.00049	0.00048	0.00067	0.00063	0.00057	0.00054
R26 . VEGETABLES	0.00036	0.00085	0.00036	0.00033	0.00027	0.00026	0.00036	0.00034	0.00031	0.00026
R27 . SEED CROPS	0.00007	0.00011	0.00005	0.00005	0.00004	0.00003	0.00005	0.00005	0.00004	0.00004
R28 . FRUIT CROPS	0.00073	0.00171	0.00073	0.00067	0.00054	0.00053	0.00074	0.00070	0.00063	0.00053
R29 . PEAS-LENTILS	0.07840	0.00096	0.00083	0.00149	0.00029	0.00038	0.00039	0.00048	0.00044	0.00059
R30 . LIVESTOCK PROC	0.00168	0.00331	0.00131	0.00121	0.00097	0.00095	0.00132	0.00124	0.00113	0.00096
R31 . GRAIN PROC	0.00113	0.00160	0.00074	0.00071	0.00053	0.00054	0.00072	0.00070	0.00064	0.00058
R32 . POTATO PROC	0.00090	0.00217	0.00090	0.00082	0.00067	0.00065	0.00091	0.00085	0.00078	0.00065
R33 . VEGETABLE PROC	0.00040	0.00092	0.00040	0.00037	0.00031	0.00029	0.00042	0.00038	0.00035	0.00029
R34 . SUGAR-MISC PROC	0.00046	0.00096	0.00048	0.00044	0.00041	0.00033	0.00056	0.00043	0.00040	0.00036
R35 . MANUFACTURE&MININ	0.03881	0.06726	0.06381	0.05682	0.07394	0.03483	0.10331	0.04728	0.04447	0.04739
R36 . UTILITIES	0.00253	0.00762	0.00267	0.00244	0.00213	0.00187	0.00293	0.00246	0.00225	0.00196
R37 . CONSTRUCTION	0.02641	0.06385	0.02642	0.02413	0.01967	0.01915	0.02688	0.02509	0.02283	0.01910
R38 . TRADE	0.04032	0.10826	0.03992	0.03650	0.02996	0.02881	0.04096	0.03777	0.03438	0.02904
R39 . SERVICES	0.05099	0.12143	0.04577	0.04188	0.03494	0.03275	0.04782	0.04296	0.03914	0.03336
R40 . HOUSEHOLDS	0.18777	0.43925	0.18913	0.17272	0.13982	0.13765	0.19094	0.18025	0.16391	0.13634

PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	0.00736	0.00677	0.00503	0.00630	0.00621	0.00643	0.00608	0.00758	0.00593	0.00688
B 2 . FORAGE	0.02528	0.00307	0.00225	0.00247	0.00251	0.00320	0.00235	0.00340	0.00282	0.01451
B 3 . CEREALS	0.00217	0.00165	0.00124	0.00153	0.00151	0.00158	0.00149	0.00185	0.00150	0.00191
B 4 . POTATOES	0.00028	0.00027	0.00020	0.00025	0.00025	0.00025	0.00024	0.00030	0.00024	0.00027
B 5 . SUGARBEETS	0.00058	0.00053	0.00039	0.00049	0.00049	0.00050	0.00048	0.00059	0.00047	0.00054
B 6 . VEGETABLES	0.00037	0.00038	0.00028	0.00035	0.00034	0.00036	0.00034	0.00042	0.00033	0.00036
B 7 . SEED CROPS	0.00017	0.00008	0.00006	0.00007	0.00007	0.00008	0.00007	0.00009	0.00008	0.00013
B 8 . FRUIT CROPS	0.00071	0.00071	0.00053	0.00066	0.00065	0.00068	0.00064	0.00080	0.00062	0.00069
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00145	0.00142	0.00105	0.00132	0.00130	0.00135	0.00128	0.00159	0.00124	0.00139
B11 . GRAIN PROC	0.00285	0.00089	0.00070	0.00080	0.00079	0.00088	0.00080	0.00099	0.00100	0.00207
B12 . POTATO PROC	0.00094	0.00094	0.00070	0.00088	0.00086	0.00089	0.00085	0.00106	0.00083	0.00092
B13 . VEGETABLE PROC	0.00043	0.00043	0.00032	0.00040	0.00040	0.00041	0.00039	0.00049	0.00038	0.00042
B14 . SUGAR-MISC PROC	0.00052	0.00047	0.00035	0.00044	0.00044	0.00045	0.00043	0.00053	0.00042	0.00049
B15 . MANUFACTURE&MININ	0.01826	0.02020	0.01451	0.01885	0.01867	0.01946	0.01781	0.02206	0.01744	0.01798
B16 . UTILITIES	0.00785	0.00916	0.00763	0.00860	0.00936	0.00812	0.00876	0.00864	0.00651	0.00760
B17 . CONSTRUCTION	0.06139	0.07105	0.05029	0.06629	0.06593	0.06890	0.06213	0.07667	0.06092	0.06080
B18 . TRADE	0.05033	0.05164	0.03723	0.04887	0.04708	0.04923	0.04548	0.05692	0.04468	0.04929
B19 . SERVICES	0.13573	0.14876	0.11333	0.13827	0.13579	0.13977	0.13640	0.17150	0.13295	0.14063
B20 . HOUSEHOLDS	0.18284	0.18204	0.13534	0.16976	0.16706	0.17268	0.16374	0.20387	0.15936	0.17697
R21 . LIVESTOCK	1.24665	0.08283	0.06123	0.05665	0.05941	0.09258	0.05353	0.09182	0.07913	0.68584
R22 . FORAGE	0.15799	1.01217	0.00885	0.00877	0.00914	0.01340	0.00820	0.01337	0.01149	0.08751
R23 . CEREALS	0.21902	0.01784	1.05160	0.01306	0.01357	0.01952	0.01239	0.01952	0.01776	0.12268
R24 . POTATOES	0.06608	0.00896	0.00626	1.10208	0.00749	0.00939	0.00673	0.00964	0.00817	0.03805
R25 . SUGARBEETS	0.07365	0.00566	0.00417	0.00408	1.04181	0.00633	0.00383	0.00629	0.00540	0.04470
R26 . VEGETABLES	0.00212	0.00288	0.00188	0.00271	0.00270	1.15082	0.00239	0.00310	0.00250	0.00217
R27 . SEED CROPS	0.00281	0.00041	0.00035	0.00034	0.00035	0.00043	1.24287	0.00046	0.00061	0.00187
R28 . FRUIT CROPS	0.00421	0.00581	0.00377	0.00544	0.00547	0.00579	0.00482	1.02249	0.00506	0.00429
R29 . PEAS-LENTILS	0.00448	0.00055	0.00047	0.00044	0.00046	0.00058	0.00049	0.00060	1.08665	0.00294
R30 . LIVESTOCK PROC	0.02001	0.01213	0.01554	0.01080	0.01156	0.01658	0.00971	0.01660	0.01426	1.05616
R31 . GRAIN PROC	0.05522	0.00626	0.00544	0.00496	0.00511	0.00670	0.00561	0.00677	0.01048	0.03607
R32 . POTATO PROC	0.00547	0.00715	0.00469	0.00698	0.00671	0.00709	0.00596	0.00744	0.00625	0.00549
R33 . VEGETABLE PROC	0.00233	0.00312	0.00206	0.00292	0.00293	0.00615	0.00261	0.00605	0.00272	0.00244
R34 . SUGAR-MISC PROC	0.01144	0.00321	0.00233	0.00287	0.00339	0.00348	0.00262	0.00360	0.00304	0.01964
R35 . MANUFACTURE&MININ	0.09772	0.12252	0.09980	0.12305	0.12482	0.13741	0.11311	0.13577	0.11091	0.13048
R36 . UTILITIES	0.02032	0.02714	0.02406	0.02556	0.02933	0.02289	0.02689	0.02259	0.01665	0.01997
R37 . CONSTRUCTION	0.16387	0.22030	0.14786	0.20564	0.20657	0.21820	0.18684	0.22854	0.18470	0.16529
R38 . TRADE	0.28656	0.34979	0.21397	0.35952	0.30468	0.33825	0.27522	0.35629	0.28402	0.30982
R39 . SERVICES	0.36398	0.43210	0.33564	0.40062	0.39315	0.40334	0.40224	0.50872	0.39230	0.39969

