The Economic Contribution of Agriculture in Delaware

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The decreasing share of production agriculture in the U.S. economy in general and Delaware in particular has raised questions about the amount of government resources being spent on the local agricultural sector. A basic question in the debate is: "What is the real economic contribution of agriculture?" This study looks at the economic role of agriculture in Delaware, presenting different perspectives of what agriculture is and what it contributes to the state economy. Based on three definitions of agriculture, the economic impacts as measured by shares to total employment, output, and value added were estimated using IMPLAN, an input-output modeling software. In each economic impact measure, the share of the local agricultural sector to the total Delaware economy ranged from around 2% to 6% in 1991.

The relative size and makeup of agriculture have changed dramatically over the last century. In 1929, the share of production agriculture to the U.S. gross domestic product was 9.2%. In 1991, this share was down to 2% (Bureau of the Census, *Statistical Abstract of the United States* 1994). This dramatic decline, together with the accompanying changes in the structure of production agriculture in favor of bigger farms, raised important policy questions about the role of agriculture in the U.S. and individual states' economies and about the appropriate level and form of government support for agriculture.

The new financial focus of the federal government has prompted lawmakers to look at agricultural price support programs and other agricultural programs, including the land grant educational system, as logical candidates for reduction or even total elimination. At the state level, the same concern for financial stability, amidst increasing requirements for social and local economic development programs, has led many local policymakers to be more critical of government support of agriculture. In Delaware, because of the state's size and comparatively small production agriculture sector, the policy questions revolve around the conflict between maintaining the viability of local agriculture, the preservation of the family farm, and the aesthetic value of open space, on the one hand, and the urbanization pressures and limited fiscal resources of local governments, on the other. Quantifying the economic contribution of local agriculture to the state economy provides local officials an essential perspective as they formulate policies and decide budget priorities for the continued economic development of the state.

A critical part of the debate can be posed in the question: "What is the real economic contribution of agriculture to the economy?" The answer to this question depends on how broadly or narrowly agriculture is defined. At one end is the traditional view that limits agriculture's economic role to its value-added contribution in traditional production sectors. At the other end is a more encompassing view that includes the agricultural processing industries and other "farm-related" industries, including food retailing establishments. This study looks at the economic role of agriculture in Delaware, presenting different perspectives of what agriculture is and what it contributes to the state economy.

Previous Studies

Leones, Schulter, and Goldman conducted a survey of studies on the contribution of agriculture in state economies. Of the twenty-seven studies in the survey, thirteen used an input-output model. IMPLAN was the model of choice in eleven of the thirteen I-O based studies. Two basic issues arise in the implementation of these models. One is the definition of agriculture. In the studies surveyed, "agriculture" ranged from basic production agriculture to more encompassing definitions that include agribusiness industries, food processing, and natural resource–based industries. The other issue

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is how to eliminate or minimize double counting. Strategies include eliminating intermediate demands within the agricultural sector (Johnson and Wade) and subtracting indirect impacts among sectors within the agricultural sector (Leones and Conklin). In this study, we address these two issues by comparing economic contributions for three definitions of agriculture in Delaware and by suggesting a method to minimize double counting through adjustment of the regional purchase coefficients of the industries comprising the agricultural sector.

Defining Agriculture

What industries or sectors should be included to assess the real economic contribution of agriculture to the Delaware economy? This question probes the real economic linkages of production agriculture with other sectors of the economy. In itself, production agriculture remains a significant and important part of the economy. At the national level, a sector that contributes more than $100 billion to the economy and employs three million people cannot be easily discounted. In Delaware, production agriculture generated $261 M value-added and employed around six thousand people in 1991. Beyond these direct benefits are the additional contributions from agricultural processing industries, farm input manufacturers, farm product marketing services, and the cycle of consumption spending induced by all the incomes generated in these economic activities.

The U.S. Department of Agriculture's Economic Research Service (ERS) has two working definitions of an expanded agriculture. The first, the "food and fiber sector" (FFS), is a final demand concept defined as consisting of "1) expenditures for food, clothing, shoes, tobacco products, flowers, seeds and potted plants; 2) net agricultural and textile exports; 3) the value of farm inventory change; and 4) the value of changes in off-farm private and government stocks of farm commodities" (Leones, Schulter, and Goldman, p. 3). Each year, exogenously determined changes in these final demands are fed into a national input-output model to determine their impact on or contribution to value-added and employment at the national level.

