

**AN UPDATE  
OF  
THE 1992 BENCHMARK INPUT-OUTPUT TABLE  
FOR THE U.S. ECONOMY  
TO 1995**

for

Institute of International Trade and Investment  
Tokyo, Japan

Submitted By

Margaret McCarthy  
INTERINDUSTRY ECONOMIC RESEARCH FUND, INC.  
P.O. BOX 451  
COLLEGE PARK, MARYLAND 20740  
Telephone: (301) 405-4609  
Fax: (301) 405-3542  
E-mail: mccarthy@inforum.umd.edu

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## AN UPDATE OF THE 1992 BENCHMARK INPUT-OUTPUT TABLE TO 1995

Inforum has updated the 1992 benchmark I-O table for the United States to 1995. This update was done under contract to the Institute of International Trade and Investment (ITI). This report describes the data and reviews Inforum's approach to updating the table.

### *The Input-Output Table*

Detailed, "benchmark" I-O accounts are prepared about every five years by the Bureau of Economic Analysis (BEA) of the Department of Commerce. The benchmark tables are prepared for years in which comprehensive data from economic censuses is available. The benchmark table for 1992, which had 500 sectors, was published in November 1997. (See "benchmark Input-Output Accounts for the U.S. Economy, 1992", by Ann Lawson in the November 1997 Survey of Current Business.) BEA prepares both a "use" and a "make" table. The use table shows commodities purchased by each industry, and thus reflects the way in which census data was collected. The make table shows the commodities made by each industry. BEA also calculates a "commodity-to-commodity" table with the assumption of industry technology. With the industry technology assumption, it is assumed that the secondary products of an industry are made according to the input structure of that industry.

The Inforum I-O table differs from the BEA table in several respects. First, we derive an activity (or commodity-to-commodity) table with a process we call *purification*. A second consideration which Inforum has in regard to the I-O table is that it be reasonably up-to-date. We *update* the purified table. Our tables are not constructed from scratch; they are updates of the most recent (purified) benchmark table. Thus, an Inforum table remains as close as possible to the purified benchmark table while achieving consistency with all the data we can muster for the update year.

The Inforum table for 1995 is similar to the 1992 BEA table in terms of detail by sector. However, Inforum redefines some secondary products to primary activity to facilitate the derivation of a commodity table. (In the future, we hope to make splits in several sectors. Although separate sectors are shown in the SIC definitions, these splits have not yet been done. They include Crude Oil and Gas Extraction, Physicians and Dentists, and Fuel Oil and Petroleum refining.)

The Inforum updating technique produces a 1995 table with similar detail to the nearly

540 sectors in the purified 1992 table. We emphasize that these methods update a table, rather than construct one from scratch. With these methods, we identify various sources of output and final demands. A pre-balancing adjustment process insures that these estimates are consistent and reasonable. The final step is an iterative procedure which balances the table.

### *The Data Files*

The data files include Inforum's 1992 activity table (purfxd92.dat) and a 1995 activity table (a95r.dat). The activity tables are organized by producer. The files include only the non-zero flows. Data is valued in millions of dollars. The files include sector titles. The sectors are those available from the 1992 benchmark table, with the revisions described above. A title file (defn92.sic) includes the SIC classifications.

### **An Overview of the Inforum Approach**

The update process begins with the 1992 activity table which Inforum derived from BEA's 1992 Benchmark Use and Make tables. An activity table defines the columns (or purchasers) as commodities which match the definitions of the rows (or producers). A "use" table shows commodities sold to industries. The industry establishment definition includes, in addition to the products which are primary to the industry, secondary products. An activity table eliminates the analytical problems of the use table caused by secondary products. Inforum used its "purification" technique, which is described below, to derive its 1992 activity table.