R40 . HOUSEHOLDS	1.38055	1.49795	1.97338	1.39871	1.41229	1.49094	1.24301	1.55013	1.30546	1.09828

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.00399	0.00528	0.00725	0.00587	0.00421	0.00559	0.00575	0.00700	0.00654	0.00734
B 2 . FORAGE	0.00167	0.00206	0.00287	0.00281	0.00162	0.00209	0.00220	0.00268	0.00246	0.00310
B 3 . CEREALS	0.00107	0.00135	0.00177	0.00154	0.00102	0.00136	0.00140	0.00170	0.00159	0.00179
B 4 . POTATOES	0.00016	0.00021	0.00029	0.00023	0.00017	0.00022	0.00023	0.00028	0.00026	0.00029
B 5 . SUGARBEETS	0.00032	0.00042	0.00057	0.00046	0.00033	0.00044	0.00045	0.00055	0.00051	0.00058
B 6 . VEGETABLES	0.00022	0.00029	0.00040	0.00033	0.00023	0.00031	0.00032	0.00039	0.00036	0.00041
B 7 . SEED CROPS	0.00007	0.00007	0.00008	0.00009	0.00005	0.00006	0.00007	0.00008	0.00007	0.00008
B 8 . FRUIT CROPS	0.00042	0.00056	0.00076	0.00062	0.00044	0.00059	0.00061	0.00074	0.00069	0.00077
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	0.00084	0.00111	0.00152	0.00123	0.00088	0.00117	0.00121	0.00147	0.00137	0.00154
B11 . GRAIN PROC	0.00098	0.00097	0.00094	0.00127	0.00053	0.00070	0.00072	0.00088	0.00082	0.00097
B12 . POTATO PROC	0.00056	0.00074	0.00101	0.00082	0.00059	0.00078	0.00080	0.00098	0.00091	0.00102
B13 . VEGETABLE PROC	0.00025	0.00034	0.00046	0.00037	0.00027	0.00035	0.00037	0.00045	0.00042	0.00047
B14 . SUGAR-MISC PROC	0.00029	0.00038	0.00051	0.00043	0.00030	0.00039	0.00040	0.00049	0.00046	0.00052
B15 . MANUFACTURE&MININ	0.01170	0.01553	0.02112	0.01775	0.01260	0.01701	0.01694	0.02073	0.02019	0.02299
B16 . UTILITIES	0.00522	0.00686	0.00844	0.00832	0.00616	0.01769	0.00691	0.00886	0.00778	0.00880
B17 . CONSTRUCTION	0.04077	0.05418	0.07339	0.06279	0.04431	0.06061	0.05918	0.07261	0.07198	0.08244
B18 . TRADE	0.03042	0.04063	0.05444	0.04539	0.03216	0.04197	0.04490	0.05286	0.04959	0.05691
B19 . SERVICES	0.08851	0.11739	0.16466	0.12629	0.09275	0.11463	0.12760	0.15674	0.14319	0.15726
B20 . HOUSEHOLDS	0.10718	0.14216	0.19526	0.15766	0.11351	0.15089	0.15480	0.18856	0.17613	0.19756
R21 . LIVESTOCK	0.04188	0.04711	0.06749	0.07871	0.03579	0.04509	0.04856	0.05932	0.05360	0.07421
R22 . FORAGE	0.00626	0.00726	0.01028	0.01154	0.00562	0.00708	0.00761	0.00930	0.00839	0.01166
R23 . CEREALS	0.22693	0.01239	0.01619	0.01950	0.00841	0.01064	0.01137	0.01389	0.01253	0.01744
R24 . POTATOES	0.00662	0.38588	0.00832	0.00839	0.00487	0.00621	0.00654	0.00818	0.00746	0.00988
R25 . SUGARBEETS	0.01235	0.00350	0.02031	0.34590	0.00335	0.00338	0.00403	0.00443	0.00406	0.00536
R26 . VEGETABLES	0.00163	0.00220	0.04080	0.00286	0.00183	0.00227	0.00249	0.00368	0.00290	0.00374
R27 . SEED CROPS	0.05008	0.00065	0.00062	0.00098	0.00024	0.00029	0.00031	0.00038	0.00058	0.00044
R28 . FRUIT CROPS	0.00327	0.00440	0.00891	0.00543	0.00367	0.00462	0.00496	0.00652	0.00542	0.00765
R29 . PEAS-LENTILS	0.07845	0.00096	0.00085	0.00149	0.00029	0.00039	0.00040	0.00048	0.00044	0.00060
R30 . LIVESTOCK PROC	0.01143	0.01317	0.02352	0.01944	0.00668	0.00838	0.00969	0.01158	0.01083	0.01319
R31 . GRAIN PROC	1.01626	0.01153	0.01011	0.01809	0.00327	0.00440	0.00440	0.00537	0.00485	0.00675
R32 . POTATO PROC	0.00876	1.00556	0.00731	0.00669	0.00459	0.00596	0.00611	0.00798	0.00737	0.00931
R33 . VEGETABLE PROC	0.00191	0.00239	1.01961	0.00793	0.00237	0.00246	0.00276	0.00363	0.00343	0.00402
R34 . SUGAR-MISC PROC	0.03193	0.00271	0.05275	1.09067	0.00422	0.00271	0.00406	0.00349	0.00333	0.00381
R35 . MANUFACTURE&MININ	0.10397	0.15149	0.20160	0.17900	1.26231	0.09745	0.36820	0.13542	0.12786	0.14288
R36 . UTILITIES	0.01529	0.01983	0.02258	0.02527	0.01902	1.06982	0.01892	0.02514	0.02120	0.02412
R37 . CONSTRUCTION	0.12347	0.16402	0.21765	0.19899	0.13735	0.19319	1.17982	0.22177	0.23286	0.27214
R38 . TRADE	0.20727	0.29100	0.34052	0.32860	0.21638	0.25209	0.34683	1.33557	0.30982	0.40171
R39 . SERVICES	0.25913	0.34366	0.48863	0.36102	0.26950	0.31554	0.37299	0.46121	1.41409	0.44711
R40 . HOUSEHOLDS	0.84080	1.13099	1.52209	1.39399	0.94550	1.19349	1.27164	1.55811	1.39952	1.97809

COLUMN SUM FOR LEONTIEF MATRIX

SECTOR		SECTOR	
1	4.38437	2	4.31917
3	3.33444	4	4.20146
5	4.10110	6	4.43097
7	4.05999	8	4.56808
9	1.00000	10	4.71723
11	3.36211	12	3.99092
13	4.60462	14	4.53910
15	3.24673	16	3.63931
17	4.09619	18	4.39341
19	4.11567	20	3.97870
21	4.38438	22	4.31925
23	3.33480	24	4.20183
25	4.10064	26	4.42492
27	4.05878	28	4.56914
29	3.98526	30	4.71721
31	3.34232	32	3.99122
33	4.61590	34	4.53877
35	3.24737	36	3.64229
37	4.09650	38	4.39351
39	4.11587	40	3.97894

ROW SUM FOR LEONTIEF MATRIX

SECTOR		SECTOR	
1	3.02486	2	1.54343
3	1.85626	4	1.21590
5	1.60217	6	1.24138
7	1.30657	8	1.12816
9	1.00000	10	1.32236
11	1.24139	12	1.14258
13	1.08902	14	1.26017
15	3.59483	16	1.75639
17	6.66128	18	7.87415
19	12.72512	20	27.90651
21	3.26089	22	1.44508
23	1.89904	24	2.21537
25	1.61651	26	1.24433
27	1.30603	28	1.13556
29	1.27729	30	1.33663
31	1.24296	32	1.14963
33	1.09116	34	1.26408
35	4.93187	36	1.54787
37	5.36246	38	7.87204
39	9.64118	40	29.78963

DIRECT AND INDIRECT MULTIPLIERS

SECTORS	INTRA-REGIONAL MULTIPLIER BOISE TO BOISE	INTER-REGIONAL MULTIPLIER BOISE TO REST OF IDAHO	TOTAL MULTIPLIER BOISE TO ENTIRE STATE
B 1 . LIVESTOCK	3.96048	0.42390	4.38437
B 2 . FORAGE	3.97233	0.34685	4.31917
B 3 . CEREALS	3.09261	0.24184	3.33444
B 4 . POTATOES	3.67248	0.52899	4.20146
B 5 . SUGARBEETS	3.77355	0.32756	4.10110
B 6 . VEGETABLES	4.07597	0.35501	4.43097
B 7 . SEED CROPS	3.76526	0.29473	4.05999
B 8 . FRUIT CROPS	4.19990	0.36819	4.56808
B 9 . PEAS-LENTILS	1.00000	0.0	1.00000
B10 . LIVESTOCK PROC	4.29762	0.41961	4.71723
B11 . GRAIN PROC	2.89119	0.45093	3.34211
B12 . POTATO PROC	2.87482	1.11611	3.99092
B13 . VEGETABLE PROC	4.21140	0.39324	4.60462
B14 . SUGAR-MISC PROC	4.17930	0.35981	4.53910
B15 . MANUFACTURE&MININ	2.92928	0.31745	3.24673
B16 . UTILITIES	3.36604	0.27328	3.63931
B17 . CONSTRUCTION	3.66022	0.43597	4.09619
B18 . TRADE	4.03370	0.35972	4.39341
B19 . SERVICES	3.78695	0.32873	4.11567
B20 . HOUSEHOLDS	3.68904	0.28966	3.97870