The second concept used by ERS is the "farm and farm-related" (FFR) industry. ERS defines an FFR industry as "having 50% or more of their national work force employed in providing goods and services to satisfy domestic final demand for agricultural products" (Majchrowicz and Salsgiver, p. 11). Employment in industries satisfying this criterion is aggregated and reported annually by ERS.

In addition to these national definitions, many individual states have used alternative definitions of agriculture. Leones, Schulter, and Goldman analyzed twenty-seven state reports addressing the impact of agriculture on a state's economy. In the studies reviewed, there was no uniform definition of which industries should be included as part of an expanded definition of agriculture. To illustrate, Leones and Conklin in their study of the role of agriculture in the Arizona economy defined the agricultural sector to include production agriculture and producer-linked agribusiness, which includes agricultural services, food and fiber processing, wholesale farm-products raw materials, and agricultural business associations. The criterion used to customize the definition to the Arizona economy is as follows: "If the business was unlikely to exist or was likely to be drastically smaller if there was not a production agriculture sector in the state, it was classified as producer-linked agribusiness" (Leones and Conklin, p. 3). The criterion explicitly excludes consumer-linked agribusiness, which includes wholesale and retail grocers, eating and drinking establishments, and apparel shops since these are demand-based rather than supply or production agriculture–based. While somewhat subjective, this criterion is intuitively appealing, particularly since it addresses the question of an industry's dependence on local production agriculture.

In a study of the impact of agriculture in Virginia, Johnson and Wade used what they called a system-wide definition which includes all activities that add value to farm products. The industries included were farming (excluding forestry), agricultural processing (food and tobacco products, wineries, cotton textiles excluding all noncotton textiles, all apparel and all textile-based consumer products), distribution (transportation, wholesale and retail trade of farm products, including basic value of food sold through restaurants but excluding all restaurant markup and activity itself), and the input sectors.

The definitions used in Arizona and Virginia are typical, but wide variation exists. In this paper, we present three alternative definitions of agriculture. The first, which we designate as Agriculture I, defines agriculture in the traditional sense, i.e., production agriculture. The second, Agriculture II, expands on the traditional definition by including industries that provide agricultural inputs and the processing industries dependent on local production agriculture. This definition follows the general criterion suggested by Leones and Conklin. The

third and broadest definition, Agriculture III, includes all food and fiber processing industries in addition to production agriculture and the agricultural input sectors.

IMPLAN

IMPLAN is software developed by the U.S. Forest Service to do input-output analysis (Taylor et al.). It allows users to estimate regional input-output tables, compute multipliers, and conduct industry impact analysis. The program creates regional input-output tables using the national input-output tables as the base. The national input-output tables are regionalized or converted into state or county tables using estimated regional purchase coefficients (RPC). The RPC for a particular industry in a given region indicates the share of regional demand that is supplied by the regional producers. In IMPLAN, the RPCs for shippable commodities were estimated from predictive equations based on empirical trade flow data from the 1977 Multiregional I-O (MRIO). The 1977 MRIO is a cross-sectional data base of 51 (includes the District of Columbia) state-level input-output accounts linked with consistent cross-interstate trade flows for 125 sectors. In the IMPLAN version (1991) used in this study, the RPCs for shippable commodities were derived using 1991 data for the explanatory variables. For the nonshippable commodities (service industries), the RPCs used were those derived from a data set developed by John Havens of Boston College.

Following the dimensions of the national input-output tables, the regional tables constructed by IMPLAN consist of as many as 528 sectors: 27 in production agriculture, 20 in mining, 10 in construction, 375 in manufacturing, 86 in utilities and services, 5 in government, and 5 in the rest of the world and household accounts.

The 1991 IMPLAN data on Delaware used in this study came from the Minnesota IMPLAN Group, Inc. (MIG), an IMPLAN consultant and IMPLAN data provider. Sources of data cited by MIG include the Bureau of Labor Statistics, the Bureau of Economic Analysis, and the Bureau of the Census. The value-added figures for each sector are consistent with the gross state product data reported by the Bureau of Economic Analysis.