After obtaining the 1992 activity table, the update process for a 1995 table begins. The update process included the derivation of row (or product output) controls and final demands by product. Next, an initial adjustment was made to the 1992 flows, to account for growth in current dollar output. Then the final demand flows, as well as the intermediate flows, were subject to an adjustment which insures that the subsequent iterative routine will not make unduly large changes to small intermediate flows. Finally, known final and intermediate flows were removed from the table, its row and columns controls were adjusted accordingly, and the remaining flows were balanced.

The rAs balancing technique is an iterative procedure in which the flows in each row, and then in each column, are scaled to match the row and column controls. After conflicts among different data sources have been resolved (which is a significant problem), convergence usually requires about ten iterations. These steps are described in detail below.

## **Purification of the 1992 Benchmark Table**

In dollar flow form, BEA publishes a "use" and a "make" table. A row of the use table shows the sales of a commodity to intermediate industries and to final demand. A column shows the purchases of commodities by an industry. A row of the make table shows the commodities produced by an industry. A column of the make table shows which industries produce a given commodity. This treatment conforms to the way in which data is reported to the Census Bureau. The reporting unit is an "establishment", which is classified as belonging to an industry on the basis of its primary product. The establishment reports all products which it makes. (This data helps build the make table.) It also reports materials purchased to manufacture its products. (This data helps build the use table.)

Although the use table is the most accurate way to tabulate Census data, a commodity-by-industry direct requirements matrix presents problems when used for input-output analysis. The presence of secondary products in the industry structure can lead to distortions in many types of analysis. These distortions may not be serious with a table of about eighty sectors, but with a table of 500 sectors (in which each manufacturing sector is a four-digit SIC product) the distortions can be quite bothersome. Therefore, it is desirable to derive a commodity-to-commodity table to eliminate the problems caused by secondary products. Two techniques are frequently employed: the industry technology approach and the commodity-technology approach.

The industry-technology approach assumes that the input structure associated with a given secondary product was the same as that of the industry making the secondary product. (This technique is recommended by the United Nations and was used by BEA to derive their 1992 commodity-by-commodity total requirements table.) It is simple to implement. But it implies that many different technologies are used to make a given product. Unfortunately, it can lead to unreasonable results. For example, do we want to assume that the cheese made as a secondary product of the ice cream industry has among its inputs such items as sugar, chocolate, and strawberries?

The commodity-technology approach is appealing for its economic sensibility. It assumes that secondary products are made with the input structure of the industry in which the product is primary. However, when reallocating materials from the industry in which the product is made, this method can yield negative flows. (It is for this reason that the industry-technology approach is often used.)

The Inforum "purification" technique starts with the commodity-technology assumption and provides a workable solution to avoid the problem of negative flows. This algorithm has been used in previous updates and was described in the report "An Update of the 1987 Benchmark Input-Output Table to 1990". It first postulates that each product is made by the same process, no matter what kind of establishment makes it. The vector of inputs into any establishment is therefore just a linear combination of the pure processes for the items it makes. An iterative algorithm (described in the 1990 report and in Appendix A of this report) solves for these pure processes. It avoids negative elements with a common-sense solution. When inputs associated with secondary products are transferred from the secondary to the primary sector, no more input is transferred than is available. Thus, an input can become zero, but it cannot become negative.

Although this algorithm works smoothly (it has been employed for the 1963, 1967, 1972, 1977, 1982, and 1987 tables), it does not produce a balanced table. The discrepancy could be resolved with a rAs balance, but this could lead to distortions in the I-O structure. Instead, we treat value-added as a residual. We also compare the residual value-added with the purified value-added. Where major differences occur, it is often possible to make sensible offsetting adjustment to the input structures of related products. As is often the case with input-output work, judgement needs to be added to mathematical techniques to obtain viable results.

## **Controls for the Update**

### *Product Output Control*

Output sources include the Annual Survey of Manufactures (ASM), Agriculture Statistics, the Minerals Yearbook, the Service Annual Survey, and the National Income and Product Accounts (NIPA). Most important among the sources are the series on five-digit SIC product shipments. These shipments, when adjusted for changes in inventories of finished goods, are the movers for manufacturing output. To derive the 1995 output levels, we multiply the 1992 BEA output by the index of growth shown in the Inforum output source.