DIRECT AND INDIRECT MULTIPLIERS

SECTORS	INTRA-REGIONAL MULTIPLIER REST OF IDAHO TO REST OF IDAHO	INTER-REGIONAL MULTIPLIER REST IF IDAHO TO BOISE	TOTAL MULTIPLIER REST OF IDAHO TO ENTIRE STATE
R21 . LIVESTOCK	3.88488	0.49951	4.38438
R22 . FORAGE	3.81878	0.50048	4.31925
R23 . CEREALS	2.96335	0.37145	3.33480
R24 . POTATOES	3.73521	0.46662	4.20183
R25 . SUGARBEETS	3.64091	0.45973	4.10064
R26 . VEGETABLES	3.94973	0.47520	4.42492
R27 . SEED CROPS	3.60905	0.44974	4.05878
R28 . FRUIT CROPS	4.00978	0.55936	4.56914
R29 . PEAS-LENTILS	3.54755	0.43771	3.98526
R30 . LIVESTOCK PROC	4.23338	0.48384	4.71721
R31 . GRAIN PROC	3.04769	0.29463	3.34232
R32 . POTATO PROC	3.60071	0.39051	3.99122
R33 . VEGETABLE PROC	4.08015	0.53576	4.61590
R34 . SUGAR-MISC PROC	4.10450	0.43428	4.53877
R35 . MANUFACTURE&MININ	2.93524	0.31213	3.24737
R36 . UTILITIES	3.22545	0.41684	3.64229
R37 . CONSTRUCTION	3.67166	0.42484	4.09650
R38 . TRADE	3.87546	0.51805	4.39351
R39 . SERVICES	3.63054	0.48532	4.11587
R40 . HOUSEHOLDS	3.43410	0.54484	3.97894

DIRECT AND INDIRECT EMPLOYMENT MULTIPLIER

SECTORS	INTRA-REGIONAL MULTIPLIER: BOISE TO BOISE	INTER-REGIONAL MULTIPLIER: BOISE TO REST OF IDAHO	TOTAL MULTIPLIER: BOISE TO ENTIRE STATE	DIRECT MULTIPLIER	EMPLOYMENT MULTIPLIER
B 1 . LIVESTOCK	246.4435	21.4467	267.8901	76.7010	3.4927
B 2 . FORAGE	214.4895	17.5346	232.0241	66.2030	3.5047
B 3 . CEREALS	196.7235	12.1817	208.9052	90.2840	2.3139
B 4 . POTATOES	169.5429	26.4638	196.0067	35.2130	5.5663
B 5 . SUGARBEETS	217.5980	16.5148	234.1128	81.0930	2.8870
B 6 . VEGETABLES	286.3479	17.9277	304.2756	123.4430	2.4649
B 7 . SEED CROPS	189.9654	14.8583	204.8237	51.9180	3.9451
B 8 . FRUIT CROPS	345.1589	18.5912	363.7500	181.7140	2.0018
B 9 . PEAS-LENTILS	22.9850	0.0	22.9850	22.9850	1.0000
B10 . LIVESTOCK PROC	202.3873	21.8613	224.2486	10.4480	21.4633
B11 . GRAIN PROC	170.5089	21.1692	191.6781	66.4130	2.8862
B12 . POTATO PROC	146.2094	55.3410	201.5504	52.9340	3.8076
B13 . VEGETABLE PROC	217.2718	19.6661	236.9379	55.0920	4.3008
B14 . SUGAR-MISC PROC	202.0058	18.0133	220.0191	35.5460	6.1897
B15 . MANUFACTURE&MININ	129.2056	15.5806	144.7862	35.8200	4.0421
B16 . UTILITIES	160.7254	13.7903	174.5157	46.9800	3.7147
B17 . CONSTRUCTION	156.9525	21.3748	178.3273	23.7830	7.4981
B18 . TRADE	268.0630	18.1336	286.1965	119.0170	2.4047
B19 . SERVICES	214.1897	16.5544	230.7441	77.7990	2.9659
B20 . HOUSEHOLDS	174.8359	14.4969	189.3328	26.2230	7.2201

DIRECT AND INDIRECT EMPLOYMENT MULTIPLIER

SECTORS	INTRA-REGIONAL MULTIPLIER: REST OF IDAHO TO REST OF IDAHO	INTER-REGIONAL MULTIPLIER: REST OF IDAHO TO BOISE	TOTAL MULTIPLIER: REST OF IDAHO TO ENTIRE STATE	DIRECT MULTIPLIER	EMPLOYMENT MULTIPLIER
R21 . LIVESTOCK	247.5650	26.7989	274.3638	76.7980	3.5725
R22 . FORAGE	221.3406	26.6057	247.9464	66.2850	3.7406
R23 . CEREALS	177.0828	19.8161	196.8990	66.4160	2.9646
R24 . POTATOES	185.0120	24.8344	209.8464	35.2640	5.9507
R25 . SUGARBEETS	224.2684	24.3668	248.6352	81.1740	3.0630
R26 . VEGETABLES	293.0449	25.2037	318.2485	123.2580	2.5820
R27 . SEED CROPS	196.1151	23.9582	220.0732	51.9830	4.2336
R28 . FRUIT CROPS	352.9087	29.9008	382.8093	181.5470	2.1086
R29 . PEAS-LENTILS	158.0570	23.3593	181.4164	21.0930	8.6008
R30 . LIVESTOCK PROC	211.8936	26.0262	237.9198	12.9460	18.3779
R31 . GRAIN PROC	142.0062	15.7300	157.7362	29.4630	5.3537
R32 . POTATO PROC	186.4109	20.8554	207.2663	49.9300	4.1511
R33 . VEGETABLE PROC	252.6769	28.6390	281.3159	80.1390	3.5103
R34 . SUGAR-MISC PROC	215.5160	23.0362	238.5522	41.3440	5.7699
R35 . MANUFACTURE&MININ	136.4637	16.5825	153.0462	34.6180	4.4210
R36 . UTILITIES	168.6769	21.7661	190.4430	50.7710	3.7510
R37 . CONSTRUCTION	184.8349	22.7169	207.5519	40.1740	5.1663
R38 . TRADE	272.8062	27.5923	300.3984	116.1060	2.5873
R39 . SERVICES	266.0132	25.6493	291.6624	122.8490	2.3742
R40 . HOUSEHOLDS	176.8171	28.7467	205.5638	23.5240	8.7385

FINAL DEMANDS - METHOD ONE

PURCHASES/SALES	1	2	3	4	5	6	7	8	9	10
1963	-0.00051	0.00000	0.55337	-0.00000	4.31500	1.01100	3.72800	1.17800	0.0	24.86021
1964	2.15148	1.09872	0.20715	0.26064	0.43143	0.50630	4.80055	2.44146	0.0	25.44180
1965	-2.48776	2.04849	-0.03882	0.39877	0.99605	1.41154	5.03951	1.07554	0.0	26.67155
1966	0.44269	0.41008	0.00981	-1.33569	2.08314	0.14299	3.77778	0.67782	0.0	27.06375
1967	6.43999	0.19964	0.22707	-0.18599	1.26338	0.53811	4.82952	1.32078	0.0	28.42371
1968	5.55047	1.44455	-0.00712	2.36092	0.93921	0.53118	3.53819	0.33818	0.0	29.12866
1969	4.39227	-3.08671	-0.60412	-0.85286	1.25287	0.09497	4.09618	1.08287	0.0	30.14185
1970	5.55036	-1.16718	-1.81082	-0.51878	-0.26558	0.73618	3.84530	2.89366	0.0	31.83931
1971	5.49151	0.93983	-1.41895	-1.19740	-0.52604	0.90453	3.25807	2.12646	0.0	32.97000
1972	8.06544	-0.07834	-2.02459	-0.25123	-1.05724	0.92600	3.25705	3.09800	0.0	34.72842
1973	9.81240	-3.06067	-2.43558	-0.90148	-1.05677	0.98499	4.06964	2.33505	0.0	36.29718
1974	13.65082	-4.74955	-3.89901	-1.55166	-1.41428	1.43801	5.36358	2.92297	0.0	38.08949
1975	14.93832	-1.09658	-4.20625	-1.45261	-1.57451	1.33716	4.73873	3.88326	0.0	40.47153
1976	11.65729	-1.53385	-4.73584	-0.68105	-2.14790	1.45367	4.64087	6.59916	0.0	42.52617
1977	11.13516	-1.76164	-4.98705	-1.59827	-2.01965	2.11010	5.26416	6.73697	0.0	45.84456
1978	9.24570	-3.76555	-4.89089	-2.26895	-2.40052	1.34546	6.79658	5.43153	0.0	49.07944
1979	7.43302	-2.34751	-5.43210	-1.91202	-1.40979	1.78743	6.41153	6.01546	0.0	51.31305
1980	6.41266	-2.74698	-6.23471	-1.44104	-2.32190	1.81141	5.79765	4.65101	0.0	54.97350
1981	5.89776	-4.65151	-6.27143	-1.34924	-2.40469	1.57080	6.34711	5.85455	0.0	58.39938
1982	6.26395	-2.48459	-6.99384	-1.12825	-3.79943	3.58321	5.92056	4.19826	0.0	62.28485
1983	-1.84406	-4.28875	-5.78696	-2.09402	-2.99505	3.38656	6.77511	3.90900	0.0	67.38704
1984	-2.11836	-5.11514	-7.57254	-1.86492	-2.63259	2.48848	6.59858	4.15689	0.0	72.43196
1985	-4.11916	-5.57544	-8.09507	-0.81820	-3.40578	2.48385	6.57264	4.97785	0.0	77.80768
1986	-5.58842	-6.16545	-9.14581	-0.46304	-4.01373	1.44095	7.56335	2.53848	0.0	83.55405