Alternative Definitions of Agriculture in IMPLAN

As shown in the appendix, Agriculture I (production agriculture) consists of twenty-seven economic sectors responsible for the production of agricultural products and services (IMPLAN Sectors 1–27). The second definition, or Agriculture II, defines agriculture as consisting of production agriculture, the agricultural input industries (IMPLAN sectors 202, 203, 204, 309), and the manufacturing industries that are dependent on the local production agriculture. Based on the IMPLAN data for Delaware, an industry is considered to be dependent on local production agriculture when production agriculture accounts for more than 5% of its total interindustry purchases in the state. Using this criterion, the several manufacturing industries shown in table 1, in addition to production agriculture and the agricultural input sectors, are included in the Agriculture II definition of agriculture.

The third and most liberal definition, Agriculture III, includes production agriculture, agricultural input industries, and all food and fiber processing industries (IMPLAN sectors 58–123). A more extended version similar to that used in the Virginia study would include wholesale and retail industries involved in food and fiber marketing. However, the IMPLAN wholesale and retail services sectors are not disaggregated by commodity or industry. An analysis including these industries was not conducted.

Economic Contribution Analysis Using IMPLAN

IMPLAN can generate two sets of reports. The first set provides the economic multipliers that are

Table 1. Manufacturing Industries Included in Agriculture II

Industry	IMPLAN Sector No.	% Share of Purchases from Local Production Agriculture to Total Local Interindustry Inputs
Sausages and other prepared meats	59	5.5
Poultry processing	60	53.6
Canned fruits and vegetables	67	20.1
Frozen fruits, juices and vegetables	70	20.0
Prepared fresh or frozen fish	98	5.0
Food preparations, N.E.C.*	103	7.5
Textile goods, N.E.C.*	123	28.0

Source of basic data: 1991 IMPLAN data for Delaware prepared by the Minnesota IMPLAN Group, Inc.
*Not elsewhere classified.

based on the inverse of the Leontief matrix. The second set reports on the estimated dollar economy-wide impacts of exogenous changes in final demand of specified industries.

The economic contribution of the agricultural sector to the Delaware economy for each of the three alternative definitions was estimated. To avoid double counting, the RPCs of the industries included in each definition were set to zero. The original RPCs, while necessary in estimating the economy-wide impact of a change in sales to final demand for a *particular* industry, cannot be used in this study, where the research interest is in the contribution of an aggregated unit consisting of several industries in the input-output table. The effect of setting the RPCs to zero is to prevent agricultural industries included in the aggregated definitions from selling their outputs to each other. For example, the direct output impact of a scenario that includes both the poultry and eggs industry and the poultry processing industry is simply the sum of their outputs. The indirect impact is the sum of the interindustry inputs required by these two sectors. If the RPCs were not set to zero, the indirect impact would include the inputs purchased by the poultry processing industry from the poultry and eggs sector and vice versa. This would lead to a double counting of that part of output in each sector used as inputs when both the direct and indirect effects are summed. An analysis using output as the measurement variable inherently suffers from double counting. Without the RPC adjustment, the double counting problem would be compounded. With value-added and employment, eliminating double counting is particularly important to preserve their integrity as economic contribution measures. Without the RPC adjustment, the double counting in the total output level would be transmitted to value-added and employment.

Economic Multipliers

Generally, economic multipliers estimate the economy-wide impact of changing one variable on related variables in a specified economy such as a state. They imply strict cause-effect relationships, not accounting identities (Schulter). It is also important to note that multipliers measure impacts of marginal changes and cannot be accurately used to measure the impact of a wholesale elimination or multiplication of a sector (Walden, p. 6).

Two sets of multipliers generated by IMPLAN are the output-based multipliers and the Types I and III multipliers. Output-based multipliers measure the effects of a million-dollar change in an industry's final demand on a region's gross output, personal income, total income, value-added, or employment. Types I and III multipliers measure the effects of a dollar change in output (or personal income, total income, value-added, employment) of an industry on the total output (or personal income, total income, value-added, employment) on the local economy. All variables are measured in millions of dollars except employment, which is shown in terms of the number of jobs.