Several types of NIPA data were utilized. NIPA series reflect data available from the annual revision of the NIPA that was released in August 1997. (See Parker and Seskin, "Annual Revision of the National Income and Product Accounts", Survey of Current Business, August 1997.) In addition, unpublished NIPA detail on consumer spending and non-residential investment was also consulted. BEA also provided its detailed estimates of Gross Output by

industry. Gross output is used by BEA to compile estimates of Gross Product by Industry (also referred to as value-added by industry). (See Lum and Yuskavage, "Gross Product by Industry, 1947-1996", Survey of Current Business, November 1997.)

### *Final Demands*

Detailed estimates, by product, of many categories of final demand were prepared for the 1995 I-O table. Such estimates were derived for personal consumption expenditures (PCE), producers' durable equipment (PDE), exports, imports, and inventory change. PCE and PDE for manufacturing rely primarily on the five-digit adjusted product shipments series. For non-manufacturing, the NIPA provide PCE estimates. Construction spending, by the private sector and by government, was derived from NIPA data. Merchandise exports and imports are taken from the Census Bureau trade publication Trade and Employment. Exports and imports of services are derived from BEA data in the Balance of Payments Accounts. For input-output work, estimates of inventory change by product are needed. However, most inventory data is available by holder. The Annual Survey of Manufactures (ASM) reports on finished goods, work-in-progress, and materials held in inventory. Estimates of manufacturing inventory change reflect the ASM data on finished goods and work-in-progress. For autos and trucks, inventory change was derived from the NIPA. Agricultural inventories are available from Agricultural Statistics.

For the government categories of final demand, we did not estimate demand by product. Instead, we estimated aggregate controls. The product structure was determined as part of the balancing for the intermediate, construction, and government matrices. The aggregate government controls were derived from Tables 3.7 (Government Consumption Expenditures and Gross Investment by Type), 3.17 (State and Local Government Current Expenditures and Gross Investment by Function), and 6.2 (Compensation of Employees by Industry) in the NIPA.

These sources provided estimates by which the 1992 value of final demand reported in the benchmark I-O table was moved forward to 1995. These initial estimates were then subject to a pre-balancing adjustment that is described below.

### *PCE and PDE*

A bit more explanation is in order for the PCE and PDE controls. From detailed I-O allocations, we have estimated the proportions of shipments that were purchased for personal

consumption and for investment in durable equipment, at the level of 5-digit SIC. Domestic product shipments are adjusted to include imports and exclude exports. The product of these ratios and the 1995 adjusted shipments yields an initial estimate for 1995 PCE and PDE for the manufacturing sectors.

We have relied on the five-digit detail for several reasons. Generally, at this level, it is possible to distinguish among consumer goods, PDE, and intermediate parts. The five-digit detail identifies military aircraft, for example. We rely on detailed product shipment data and these ratios to give us final demand estimates that are consistent with production data.

Of course, the National Income and Product Accounts (NIPA) also provide estimates of PCE and PDE. For several sectors, we rely on the NIPA for our primary estimates of PCE. All services, and within manufacturing, Gasoline, Fuel Oil, and Motor Vehicles, and Computers, are derived from NIPA data. However, for most manufacturing sectors, we rely primarily on the estimates derived from the five-digit shipment source. The major advantage of this data is its product-specific detail. Expenditure categories in the NIPA are often quite broad and cover many products. Data on retail sales is an important source of PCE for the NIPA, but retail establishments frequently sell a broad and changing array of products. Consequently, retail sales by type of establishment is often a poor indicator of purchases of specific products.