PURCHASES/SALES	11	12	13	14	15	16	17	18	19	20
1963	1.24406	8.96100	0.72220	7.18400	0.00053	0.00197	9.06026	5.30552	0.01956	0.01292
1964	1.15088	9.19509	0.74590	7.33611	3.08169	0.26383	9.15976	10.53933	6.07265	-13.31088
1965	1.55502	9.63682	0.79254	7.69412	4.06809	0.50821	17.46260	10.73020	13.32887	-23.44458
1966	1.42167	9.78761	0.80623	7.78186	4.40458	0.45339	26.95674	10.55025	19.48140	-31.31200
1967	1.15249	10.31308	0.84908	8.15108	5.82950	0.78312	28.12280	6.93667	23.92377	-38.03436
1968	1.27856	10.55524	0.86532	8.35420	7.49037	1.40765	27.25746	9.25838	28.18303	-42.64925
1969	1.44674	10.90686	0.88757	8.64145	9.75825	1.77679	26.92079	16.41272	33.86197	-46.99088
1970	1.50037	11.52726	0.93226	9.12816	10.99586	2.22002	26.00763	14.66221	38.02538	-49.05489
1971	1.57270	11.93351	0.96390	9.45001	13.57561	3.47677	25.30739	15.32098	43.70921	-54.70879
1972	1.49818	12.55988	0.99656	9.94279	13.36212	4.40889	33.32190	16.96198	43.16223	-58.76694
1973	1.42603	13.08381	1.01191	10.37661	14.93101	7.51044	46.65796	9.41402	36.70030	-47.79419
1974	1.30425	13.74367	1.05952	10.86159	15.76454	11.42296	61.19125	6.00599	38.85399	-57.71722
1975	1.34667	14.58607	1.11390	11.55968	24.89473	9.66909	33.00165	4.08593	44.45164	-44.66147
1976	1.68669	15.33308	1.17618	12.16194	24.79132	14.37137	35.61026	5.17705	52.48846	-56.44861
1977	1.94499	16.55295	1.28467	13.10099	26.45349	16.43581	51.52739	9.44157	56.02103	-73.77686
1978	2.21977	17.69060	1.37077	14.02847	20.63261	21.02745	76.61099	3.86159	55.41231	-73.79565
1979	2.47635	18.48415	1.43715	14.69890	39.35527	25.50996	17.48676	14.12534	66.04858	-66.81055
1980	2.80095	19.82549	1.56860	15.73431	43.54782	31.13937	26.27917	12.43366	74.50127	-79.48633
1981	2.87656	20.96570	1.59340	16.70723	48.29599	35.78380	48.70915	-0.05497	65.74048	-63.51514
1982	3.07420	22.37416	1.71166	17.80692	64.25746	41.70331	36.50179	-2.43357	72.91386	-68.53442
1983	3.84362	24.18550	1.86273	19.28912	78.53108	48.38911	27.85735	-4.76299	80.89835	-68.18774
1984	4.15799	26.00708	2.01493	20.70952	97.52060	54.90895	18.70035	13.24159	87.20897	-90.17114
1985	4.45269	27.86272	2.11212	22.25018	108.62856	59.70259	25.06294	15.13178	78.47435	-80.50659
1986	4.78644	29.86946	2.24758	23.87091	125.78392	65.86562	32.13612	22.51363	76.89204	-84.62451

PURCHASES/SALES	21	22	23	24	25	26	27	28	29	30
1963	110.47615	0.00001	66.04312	16.87798	4.36400	5.56200	49.10095	7.38900	8.97600	38.24275

1964	132.71183	3.26532	44.93581	27.47133	-2.33163	4.33833	33.18933	2.08163	3.13346	37.20813
1965	98.89705	2.21186	62.52803	15.65293	-6.42879	3.95814	49.74854	1.99261	2.33022	41.55275
1966	104.23778	2.37347	40.04305	-1.55407	-3.41774	2.75609	36.05476	2.70661	27.27107	42.25356
1967	132.52998	-0.60617	50.28210	2.04161	-5.43818	4.88111	25.94881	3.91534	2.78476	44.34419
1968	110.26797	4.09418	64.52302	26.55606	-6.39144	1.84001	32.75369	5.79903	4.01402	45.53157
1969	87.98698	3.82341	87.33911	15.74887	0.90235	4.08552	34.84389	4.68765	4.61309	47.17056
1970	84.35461	3.91073	71.55771	-2.47625	0.78529	2.20602	24.99706	3.23487	4.86012	50.21674
1971	83.46587	5.99936	65.20268	11.08210	-1.35129	1.50991	28.14723	2.18077	7.33646	52.08949
1972	94.55519	14.51255	67.74071	19.72914	1.71416	1.42778	33.62355	4.66285	11.42904	54.70137
1973	102.96454	6.82449	58.40736	-4.30420	0.50731	-0.11365	26.19522	1.79428	4.97108	57.14093
1974	118.29558	4.56301	53.00081	16.25029	4.83936	1.88890	27.61955	1.38892	5.93769	59.95157
1975	123.23593	5.30992	52.00606	8.54155	-1.06785	1.14874	29.20871	-0.69497	5.96341	63.78136
1976	111.17616	12.45086	41.63570	49.92110	3.90836	0.10760	29.22731	-3.56884	3.98867	67.34977
1977	111.54820	10.11997	41.83839	26.16055	-3.83201	1.68110	34.21773	-0.41474	3.06759	72.89523
1978	105.97429	6.85639	50.58456	14.12783	8.59583	3.03405	30.05058	-3.99357	7.26837	78.05864
1979	99.78648	22.86375	73.71414	32.13506	24.01985	4.13491	38.52271	-2.01463	8.42440	81.55638
1980	98.66022	11.69431	51.43126	44.12518	10.71784	3.02617	26.03598	-2.28321	5.54693	87.90182
1981	110.13829	15.92141	45.39955	75.08421	14.05410	4.88817	24.16580	-1.34179	8.65812	92.99493
1982	128.03194	25.12291	40.99339	56.75728	2.45304	5.54824	27.86304	-1.22507	4.80408	99.34036
1983	110.44550	20.40067	52.52063	33.88989	10.88343	7.09961	20.86607	0.45611	5.87258	107.71445
1984	129.94110	11.50548	35.56450	33.19706	14.68352	7.98994	30.31215	-3.55448	4.76850	116.01268
1985	147.76175	19.52008	29.97743	72.96025	14.35620	6.77297	30.93042	2.40610	7.64899	124.32884
1986	164.64961	15.69789	23.43300	70.50655	10.23464	9.45762	39.99661	-2.34545	6.83970	133.42421

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PURCHASES/SALES	31	32	33	34	35	36	37	38	39	40
1963	-0.00129	45.00394	1.07800	14.25898	114.48135	0.00959	0.00523	0.00620	0.06888	0.26758
1964	-0.84366	46.13858	1.14931	14.42865	143.61162	0.55830	0.63211	13.31212	12.86188	-41.30566
1965	1.21703	48.33212	1.25157	15.33923	162.47112	1.11676	14.54909	16.95473	28.78813	-59.42847
1966	0.97063	49.10654	1.26126	15.50110	179.37910	1.25603	29.92830	18.03429	42.64601	-75.64209
1967	0.05608	51.74159	1.33942	16.16757	194.24179	2.01523	31.70538	8.41153	53.78246	-79.40674
1968	1.27663	52.97952	1.34914	16.70555	210.27380	3.15003	29.70561	13.11636	60.98839	-106.44946
1969	2.58810	54.76935	1.37502	17.42174	225.39452	3.74301	28.66312	32.99596	71.65775	-128.67773
1970	3.24475	57.90262	1.47679	18.48741	238.36432	4.97766	27.28496	30.69456	84.46487	-101.95239
1971	3.55142	59.95174	1.52304	19.14651	258.58423	7.58087	25.69231	31.32463	95.88780	-120.68457
1972	3.30691	63.18469	1.55105	20.12639	267.77124	9.48670	37.19127	34.28806	95.93973	-139.97290
1973	3.14455	65.97200	1.51711	21.00104	269.58569	16.23842	56.40829	15.27367	89.14836	-52.06372
1974	2.81127	69.32111	1.60522	22.01688	259.03735	24.32491	79.19586	6.49580	96.05476	-75.82495
1975	3.07362	73.61168	1.68937	23.48506	272.19971	21.06596	32.77156	-1.07439	108.61166	-14.48267
1976	4.25201	77.31631	1.84048	24.81837	269.37671	30.59239	36.65160	-1.01926	125.46512	-54.25439
1977	5.14492	83.44464	2.05553	26.82333	282.87036	35.15868	62.70085	12.87225	137.66740	-80.58057
1978	6.10988	89.29922	2.19203	28.83247	261.36182	44.80408	101.99150	-0.85934	142.36967	-57.18066
1979	6.95466	93.30873	2.32793	30.19943	329.83960	53.59421	7.70558	17.70731	157.35771	-113.32300
1980	8.10114	99.98595	2.59484	32.41556	349.32031	65.49440	22.32108	13.70403	179.13657	-119.87842
1981	7.99877	106.13277	2.53662	34.37929	355.38428	75.44405	55.21114	-23.23872	170.13252	-57.84204
1982	8.13958	113.26746	2.78233	36.63643	385.59302	87.95471	36.31934	-29.31833	188.16068	-58.60889
1983	10.26889	122.41866	3.05893	39.82635	407.48193	102.03725	22.11571	-37.19298	208.52702	-33.14502
1984	10.66064	131.64674	3.37673	42.76573	436.00293	115.91461	8.12534	5.38281	227.85626	-82.41406
1985	10.82656	141.36897	3.48925	45.88153	463.57593	126.24026	16.28758	-8.22314	219.25415	-58.34229
1986	11.24390	151.75362	3.68331	49.18935	506.26416	139.56631	26.02727	-12.25830	226.37134	-32.49121