For each impact variable, there are four types of multipliers: direct, indirect, induced, and total. The direct multipliers capture the immediate impact of the initial change in the output of the industry being analyzed. The indirect multipliers capture the increased purchases of inputs required by the industry to produce the initial change in output. The induced multipliers measure the effects of changes in household spending resulting from employment changes generated by the direct and indirect effects. In an open input-output model like IMPLAN, induced effects are estimated by first converting "direct and indirect effects to changes in employment based on each sector's employment-to-output ratio. Employment change is then multiplied by the region's population-to-employment ratio, converting it into population change. Population change is multiplied by average regional per-capita consumption rates by sector to estimate the regional household consumption generated by the initial final demand changes. This change in household consumption is treated as an additional set of final demand changes and are multiplied by the Leontief Inverse matrix to generate the first round of induced effects. In order to capture successive rounds of induced effects, the procedure is repeated until the population changes by fewer than 10 people" (Taylor et al.). Since the service sectors comprise a major portion of household spending, the induced effects are largely concentrated in the impact on the service industries. The total multiplier is the aggregate of the direct, indirect, and induced multipliers.

Type I multipliers are derived by dividing the sum of the direct and indirect effects by the direct effects of a dollar change in final demand. Type III multipliers are computed by dividing the sum of the direct, indirect, and induced effects by the direct effects.

There are several relevant caveats with respect to the use of input-output analysis. It is prudent to be aware of its basic assumption of fixed-coefficient technology. This technology, otherwise known as the Leontief production function, offers a strict production recipe for each sector and does not allow input substitution. With respect to the use of IMPLAN, we also assumed that the regional

purchase coefficients (RPC) reflect actual demand-supply conditions and that household expenditures are appropriately represented by the IMPLAN consumption coefficients.

Findings

This study reports two sets of findings on the economic contribution of agriculture. First, the economic multipliers are presented and discussed. Second, the contributions of local agriculture to the state's total output, value-added, and employment are reported. Using IMPLAN, multipliers and economic contributions to total output, value-added, and employment were estimated for three alternative definitions of agriculture.

Multipliers

The total value-added multipliers were 0.80, 0.64, and 0.60 for Agriculture I, II, and III respectively for each dollar of output (table 2). Using Agriculture II as an example, the multiplier of 0.64 means that for every dollar of output produced by Agriculture II, the total value-added generated for the Delaware economy is $.64. This consists of $.32 directly resulting from Agriculture II (direct), $.12 from industries supplying inputs to Agriculture II (indirect), and $.19 from other industries as a result of the incomes generated in Agriculture II and in the inputs-supplying industries (induced). Going from one definition of agriculture to another, the multipliers decrease as the number of industries aggregated increases. It would be expected that the value-added per dollar of output of the aggregated agricultural sector decreases as the number of processing industries included increases because processing industries have generally lower value-added contributions per dollar of output. Moreover, the number of industries with regional purchase coefficients set to zero increases as the definition of agriculture is expanded to include more processing industries.

The Type I value-added multipliers, which are the more commonly reported numbers in input-output analysis, ranged from 1.30 to 1.40. Again using Agriculture II as an example, the multiplier of 1.38 means that for every dollar of value-added included in Agriculture II's total output, the value-added generated for the Delaware economy resulting from the production of Agriculture II and the inputs it requires is $1.38. Type III value-added multipliers were, as expected, considerably higher—ranging from 1.94 for Agriculture I to 1.98 for Agriculture III. For Agriculture II, the

Table 2. Economic Multipliers for Delaware Agriculture

	Direct	Indirect	Induced	Total	Type I	Type III
A. Agriculture I						
Output	1.0000	0.2120	0.4423	1.6543	1.2120	1.6543
Personal income	0.1069	0.0494	0.1540	0.3103	1.4623	2.9028
Total income	0.4053	0.1031	0.2320	0.7404	1.2544	1.8268
Value-added	0.4121	0.1256	0.2622	0.7999	1.3048	1.9409
Employment	9.7366	1.5959	5.8742	17.2067	1.1640	1.7675
B. Agriculture II						
Output	1.0000	0.2212	0.3235	1.5447	1.2212	1.5447
Personal income	0.1602	0.0575	0.1130	0.3306	1.3588	2.0644
Total income	0.3195	0.1066	0.1701	0.5962	1.3336	1.8659
Value-added	0.3232	0.1221	0.1923	0.6376	1.3777	1.9727
Employment	8.1723	1.9140	5.0692	15.1555	1.2342	1.8545
C. Agriculture III						
Output	1.0000	0.2208	0.2933	1.5141	1.2208	1.5141
Personal income	0.1533	0.0593	0.1031	0.3157	1.3870	2.0597
Total income	0.3003	0.1067	0.1550	0.5620	1.3553	1.8716
Value-added	0.3037	0.1214	0.1753	0.6004	1.3996	1.9769
Employment	7.2590	1.9127	4.5878	13.7596	1.2635	1.8955