Experience has shown that the reconciliation of production data with PCE and PDE from the NIPA is not a simple task. Indeed, the preparation of an I-O table by BEA frequently results in significant benchmark revisions to the NIPA. Appendix B contains tables which compare estimates of PCE and PDE in the 1992 I-O table with estimates in the NIPA. Although aggregates are similar, there is often significant variation by category between the I-O and NIPA estimates. The NIPA do not yet reflect revisions based on the 1992 I-O accounts. Consequently, we have not controlled detailed PCE and PDE estimates to the NIPA. For manufacturing, we rely on shipments adjusted for foreign trade. From the NIPA estimates of PCE, we used estimates of services. We used total PCE and total PDE from the NIPA as an approximate guide for the totals in our updated table for 1995.

### *Exports and Imports*

For the 1995 update, considerable effort was devoted to the reconciliation of source data for foreign trade with the 1992 I-O estimates. This reconciliation was made possible by access to the Transactions, Merchandise Export, and Merchandise Import workfiles. We thank the I-O Division at BEA for providing these workfiles to Inforum. The workfiles enabled us to relate



I-O allocations to Census and NIPA data. The 1995 estimates of exports and imports were derived from two sources. Merchandise trade was derived from "Trade and Employment" (TM95), a joint publication of the Census Bureau and the Bureau of Labor Statistics. Services were derived from the NIPA, supplemented with the Balance of Payments Accounts (BPA).

The Transactions Workfile showed the relation between trade in the I-O table and the categories of service exports and imports in the NIPA. For exports, the workfile was particularly helpful, because several NIPA service categories are represented in the I-O table as exports of manufactured goods. The NIPA categories for service exports include

- transfers under military agency sales contracts
- travel
- passenger fares
- other transportation
- royalties and license fees
- other private services
- other.

"Other transportation" includes port expenditures as well as the transport of freight. The BPA shows this detail separately, and also gives freight by mode of transport. The I-O workfile showed the 1992 composition of port expenditures (by mode), in terms of products identified by I-O sector. For example, the I-O workfile category, "ocean port expenditures in the U.S. by foreigners" appears in the I-O table as exports of Petroleum refining, Ship building and repair, Sawmill products, Water transportation, Communication services, Legal services, Insurance, Food, and other products.

Merchandise trade is based on the TM95 report, which published exports and imports by SIC. Unfortunately for future work, this report has been discontinued. In this source, exports were reported in "f.a.s." (free-alongside ship) valuation. We derived producers' values with the margin shares from BEA's basic 1992 I-O data file. In TM95, imports were reported in "c.i.f." (cost, insurance, freight) valuation. To derive domestic port prices, the I-O valuation, duties were estimated with the 1992 duty "margin", controlled to the NIPA aggregate.

However, to conform with I-O estimates, adjustments to Census merchandise trade are more complicated than these valuation adjustments. Here, the I-O export and import workfiles were invaluable. The export workfile identified, for detailed commodities, the following adjustments to Census merchandise exports:

- Canadian adjustment

- miscellaneous adjustment to non-Canadian goods
- military goods
- statistical difference
- BPA adjustment
- Puerto Rican adjustment.

The import workfile identified the following adjustments to the Custom's valuation of merchandise imports:

- ocean freight
- air freight
- land freight
- duty
- miscellaneous adjustment
- Puerto Rican
- re-exports.

For the 1995 I-O estimates, these adjustments were estimated with the 1992 proportions. For some of the adjustments (duties, re-exports, Puerto Rico), controls were available from the BPA.

The 1995 table defines non-comparable imports (NCI) in the same way that NCI were defined in the 1992 benchmark table. Domestically consumed imports of goods are all classified in the import column of final demand. (Earlier BEA tables treated some goods, such as bananas and coffee, as NCI. This treatment was changed with the 1992 table.)