CHECK OF LEONTIEFF INVERSE

PURCHASES/SALES	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B10
B 1 . LIVESTOCK	0.99998	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000
B 2 . FORAGE	0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B 3 . CEREALS	0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B 4 . POTATOES	0.00000	0.00000	-0.00000	0.99999	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B 6 . VEGETABLES	0.00000	0.00000	-0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.0	0.00000
B 7 . SEED CROPS	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	0.0	-0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	0.0	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0
B10 . LIVESTOCK PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.99998
B11 . GRAIN PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.00000
B12 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B13 . VEGETABLE PROC	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000
B14 . SUGAR-MISC PROC	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B16 . UTILITIES	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B17 . CONSTRUCTION	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
B18 . TRADE	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000
B19 . SERVICES	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.00000
B20 . HOUSEHOLDS	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R21 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.00000
R22 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R23 . CEREALS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R24 . POTATOES	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R25 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R27 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R31 . GRAIN PROC	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R32 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R34 . SUGAR-MISC PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R35 . MANUFACTURE&MININ	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000
R36 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R40 . HOUSEHOLDS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000

PURCHASES/SALES	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
B 1 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B 2 . FORAGE	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 3 . CEREALS	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 4 . POTATOES	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 6 . VEGETABLES	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 7 . SEED CROPS	0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B11 . GRAIN PROC	0.99999	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B12 . POTATO PROC	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B13 . VEGETABLE PROC	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B14 . SUGAR-MISC PROC	0.00000	-0.00000	0.00000	0.99999	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	-0.00000	0.00000	-0.00000	-0.00000	-0.00000

B16 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99998	-0.00000	-0.00000	-0.00000	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99998	-0.00000	-0.00000	-0.00000
B18 . TRADE	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.99998	-0.00000	-0.00000
B19 . SERVICES	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.99998	-0.00000
B20 . HOUSEHOLDS	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.0	0.0	1.00000
R21 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R22 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R23 . CEREALS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R24 . POTATOES	-0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R25 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R27 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R31 . GRAIN PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R32 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R34 . SUGAR-MISC PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R35 . MANUFACTURE&MININ	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R40 . HOUSEHOLDS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0

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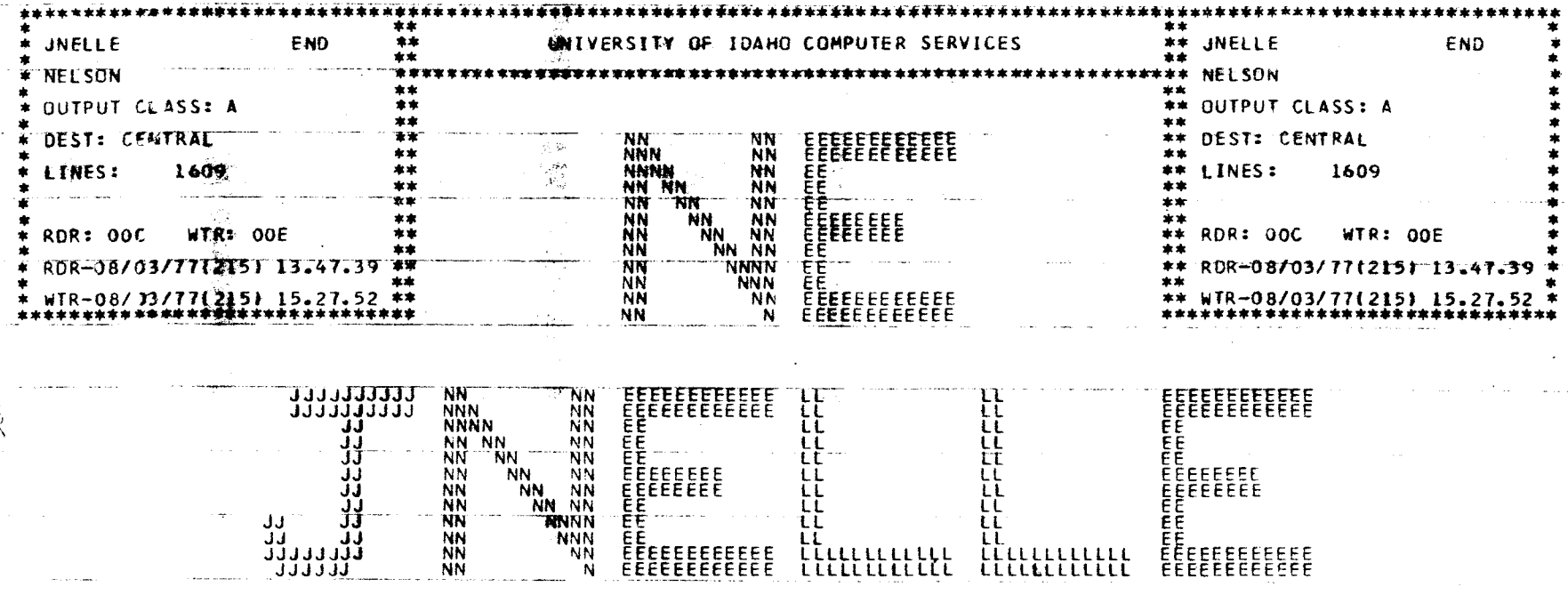
PURCHASES/SALES	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30
B 1 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000	0.0	-0.00000	-0.00000	-0.00000
B 2 . FORAGE	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 3 . CEREALS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 4 . POTATOES	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 6 . VEGETABLES	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0
B 7 . SEED CROPS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000	0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B11 . GRAIN PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B12 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B13 . VEGETABLE PROC	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000	0.00000	0.00000
B14 . SUGAR-MISC PROC	-0.00000	0.00000	0.0	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B16 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B18 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B19 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B20 . HOUSEHOLDS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R21 . LIVESTOCK	0.99998	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
R22 . FORAGE	0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R23 . CEREALS	0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R24 . POTATOES	0.00000	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R25 . SUGARBEETS	0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000
R27 . SEED CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.99999
R31 . GRAIN PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R32 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R34 . SUGAR-MISC PROC	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
R35 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R39 . SERVICES	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

R40 . HOUSEHOLDS	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

PURCHASES/SALES	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40
B 1 . LIVESTOCK	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000
B 2 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 3 . CEREALS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 4 . POTATOES	0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000	0.00000
B 5 . SUGARBEETS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 6 . VEGETABLES	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 7 . SEED CROPS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B 8 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B 9 . PEAS-LENTILS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B10 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B11 . GRAIN PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B12 . POTATO PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B13 . VEGETABLE PROC	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B14 . SUGAR-MISC PROC	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.00000
B15 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B16 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B17 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B18 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B19 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
B20 . HOUSEHOLDS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R21 . LIVESTOCK	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R22 . FORAGE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R23 . CEREALS	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R24 . POTATOES	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R25 . SUGARBEETS	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R26 . VEGETABLES	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R27 . SEED CROPS	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000
R28 . FRUIT CROPS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R29 . PEAS-LENTILS	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R30 . LIVESTOCK PROC	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R31 . GRAIN PROC	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R32 . POTATO PROC	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R33 . VEGETABLE PROC	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R34 . SUGAR-MISC PROC	0.00000	-0.00000	0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R35 . MANUFACTURE&MININ	-0.00000	-0.00000	-0.00000	-0.00000	0.99999	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
R36 . UTILITIES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000	-0.00000
R37 . CONSTRUCTION	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000	-0.00000
R38 . TRADE	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000	-0.00000
R39 . SERVICES	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	1.00000	-0.00000
R40 . HOUSEHOLDS	0.00000	0.0	0.00000	0.00000	0.00000	0.0	0.0	0.0	0.0	1.00000


JNELLE END
NELSON
OUTPUT CLASS: A
DEST: CENTRAL
LINES: 1609
RDR: 00C WTR: 00E
RDR-08/03/77(215) 13.47.39
WTR-08/03/77(215) 15.27.52
UNIVERSITY OF IDAHO COMPUTER SERVICES
JNELLE END
NELSON
OUTPUT CLASS: A
DEST: CENTRAL
LINES: 1609
RDR: 00C WTR: 00E
RDR-08/03/77(215) 13.47.39
WTR-08/03/77(215) 15.27.52

Appendix G

Boise Project Imports

APPENDIX G

BOISE PROJECT IMPACTS

Table G-1. Direct Income Coefficients, Boise Region, Idaho, 1947-1974 (direct purchase per dollar of output)