Definitions
Direct: immediate change in the impact variable (in millions of dollars) per million dollar change in output.
Indirect: change in the impact variable (in millions of dollars) resulting from input purchases per million dollar change in output.
Induced: change in the impact variable (in millions of dollars) resulting from changes in employment and spending per million dollar change in output.
Total: sum of direct, indirect, and induced.
Type I: direct plus indirect change in the impact variable per direct dollar change in the impact variable.
Type III: direct, indirect, and induced change in the impact variable per direct change in the impact variable.
Note: The employment multipliers show the change in the number of jobs per million dollar change in output (direct, indirect, induced, and total) or per direct job change (Type I and Type III).

multiplier means that the total value-added contribution of Agriculture II for every dollar of its own value-added is $1.97. Type III multipliers include, in addition to the direct and indirect effects, the consumption spending effects of the incomes generated by all direct and indirect production activities. In terms of employment impact, Agriculture I generated seventeen jobs per million dollars of output in 1991. The figures for Agriculture II and III were fifteen and fourteen jobs respectively. The Type I and Type III employment multipliers were relatively lower but closely tracked the same type of multipliers for value-added.

Economic Contribution in 1991

In 1991, the total (sum of direct, indirect, and induced effects) value-added contribution of agriculture in Delaware to the gross state product was 2.4% for Agriculture I, 5.7% for Agriculture II, and 6.3% for Agriculture III. In dollar terms, the amounts ranged from $507 M to $1,332 M. The shares of these sectors to total Delaware employment were 2.6% for Agriculture I, 6.9% for Agriculture II, and 7.3% for Agriculture III. Estimated state-wide employment effects ranged from 10,898 jobs for Agriculture I to 30,537 jobs for Agriculture III (table 3).

Conclusions

As urbanization pressures in Delaware mount and the share of production agriculture in the state's economy further declines, questions bearing on continued support for agricultural programs in government and universities are increasingly raised. Part of the debate revolves around the economic contribution of agriculture to the overall economy. An answer to this question depends on how the agricultural sector is defined and how its economic contribution is measured. While not definitive, this study addresses this issue by providing a starting point toward building a common ground about the economic role of local agriculture. Three alternative views of the agricultural sector are offered. For each alternative view, various measures of economic contribution using input-output analysis are provided.

Three definitions of the industry were used in analyzing agriculture's economic contribution to the Delaware economy: Agriculture I, the most conservative definition, which consists of traditional farming and agricultural services; Agriculture II, which includes Agriculture I plus the agricultural inputs industries and the manufacturing industries dependent on local production agriculture; and Agriculture III, the broadest definition, which includes Agriculture I, the agricultural inputs industries, and all the food and fiber processing industries. For each definition, a 1991 economic impact analysis of Delaware agriculture was conducted using IMPLAN, an input-output modeling software that allows users to regionalize national input-output tables, to compute multipliers for output, personal income, total income, value-added, and employment, and to conduct industry impact analysis. To avoid double counting in adding up the output, income, value-added, and employment effects, the regional purchase coefficients of the industries included in each definition of agriculture were set to zero.

The Type I value-added multipliers ranged from 1.30 for Agriculture I to 1.40 for Agriculture III. With the inclusion of the induced effects, the Type III value-added multipliers increased to 1.94 for Agriculture I, 1.97 for Agriculture II, and 1.98 for Agriculture III. The employment multipliers were

Table 3. Economic Contributions of Delaware Agriculture, 1991

	Direct	Indirect	Induced	Total	% to Total Delaware
A. Agriculture I					
Total output	633	134	280	1048	2.44
Value-added	261	80	166	507	2.38
Employment	6167	1011	3720	10898	2.60
B. Agriculture II					
Total output	1894	419	613	2925	6.81
Value-added	612	231	364	1207	5.68
Employment	15475	3624	9599	28698	6.86
C. Agriculture III					
Total output	2219	490	651	3360	7.82
Value-added	674	269	389	1332	6.26
Employment	16110	4245	10182	30537	7.30

Note: Total output and value-added impacts are in millions of dollars. Employment impacts are in number of jobs.

slightly lower than the value-added multipliers, ranging from 1.16 to 1.26 for Type I and from 1.77 to 1.90 for Type III.