### *Government*

The 1992 benchmark table, and the 1995 update, include new detail for final demand by government. This change conforms with changes in the NIPA introduced in the 1996 comprehensive revision. Gross investment is separated from current consumption expenditures by government. Current consumption expenditures include compensation of employees, purchases of goods and services, and a new item, the consumption of fixed capital. The "government industry" includes compensation of employees and consumption of fixed capital. Negative values in the government final demand columns represent negative "net purchases". That is, sales by government exceed purchases. For example, the negative entry in the State and Local Health column represents the sale of hospital services.

### *Intermediate Demand*

For the 1995 update, no controls were available for intermediate demand. The usual

source of such data is Census of Manufacturing. However, no economic censuses were conducted for 1995. (The economic censuses were conducted in 1992 and in 1997.) For the 1995 update, no census data was not available. Therefore, the initial estimate of intermediate flows was derived by assuming that the 1992 I-O coefficients were constant. These initial estimates then were revised by the update procedure.

## **Balancing the 1995 Table**

When all data estimates have been made, balancing proceeds in three steps: adjustment of 1992 intermediate and government flows for output growth or changes in final demand totals, a preliminary balancing adjustment to insure consistency between "known" final demand flows and output, and the iterative balancing by the rAs method.

### *Initial Estimate*

An initial estimate is made of the 1995 flows for which no independent information is known. The 1992 flows are updated with the growth in current dollar output of the purchasing sector. No independent data was available to update the intermediate flows.

### *A Pre-Balance Adjustment*

For each sector, the initial estimates are compared with product output. When many flows in a row are pre-determined flows, care must be taken to insure that such flows are consistent with output. Otherwise, unreasonable changes could be forced on the remaining small flows. Therefore, "known" intermediate and final demand flows are subjected to preliminary adjustment before starting the rAs process. This adjustment process was described in the 1990 report and in Appendix C of this report.

Prior to balancing, initial estimates for the update are adjusted. This adjustment insures that "known" flows are consistent with output. If known flows are large relative to other flows, the two kinds of flows receive almost the same adjustment. If they are small relative to other flows, the known flows will be relatively untouched by this preliminary adjustment. The adjusted

"known" flows are removed from row and column totals and the rAs balancing proceeds. It works much more smoothly after the preliminary adjustment than it does without it. This adjustment process is a key step in the update procedure. Because data is derived from many sources, our initial estimates may not be consistent with one another or with output. This technique helps reveal data inconsistencies. Appendix D shows the impact of this adjustment for each sector.

### *The rAs balance*

The rAs method completes the balancing process. Given a starting matrix,  $A$ , the method finds diagonal matrices  $r$  and  $s$  such that the matrix  $rAs$  has the required row and column sums, hence the name rAs. First, the adjusted "known" flows are subtracted from the corresponding row and column totals. In this iterative method, we first scale all the elements in each row to obtain the correct row sums, then scale all the elements in each column to obtain the correct column sum. The rows will then be out of balance, so we again scale them so that they have the right sums, then scale the columns again, and so on until the process converges. About ten iterations are necessary to get all the scaling factors to within one tenth of one percent of unity.

## **Acknowledgements**

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## Appendix A. The Purification Algorithm

Inforum derives an activity (commodity-to-commodity) table with a technique called "purification". This approach first postulates that each product is made by the same process, no matter what kind of establishment makes it. The vector of inputs into any establishment is therefore just a linear combination of the pure processes for the items it makes. In symbols:

$$f_i = Mp_i \quad (i = 1, \dots, n), \quad (1)$$

where:

$f_i$  (a column vector) is the transpose of the  $i$ th row of the primary flow matrix: that is  $f_{ij}$  equals the purchases of product  $i$  by the establishments in industry  $j$ .

$M$  is the product mix matrix:  $m_{ij}$  = the fraction of product  $j$  made in establishments in industry  $j$ . (The columns of  $M$  sum to 1.0.)

$p_i$  is the transpose of the row of the pure flow matrix:  $p_{ij}$  = inputs of product  $i$  into product  $j$ .