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970
1. Livestock	.11	.10	.09	.09	.09	.09	.10	.09	.09	.10	.10	.10
2. Forage	.61	.53	.49	.48	.47	.51	.53	.49	.51	.53	.53	.54
3. Cereals	.34	.30	.28	.27	.27	.29	.30	.27	.29	.30	.30	.30
4. Potatoes	.51	.44	.41	.40	.39	.42	.44	.40	.42	.44	.44	.44
5. Sugar Beets	.58	.50	.47	.46	.45	.48	.50	.46	.48	.50	.50	.51
6. Vegetables	.54	.47	.44	.42	.42	.45	.47	.43	.45	.47	.47	.47
7. Seed Crops	.40	.34	.32	.31	.30	.33	.34	.31	.33	.34	.34	.34
8. Fruit Crops	.59	.51	.47	.46	.45	.49	.50	.47	.49	.51	.51	.51
9. Peas-Lentils	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
10. Livestock Processing	.14	.12	.11	.10	.10	.11	.12	.11	.11	.12	.12	.12
11. Grain Processing	.16	.14	.13	.13	.12	.14	.14	.13	.13	.14	.14	.14
12. Potato Processing	.22	.20	.18	.18	.17	.19	.19	.18	.19	.19	.20	.20
13. Vegetable Processing	.53	.46	.42	.41	.41	.44	.45	.42	.44	.46	.46	.46
14. Sugar-Miscellaneous Processing	.34	.29	.27	.26	.26	.28	.29	.27	.28	.29	.29	.29
15. Manufacture & Mining	.33	.29	.27	.26	.26	.28	.29	.26	.28	.29	.29	.29
16. Utilities	.50	.43	.40	.39	.38	.41	.43	.40	.41	.43	.43	.43
17. Construction	.41	.35	.33	.32	.31	.34	.35	.32	.34	.35	.35	.35
18. Trade	.66	.57	.53	.52	.51	.55	.56	.52	.54	.57	.57	.58
19. Services	.57	.49	.46	.45	.44	.48	.49	.45	.47	.49	.49	.50
20. Households	.10	.08	.08	.07	.07	.08	.08	.08	.08	.08	.08	.08

Table G-2. Leontif Income Coefficients (Household-inverse coefficients, Boise Region, Idaho, 1947 - 1970 (direct and indirect requirements per dollar of final demand).

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970	Statistics $\bar{x}$	Statistics s
1. Livestock	1.08	.89	.82	.80	.80	.89	.94	.81	.91	.90	.90	.94	.89	.08
2. Forage	1.51	1.23	1.14	1.11	1.09	1.27	1.37	1.18	1.29	1.38	1.37	1.45	1.28	.14
3. Cereals	.99	.82	.77	.75	.74	.86	.93	.80	.88	.94	.94	.99	.87	.09
4. Potatoes	1.33	1.09	1.01	.97	.94	1.11	1.20	1.03	1.12	1.20	1.19	1.28	1.12	.12
5. Sugarbeets	1.42	1.14	1.06	1.04	1.02	1.18	1.28	1.10	1.22	1.29	1.29	1.36	1.20	.13
6. Vegetables	1.49	1.21	1.12	1.08	1.06	1.24	1.34	1.15	1.26	1.34	1.33	1.40	1.25	.13
7. Seed Crops	1.26	1.04	.97	.95	.93	1.09	1.18	1.02	1.12	1.19	1.19	1.25	1.10	.12
8. Fruit Crops	1.57	1.29	1.21	1.18	1.16	1.34	1.46	1.25	1.37	1.45	1.44	1.53	1.35	.14
9. Peas-Lentils	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
10. Livestock Processing	1.09	.87	.86	.85	.84	.95	1.02	.88	.97	1.00	.97	1.01	.94	.08
11. Grain Processing	.76	.62	.58	.55	.52	.60	.63	.52	.57	.60	.61	.63	.60	.06
12. Potato Processing	.83	.71	.63	.57	.54	.66	.71	.60	.65	.72	.69	.81	.67	.09
13. Vegetable Processing	1.52	1.26	1.18	1.15	1.13	1.31	1.42	1.22	1.33	1.42	1.41	1.49	1.32	.13
14. Sugar-Miscellaneous Processing	1.38	1.01	.98	1.01	.95	1.09	1.16	.98	1.11	1.15	1.12	1.19	1.09	.12
15. Manufacture & Mining	.92	.77	.72	.70	.69	.80	.87	.75	.82	.88	.87	.92	.80	.08
16. Utilities	1.20	.98	.91	.89	.89	1.06	1.16	1.04	1.16	1.23	1.23	1.30	1.09	.14
17 Construction	1.23	1.04	.97	.94	.92	1.07	1.16	1.00	1.09	1.16	1.15	1.23	1.08	.10
18. Trade	1.57	1.28	1.19	1.16	1.14	1.32	1.43	1.23	1.35	1.44	1.43	1.51	1.34	.14
19. Services	1.41	1.16	1.08	1.04	1.02	1.19	1.29	1.11	1.21	1.29	1.28	1.36	1.20	.13
20. Households	2.04	1.89	1.86	1.84	1.83	1.96	2.05	1.91	2.00	2.05	2.03	2.12	1.96	.10

Table G-3. Boise Region Income Multipliers, Idaho, 1947 - 1970 (direct and indirect income change per $1.00 direct income change).

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970	Ave.
1. Livestock	3.96	3.67	3.64	3.62	3.63	3.78	3.85	3.60	3.82	3.73	3.72	3.78	3.73
2. Forage	3.97	3.57	3.50	3.47	3.43	3.80	4.03	3.67	3.91	4.05	4.01	4.22	3.80
3. Cereals	3.09	2.87	2.85	2.84	2.81	3.06	3.21	2.97	3.14	3.24	3.21	3.34	3.05
4. Potatoes	3.67	3.34	3.24	3.18	3.13	3.49	3.68	3.34	3.56	3.69	3.64	3.89	3.48
5. Sugarbeets	3.77	3.36	3.30	3.29	3.25	3.60	3.81	3.47	3.71	3.84	3.80	4.00	3.60
6. Vegetables	4.07	3.65	3.58	3.54	3.51	3.86	4.08	3.71	3.94	4.08	4.04	4.24	3.85
7. Seed Crops	3.76	3.47	3.42	3.41	3.38	3.71	3.91	3.61	3.82	3.95	3.92	4.10	3.70
8. Fruit Crops	4.19	3.81	3.78	3.75	3.71	4.09	4.34	3.94	4.18	4.33	4.29	4.51	4.07
9. Peas-Lentils	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10. Livestock Processing	4.29	3.86	4.08	4.08	4.07	4.28	4.41	4.13	4.34	4.34	4.21	4.26	4.19
11. Grain Processing	2.89	2.69	2.67	2.61	2.52	2.66	2.70	2.47	2.57	2.61	2.61	2.64	2.63
12. Potato Processing	2.87	2.74	2.59	2.46	2.37	2.66	2.76	2.51	2.63	2.79	2.69	3.03	2.67
13. Vegetable Processing	4.21	3.86	3.82	3.80	3.76	4.13	4.36	3.97	4.22	4.36	4.32	4.54	4.12
14. Sugar-Miscellaneous Processing	4.17	3.49	3.53	3.69	3.56	3.82	3.95	3.58	3.90	3.92	3.84	4.00	3.78
15. Manufacture & Mining	2.92	2.76	2.72	2.71	2.69	2.93	3.07	2.85	3.01	3.09	3.07	3.21	2.91
16. Utilities	3.36	3.05	2.98	2.97	2.99	3.38	3.60	3.41	3.71	3.84	3.82	4.00	3.42
17. Construction	3.66	3.44	3.40	3.38	3.35	3.66	3.85	3.53	3.73	3.83	3.80	4.00	3.63
18. Trade	4.03	3.63	3.56	3.53	3.49	3.87	4.11	3.72	3.97	4.12	4.09	4.30	3.56
19. Services	3.78	3.42	3.36	3.33	3.29	3.64	3.85	3.50	3.72	3.85	3.82	4.02	3.63
20. Household	3.68	3.54	3.58	3.60	3.58	3.86	4.04	3.78	3.98	4.04	3.98	4.21	3.82

Table G-4. Boise Region Income Multipliers (Boise Region to Rest of Idaho), 1947 - 1970 (direct and indirect income change per $1.00 direct income change).