In 1991, Agriculture I contributed $507 million value-added to the Delaware economy, accounting for 2.4% of the state's gross state product (GSP). This consisted of $261 million in direct contribution and $246 million in indirect and induced effects. Using Agriculture II, the overall value-added contribution of agriculture more than doubled at $1,207 million or 5.7% of Delaware's GSP. With Agriculture III, the sector's contribution was $1,332 million or 6.3% of the state's GSP. The employment impact ranged from 10,898 for Agriculture I to 30,537 for Agriculture III. The relative shares to total Delaware employment closely followed the value-added pattern.

Delaware agriculture, as indicated by the numbers in this study, is a relatively small sector in the state economy. Even with the expanded definition, its economic contribution was just a bit above 6% of the gross state product. This finding may be used to argue for or against increased or decreased appropriations for agricultural programs. The contribution of this study is that it provides objective information that can be used as a base for a more expanded discussion on the role of agriculture and agricultural issues.

Appendix IMPLAN Sectors Included in This Study

Sector	Name
Agriculture I	
1	Dairy Farm Products
2	Poultry And Eggs
3	Ranch Fed Cattle
4	Range Fed Cattle
5	Cattle Feedlots
6	Sheep, Lambs And Goats
7	Hogs, Pigs And Swine
8	Other Meat Animal Products
9	Miscellaneous Livestock
10	Cotton
11	Food Grains
12	Feed Grains
13	Hay And Pasture
14	Grass Seeds
15	Tobacco
16	Fruits
17	Tree Nuts
18	Vegetables
19	Sugar Crops
20	Miscellaneous Crops
21	Oil Bearing Crops
22	Forest Products
23	Greenhouse And Nursery Products
24	Forestry Products
25	Commercial Fishing
26	Agricultural, Forestry, Fishery
27	Landscape And Horticultural Services
Agricultural Input Industries	
202	Nitrogenous And Phosphatic Fertilizers
203	Fertilizers, Mixing Only
204	Agricultural Chemicals, N.E.C.
309	Farm Machinery And Equipment
Food and Fiber Processing Industries	
58	Meat Packing Plants
59	Sausages And Other Prepared Meats
60	Poultry Processing
61	Creamery Butter
62	Cheese, Natural And Processed
63	Condensed And Evaporated Milk
64	Ice Cream And Frozen Desserts
65	Fluid Milk
Food and Fiber Processing Industries	
66	Canned Specialties
67	Canned Fruits And Vegetables
68	Dehydrated Food Products
69	Pickles, Sauces, And Salad Dres
70	Frozen Fruits, Juices And Vegetables
71	Frozen Specialties
72	Flour And Other Grain Mill Products
73	Cereal Preparations
74	Rice Milling
75	Blended And Prepared Flour
76	Wet Corn Milling
77	Dog, Cat, And Other Pet Food
78	Prepared Feeds, N.E.C.
79	Bread, Cake, And Related Products
80	Cookies And Crackers
81	Sugar
82	Confectionery Products
83	Chocolate And Cocoa Products
84	Chewing Gum
85	Salted And Roasted Nuts & Seeds
86	Cottonseed Oil Mills
87	Soybean Oil Mills
88	Vegetable Oil Mills, N.E.C.
89	Animal And Marine Fats And Oils
90	Shortening And Cooking Oils
91	Malt Beverages
92	Malt
93	Wines, Brandy, And Brandy Spirits
94	Distilled Liquor, Except Brandy
95	Bottled And Canned Soft Drinks
96	Flavoring Extracts And Syrups, N.E.C.
97	Canned And Cured Sea Foods
98	Prepared Fresh Or Frozen Fish Or Seafood
99	Roasted Coffee
100	Potato Chips & Similar Snacks
115	Knitting Mills, N.E.C.
116	Yarn Mills And Finishing Of Tex
117	Carpets And Rugs
118	Thread Mills
119	Coated Fabrics, Not Rubberized
120	Tire Cord And Fabric
121	Nonwoven Fabrics
122	Cordage And Twine
123	Textile Goods, N.E.C.

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