Equation (1) can be solved for  $p_i$  by

$$p_i = M^{-1}f_i \quad (i = 1, \dots, n). \quad (2)$$

The  $p_i$  vectors solved for by this formula will generally have some small negative elements and some small positive entries where the corresponding  $f_i$  vectors have zeros. The former are clearly nonsense; the latter are at best dubious and certainly inconvenient, especially as we move toward larger matrices for which we will wish to store only non-zero entries in our computers. By analyzing the solution of equation (2), we shall find a way to put a stop to this nonsense.

To simplify notation, let us drop the subscript  $i$  from  $f$  and  $p$ , and understand that the  $f$  and  $p$  in an equation all have the same  $i$  subscript. Equation (1) may then be written

$$0 = -Mp + f$$

and by adding  $p$  to both sides we obtain

$$p = (I - M)p + f. \tag{3}$$

The column sums of the absolute values of  $(I - M)$  will be less than 1.0, save in the unlikely case in which less than half of a product is produced by establishments primarily engaged in its production. The iterative process for the solution of (3) will therefore converge. In this process, we take as a first approximation of  $p$ ,

$$p^{(0)} = f$$

and then define successive approximations by

$$p^{(k+1)} = (I-M)p^{(k)} + f. \tag{4}$$

To see the economic interpretation of equation (4), let us write out the equation for the use of a product, say steel, in making another product, say  $j$ :

$$p_j^{(k+1)} = f_j - \sum_{\substack{l=1 \\ l \neq j}}^n m_{jl} p_l^{(k)} + (1 - m_{jj}) p_j^{(k)}. \tag{5}$$

The first term on the right of equation (5) tells us to begin with steel purchases by the establishments of industry  $j$ . The second term directs us to remove the amounts of steel needed

for making the secondary products of those establishments, using our present estimates ( $p^{(k)}$ ) of the technology of those products. Finally, the last term causes us to add back the steel used in making product  $j$  in other industries.

The amount of steel added by the third term is exactly equal to the amount stolen, via second terms, from other industries on account of their production of product  $j$ :

$$(1 - m_{jj})p_j = \sum_{\substack{l=1 \\ l \neq j}}^n [m_{jl} p_l^{(k)}]$$

since  $\sum_{l=1}^n m_{lj} = 1$  .

It is now clear how to keep the negative elements out of  $p$ . When the "removal" term, the second on the right of equation (5), is larger than the "primary use" term, the  $f_j$ , we simply scale down all components of the removal term to leave a zero balance. Then instead of adding back the "total-stolen-from-other-industries" term  $(1 - m_{jj})p_j$  all at once, we added it back bit-by-bit, as it is captured. If a plundered industry runs out of steel with only a third of the total amount of plundering claims satisfied, we simply add only a third of each plundering products's claims into that products's cell in  $p$ .

Although this algorithm works smoothly (it has been employed for the 1963, 1967, 1972, 1977 and 1982 tables), it does not produce a balanced table. The discrepancy could be resolved with a rAs balance, but this could lead to distortions in the I-O structure. Instead, we treat value-added as a residual. We also compare the residual value-added with the purified value-added. Where major differences occur, it is often possible to make sensible offsetting adjustment to the input structures of related products. As is often the case with input-output work, judgement needs to be added to mathematical techniques to obtain viable results.



## **Appendix B. A Comparison of PCE and PDE in the 1992 I-O Table and the NIPA**

The 1992 I-O accounts were published in November 1997. The NIPA do not yet incorporate any of the results of the I-O study. The following tables compare I-O and NIPA estimates of personal consumption expenditures (PCE) and private investment spending for producers' durable equipment (PDE) in 1992. The NIPA estimates reflect data released in the August 1997 annual revision of the NIPA and are taken from unpublished BEA data that reported spending in million dollars and in additional detail that was not available in the published NIPA.