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970
1. Livestock	.42	.51	.50	.48	.68	.95	1.22	1.17	1.24	1.39	1.53	1.53
2. Forage	.34	.39	.48	.35	.51	.79	.99	.90	.70	.86	.97	1.01
3. Cereals	.24	.27	.33	.25	.37	.57	.73	.67	.54	.66	.73	.78
4. Potatoes	.52	.53	.64	.55	.71	.92	1.18	1.08	.90	1.04	1.15	1.15
5. Sugarbeets	.32	.36	.44	.33	.47	.75	.94	.84	.67	.83	.94	.98
6. Vegetables	.35	.39	.47	.35	.50	.77	.97	.88	.68	.84	.95	.99
7. Seed Crops	.29	.33	.41	.30	.43	.67	.85	.77	.59	.73	.82	.86
8. Fruit Crops	.36	.42	.51	.38	.54	.84	1.06	.95	.74	.91	1.03	1.07
9. Peas-Lentils	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
10. Livestock Processing	.41	.65	.44	.39	.56	.80	1.03	.96	.93	1.07	1.29	1.38
11. Grain Processing	.45	.45	.49	.47	.63	.85	1.06	1.03	.96	1.09	1.13	1.25
12. Potato Processing	1.11	.98	1.16	1.17	1.35	1.37	1.80	1.69	1.59	1.66	1.80	1.68
13. Vegetable Processing	.39	.40	.50	.36	.52	.82	1.03	.93	.72	.89	1.00	1.05
14. Sugar-Miscellaneous Processing	.35	.34	.41	.32	.46	.87	1.02	.84	.83	1.09	1.23	1.31
15. Manufacture & Mining	.31	.26	.30	.22	.31	.49	.62	.56	.43	.53	.60	.63
16. Utilities	.27	.30	.38	.28	.41	.65	.83	.78	.61	.76	.85	.88
17. Construction	.43	.35	.41	.29	.42	.66	.83	.75	.57	.71	.79	.83
18. Trade	.35	.40	.50	.36	.52	.81	1.02	.93	.71	.88	.99	1.03
19. Services	.32	.36	.45	.33	.47	.73	.92	.83	.64	.79	.89	.92
20. Households	.28	.31	.37	.28	.40	.61	.78	.71	.56	.68	.76	.81

Table G-5. Boise Region Income Multipliers (Rest of Idaho to Boise Region), 1947 - 1970 (direct and indirect income change per $1.00 direct income change).

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970
1. Livestock	.49	.42	.38	.28	.26	.35	.46	.25	.32	.32	.28	.45
2. Forage	.50	.32	.32	.31	.21	.39	.48	.26	.35	.36	.31	.52
3. Cereals	.37	.25	.26	.25	.17	.31	.37	.21	.27	.27	.23	.39
4. Potatoes	.46	.29	.29	.28	.19	.36	.44	.24	.33	.33	.29	.29
5. Sugarbeets	.45	.30	.30	.28	.19	.36	.44	.24	.33	.32	.28	.47
6. Vegetables	.47	.29	.29	.28	.19	.40	.44	.23	.33	.33	.29	.48
7. Seed Crops	.44	.30	.30	.30	.20	.37	.44	.25	.33	.33	.28	.47
8. Fruit Crops	.55	.37	.38	.37	.24	.45	.55	.30	1.13	.43	.34	.60
9. Peas-Lentils	.43	.28	.29	.27	.18	.34	.42	.22	.30	.31	.26	.45
10. Livestock Processing	.48	.38	.36	.30	.24	.37	.47	.25	.33	.34	.28	.47
11. Grain Processing	.29	.19	.19	.18	.12	.23	.28	.15	.20	.21	.18	.30
12. Potato Processing	.39	.25	.25	.25	.16	.29	.38	.20	.27	.28	.24	.41
13. Vegetable Processing	.53	.36	.37	.35	.23	.44	.52	.28	.38	.39	.33	.56
14. Sugar-Miscellaneous Processing	.43	.38	.36	.25	.16	.32	.39	.20	.30	.30	.26	.44
15. Manufacture & Mining	.31	.19	.20	.19	.13	.24	.30	.16	.22	.22	.19	.32
16. Utilities	.41	.26	.26	.26	.19	.36	.43	.28	.26	.30	.26	.44
17. Construction	.42	.27	.27	.26	.17	.33	.41	.21	.29	.31	.26	.45
18. Trade	.51	.33	.34	.33	.22	.41	.50	.27	.36	.37	.32	.54
19. Services	.48	.30	.30	.29	.19	.37	.45	.24	.34	.33	.29	.49
20. Household	.54	.35	.36	.36	.24	.42	.51	.28	.41	.39	.34	.57

Table G-6. Direct and indirect employment by sector, Boise region, Idaho, 1947 - 1970 (employees per million dollars of final demand).

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970
1. Livestock	246	382	365	333	325	317	297	265	240	214	207	235
2. Forage	214	323	311	277	266	273	268	230	217	203	194	232
3. Cereals	196	311	298	271	262	264	253	224	202	188	181	212
4. Potatoes	169	252	243	212	200	209	207	174	169	160	151	185
5. Sugarbeets	217	330	315	285	274	280	272	235	219	205	196	233
6. Vegetables	286	442	418	380	370	373	359	317	284	265	255	299
7. Seed Crops	189	293	282	253	243	249	244	211	198	186	177	212
8. Fruit Crops	345	542	515	472	459	462	442	394	351	326	315	367
9. Peas-Lentils	22	38	35	33	33	33	30	28	22	20	20	22
10. Livestock Processing	202	285	304	274	263	261	252	222	208	189	174	200
11. Grain Processing	170	226	228	201	183	180	174	161	152	140	129	155
12. Potato Processing	146	199	193	164	149	156	157	142	138	132	118	157
13. Vegetable Processing	217	296	299	265	248	254	256	228	224	210	194	239
14. Sugar-Miscellaneous Processing	202	250	258	245	224	223	219	190	191	173	158	194
15. Manufacture & Mining	129	221	219	185	181	170	172	142	136	132	120	146
16. Utilities	160	460	437	356	295	260	235	189	182	164	149	196
17. Construction	156	246	252	204	194	191	195	158	164	150	140	178
18. Trade	268	378	388	325	307	306	315	264	271	260	252	287
19. Services	214	312	304	267	248	256	255	217	216	205	193	231
20. Household	174	273	281	245	232	229	227	196	195	179	168	206

Table G-7. Direct employment by sector, Boise region, Idaho, 1947 - 1970 (employees per million dollars of output).

Sector	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970
1. Livestock	76	129	117	147	149	110	100	95	76	69	69	76
2. Forage	66	111	101	127	128	95	86	82	66	60	59	66
3. Cereals	90	152	138	127	128	129	118	112	90	81	81	90
4. Potatoes	35	59	53	67	68	50	46	43	35	31	31	35
5. Sugarbeets	81	136	124	155	157	116	106	101	81	73	73	81
6. Vegetables	123	208	189	237	240	177	161	153	123	112	111	123
7. Seed Crops	51	87	79	99	100	74	68	64	51	47	46	51
8. Fruit Crops	181	306	278	348	352	261	238	226	181	164	163	181
9. Peas-Lentils	22	38	35	40	40	33	30	28	22	20	20	22
10. Livestock Processing	10	11	11	14	13	10	10	11	10	9	8	10
11. Grain Processing	66	71	75	32	29	64	63	72	66	59	52	66
12. Potato Processing	52	56	60	55	50	51	51	58	52	47	42	52
13. Vegetable Processing	55	59	62	88	80	53	53	60	55	49	43	55
14. Sugar-Miscellaneous Processing	35	38	40	45	41	34	34	38	35	31	28	35
15. Manufacture & Mining	35	78	76	55	57	51	50	43	35	36	31	35
16. Utilities	46	284	264	220	164	109	81	60	46	37	30	46
17. Construction	23	43	49	54	52	23	24	19	23	16	15	23
18. Trade	119	165	177	145	138	127	132	116	119	114	115	119
19. Services	77	116	111	163	146	93	87	82	77	73	69	77
20. Households	26	44	44	35	34	33	29	28	26	22	21	26

Table G-8. Employment multipliers by sector, Boise Region, Idaho, 1947 - 1970 (state employment per direct sector employee).

Sector		1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1970
1.	Livestock	3.49	3.35	3.49	3.31	3.38	3.52	3.78	3.54	4.09	4.13	4.11	4.24
2.	Forage	3.50	3.22	3.50	3.14	3.13	3.44	3.82	3.43	3.88	4.12	4.05	4.37
3.	Cereals	2.31	2.21	2.37	2.20	2.19	2.34	2.54	2.35	2.59	2.72	2.68	2.84
4.	Potatoes	5.56	5.09	5.59	4.95	4.93	5.39	6.12	5.43	6.23	6.65	6.51	7.09
5.	Sugarbeets	2.88	2.65	2.86	2.61	2.20	2.84	3.12	2.82	3.18	3.37	3.31	3.56
6.	Vegetables	2.46	2.30	2.43	2.25	2.25	2.40	2.60	2.40	2.62	2.75	2.71	2.87
7.	Seed Crops	3.94	3.69	4.02	3.64	3.62	3.95	4.38	3.96	4.46	4.74	4.66	5.01
8.	Fruit Crops	2.00	1.90	2.01	1.88	1.87	1.99	2.14	1.98	2.16	2.26	2.23	2.35
9.	Peas-Lentils	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10.	Livestock Processing	21.46	32.09	28.93	27.23	29.42	31.69	31.82	24.58	25.14	26.23	28.92	27.02
11.	Grain Processing	2.88	3.73	3.56	3.33	3.49	3.78	3.83	3.10	3.12	3.29	3.50	3.40
12.	Potato Processing	3.80	5.13	4.94	4.53	4.77	4.95	5.34	4.17	4.24	4.52	4.48	4.70
13.	Vegetable Processing	4.30	5.64	5.49	4.97	5.22	5.84	6.07	4.68	4.80	5.18	5.57	5.42
14.	Sugar-Miscellaneous Processing	6.18	7.40	7.30	7.10	7.29	8.40	8.39	6.19	6.75	7.26	7.85	7.62
15.	Manufacture & Mining	4.04	3.13	3.23	3.21	3.12	3.98	4.17	4.07	4.48	4.38	4.82	5.06
16.	Utilities	3.71	1.72	1.78	1.82	2.11	2.79	3.51	3.90	4.61	5.44	6.21	5.23
17.	Construction	7.49	6.43	5.86	7.34	7.58	10.01	10.34	10.50	8.29	11.27	11.74	9.45
18.	Trade	2.40	2.51	2.44	2.45	2.52	2.85	2.87	2.74	2.61	2.66	2.60	2.90
19.	Services	2.96	2.95	3.11	2.89	3.04	3.29	3.56	3.23	3.24	3.35	3.40	3.64
20.	Household	7.22	6.84	7.08	6.75	6.77	8.11	9.50	8.31	8.66	9.37	9.46	9.61

Figure G - 1. Direct and total project income impact and total water delivered to farms, Boise Region, Idaho, 1947 - 1970.

