

## Appendix A: Data Compilations

The data used in this study were compiled mainly from the *Census of Manufactures* and the *Annual Survey of Manufactures* SIC code 20 (Food and Kindred Products) and its nine three-digit industries for 1975-97 published by the Census Bureau of the U.S. Department of Commerce. The Census Bureau conducts the economic census (including food manufacturing) every 5 years, covering years ending in 2 and 7, (e.g., 1992 and 1997). In addition, the Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics as the economic census including employment, payroll, value of shipments, etc. However, there are some selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and sub-State geographic data.

The data in the *1997 Census of Manufactures* were published for the first time on the basis of the North American Industry Classification System (NAICS), which is different from the Standard Industrial

Classification System (SIC) used in previous censuses. For food manufacturing industries, there is substantial difference in product classification between the NAICS and the SIC systems. For example, dog and cat food and other animal foods are included in animal food (code 3111) in the NAICS, but they are included in grain mill products (code 204) in the SIC. In the NAICS, seafood product preparation and packaging (code 3117) is added as a product category, but is included in miscellaneous food (code 209) under the SIC system.

To construct consistent time-series data dating back to 1975, this study converts the 1997 data under the NAICS classification system into a framework along with the SIC classification system. The converting procedure follows the Census Bureau's classification codes published on the web site "1997 Economic Census: Bridge Between SIC and NAICS." A list of the comparability of product codes used for converting the NAICS data into SIC data is presented in Appendix table A. For example, in the meat products, SIC code 2011 (meat-packing plants) is nearly equivalent to NAICS code 311611 (animal, except poultry, slaughtering).

**Appendix table A—Comparability of product codes between SIC and NAICS for food and kindred products**

	<b>SIC code</b>		<b>NAICS code *</b>
<b>Meat products</b>	<b>201</b>		
Fresh frozen meat	2011	Meatpacking plants	311611 Animal (except poultry) slaughtering (99.9%)
Sausage	2013	Sausages and other prepared meats	311612 Meat processed from carcasses (93%)
Poultry	2015	Poultry slaughtering and processing	311615 Poultry processing 311999 All other miscellaneous food (21%)
<b>Dairy products</b>	<b>202</b>		
Creamery butter	2021	Creamery butter	311512 Creamery butter
Cheese	2022	Cheese, natural and processed	311513 Cheese
Dry condensed milk	2023	Dry, condensed and evaporated dairy products	311514 Dry, condensed and evaporated dairy products
Ice cream	2024	Ice cream and frozen desserts	311520 Ice cream and frozen dessert
Fluid milk	2026	Fluid milk	311511 Fluid milk
<b>Preserved fruits and vegetables</b>	<b>203</b>		
Canned specialty	2032	Canned specialties	311422 Speciality canning 311999 All other miscellaneous food (2%)
Canned fruits and vegetables	2033	Canned fruits and vegetables	311421 Fruit and vegetable canning (91%)
Dried fruits and vegetables	2034	Dehydrated fruits, vegetables, and soups	311423 Dried and dehydrated food (94%)
Pickles	2035	Pickles, sauces, and salad dressings	311941 Pickles, sauces, and salad dressings (96%) 311421 Fruit and vegetable canning (9%)
Frozen fruits and vegetables	2037	Frozen fruits and vegetables	311411 Frozen fruit, juice, and vegetable
Frozen specialties	2038	Frozen specialties	311412 Frozen specialty food
<b>Grain mill products</b>	<b>204</b>		
Flour and gain mill products	2041	Flour and other grain mill products	311211 Flour milling
Breakfast cereals	2043	Cereal breakfast foods	311230 Breakfast cereal
Rice	2044	Rice milling	311212 Rice milling
Prepared flour mixes	2045	Prepared flour mixes and doughs	311822 Flour mixes and dough from flour
Wet corn	2046	Wet corn milling	311221 Wet corn milling
Dog and cat food	2047	Dog and cat food	311111 Dog and cat food
Prepared feeds	2048	Prepared feeds	311119 Other animal food 311611 Animal (except poultry) slaughtering (0.1%)
<b>Bakery products</b>	<b>205</b>		
Cookies and crackers	2052	Cookies and crackers	311821 Cookies and crackers 311919 Potato chips and other snack food (6%) 311812 Commercial bakeries (0.2%)
Frozen bakery	2053	Frozen bakery products, except bread	311813 Frozen cake, pie, and other pastry
<b>Sugar and confections</b>	<b>206</b>		
Raw cane sugar	2061	Raw cane sugar	311311 Sugarcane mills
Cane sugar	2062	Cane sugar refining	311312 Cane sugar refining
Beet sugar	2063	Beet sugar	311313 Beet sugar
Candy	2064	Candy and other confectionery products and chewing gum Nonchocolate confectionery manufacturing	3113302 Confectionery products from chocolate (commercial) 3113402 Nonchocolate confectionery (commercial)
Chocolate	2066	Chocolate and cocoa products	311320 Chocolate and confectionery from cacao beans
Nuts and peanuts	2068	Salted and roasted nuts and seeds	311911 Roasted nuts and peanut butter (80%)

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**Appendix table A—Comparability of product codes between SIC and NAICS for food and kindred products--Continued**

<b>Fats and oils</b>		<b>207</b>		
Soybean oil	2075	Soybean oil mills	311222	Soybean processing
			311225	Fats and oils refining and blending (12%)
Other oilseed	2076	Vegetable and cotton oil mills	311223	Other oilseed processing
			311225	Fats and oils refining and blending (2%)
Animal fats and oils	2077	Animal and marine fats and oils	311613	Rendering and meat byproduct processing
			311711	Seafood canning (1%)
Edible fats and oils	2079	Edible fats and oils	311225	Fats and oils refining and blending (86%)
<b>Beverages</b>		<b>208</b>		
Malt beverages	2082	Malt beverages	312120	Breweries
Malt	2083	Malt	311213	Malt
Wines	2084	Wines, brandy, and brandy spirits	312130	Wineries
Distillery	2085	Distilled and blended liquors	312140	Distilleries
Soft drink	2086	Soft drink	312111	Soft drink
	2086	Bottled water	312112	Bottled water
Flavoring syrups	2087	Flavoring syrup and concentrate	311930	Flavoring syrup and concentrate
			311942	Spice and extract (20%)
			311999	All other miscellaneous food (8%)
<b>Miscellaneous foods</b>		<b>209</b>		
Seafood canned	2091	Canned and cured fish and seafoods	311711	Seafood canning (99%)
Seafood fresh	2092	Fresh or frozen prepared fish	311712	Fresh and frozen seafood processing
Roasted coffee	2095	Roasted coffee	311920	Coffee and tea (90%)
Potato chips	2096	Potato chips and similar snacks	311919	Potato chips and other snack food (94%)
Manufactured ice	2097	Manufactured ice	312113	Manufactured ice
Macaroni and spaghetti	2098	Macaroni and spaghetti	311823	Dry pasta
Food preparation	2099	Food preparations	311830	Tortilla
			311942	Spice and extract (80%)
			311991	Perishable prepared food
			311999	All other miscellaneous food (69%)
			311423	Dried and dehydrated food (6%)
			311911	Roasted nuts and peanut butter (20%)
			311920	Coffee and tea (10%)
			311941	Mayonnaise, dressing & sauce (4%)

\* The percent in parentheses indicates that the percentage of a NAICS code is allocated to a corresponding SIC code.

Source: U.S. Census Bureau. 1997 Economic Census: Bridge Between SIC and NAICS: Food and kindred products. (<http://www.Census.gov/epcd/ec97brdg>)