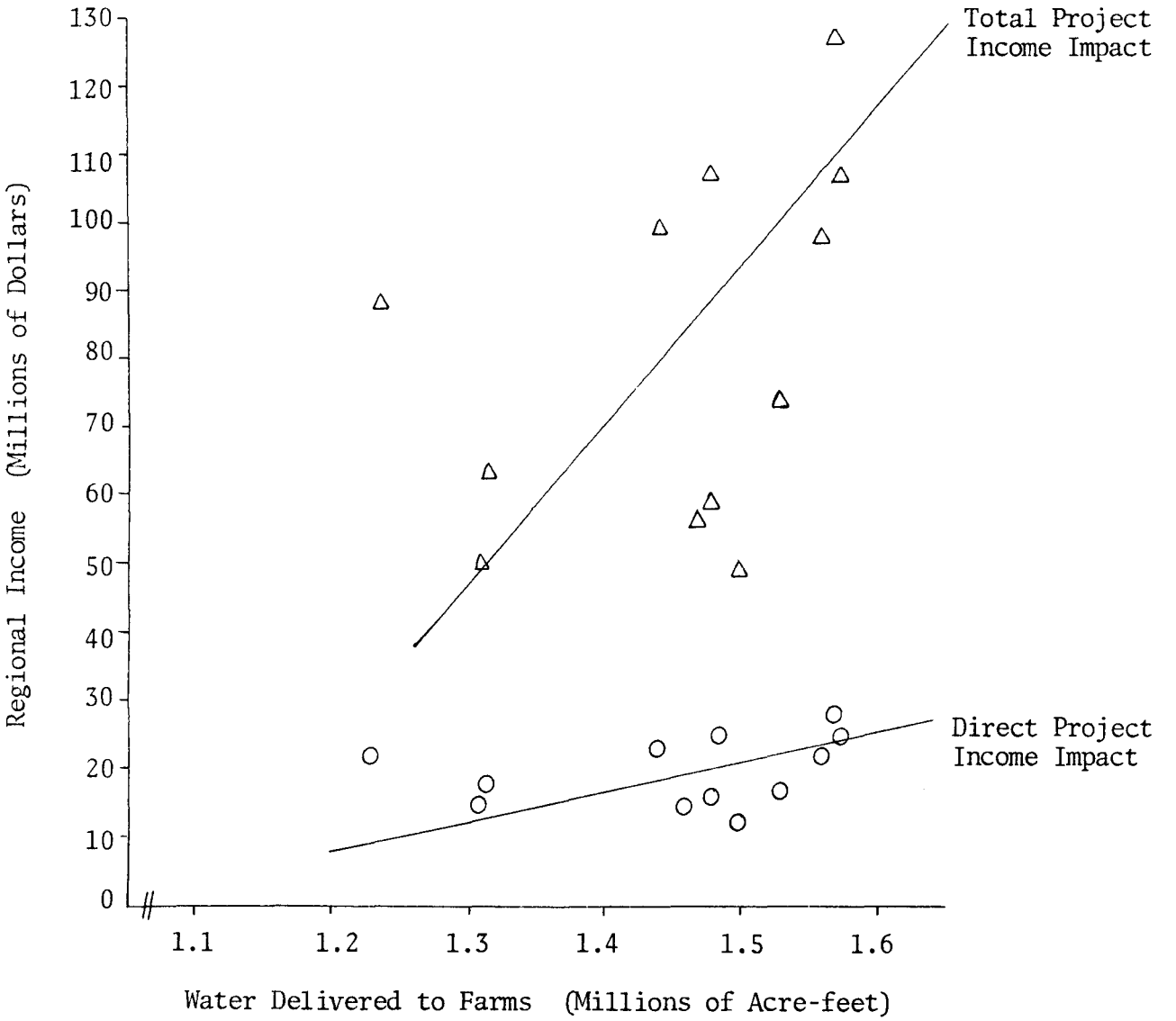


Figure G - 2. Total Boise Project output and water delivered to farms, Boise Region, Idaho, 1947 - 1970.

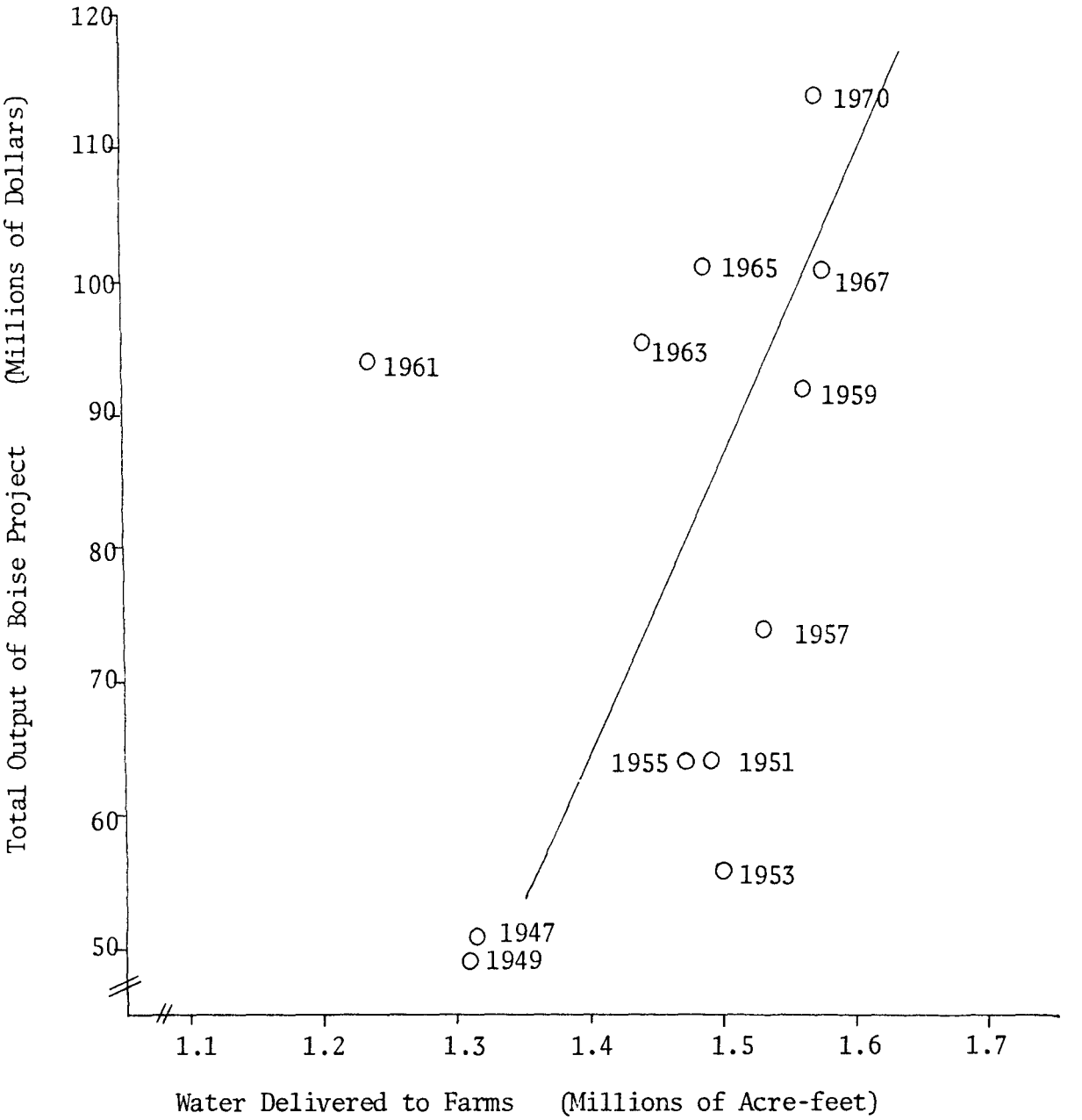


Figure G - 3. Food processing total output and water delivered to farms, Boise Region, Idaho, 1947 - 1970.