The first column of the table is Inforum's numerical designation of the spending category. The second column is the line number in the (unpublished) NIPA table for PCE or PDE. The third column is the NIPA estimate of 1992 spending. The fourth column is the I-O estimate. The fifth and sixth columns are the differences between the NIPA and I-O estimate, in dollars and as a percent. The last column is the title of the spending category.

Table B-1. Personal Consumption Expenditures

Table B-2. Private Investment Expenditures for Producers' Durable Equipment

Table B-1. 1992 PERSONAL CONSUMPTION EXPENDITURES by Category

A Comparison of NIPA and I-O Estimates

Bridge Category	Line UnPub	--- Million \$ ----		-- Difference --		
		NIPA	IO	Mil\$	Percent	
0	1	4219796.	4208718.	11078.	0.3	Total PCE
1	39	52170.	49567.	2603.	5.3	New domestic autos
2	40	29943.	28449.	1494.	5.3	New foreign autos
3	41	35450.	31177.	4273.	13.7	Net purchases of used autos
4	46	53580.	54069.	-489.	-0.9	New and used trucks
5	47	5935.	6454.	-519.	-8.0	Recreational vehicles
6	49	13965.	14200.	-235.	-1.7	Tires and tubes
7	50	15834.	16323.	-489.	-3.0	Accessories and parts for motor vehicles
8	52	39807.	38957.	850.	2.2	Furniture, including mattresses & bedsprings
9	53	22215.	24287.	-2072.	-8.5	Kitchen and other household appliances
10	56	20702.	19577.	1125.	5.7	China, glassware, tableware and utensils
11	65	11876.	12076.	-200.	-1.7	Computing equipment and software
141	64	1867.	1745.	122.	7.0	Musical instruments (split from 131 AV products)
142	7058	47426.	43219.	4207.	9.7	Video and audio products (split from 131 AV products)
12	67	12756.	11321.	1435.	12.7	Floor coverings
13	68	24208.	19407.	4801.	24.7	Durable house furnishings nec
14	71	1985.	2311.	-326.	-14.1	Writing equipment
15	72	6516.	5754.	762.	13.2	Hand tools
16	76	33191.	31645.	1546.	4.9	Jewelry & watches
17	77	11575.	13001.	-1426.	-11.0	Ophthalmic products and orthopedic appliances
18	78	17674.	17148.	526.	3.1	Books and maps
19	85	3348.	2383.	965.	40.5	Photographic equipment
133	3083	5549.	4852.	697.	14.4	Bicycles and motorcycles ( 83 Bicycles, 84 Motorcycles)
139	81	1951.	1526.	425.	27.9	Guns (split from 132 Sporting equipment, including guns )
140	82	12172.	14820.	-2648.	-17.9	Sporting equipment, other, durable ( split from 132 Sport eqpt)
20	87	6278.	5743.	535.	9.3	Boats
21	88	560.	768.	-208.	-27.1	Pleasure aircraft
22	92	372829.	364856.	7973.	2.2	Food in off-premise consumption
23	112	50510.	48853.	1657.	3.4	Alcohol in off-premise consumption
24	117	203089.	212269.	-9180.	-4.3	Food in purchased meals
25	121	25499.	33694.	-8195.	-24.3	Alcohol in purchased meals
26	122	7462.	7086.	376.	5.3	Food furnished employees (including military)
27	125	567.	590.	-23.	-3.9	Food produced & consumed on farms
28	130	122406.	120938.	1468.	1.2	Women's clothing without luggage
29	134	2892.	2468.	424.	17.2	Women's luggage
30	136	65535.	64096.	1439.	2.2	Men's clothing without luggage
31	139	893.	1179.	-286.	-24.3	Men's luggage
32	140	244.	244.	0.	0.0	Standard clothing issued to military personnel
40	128	33565.	32903.	662.	2.0	Shoes & other footwear
33	141	106595.	104880.	1715.	1.6	Gasoline & oil
34	9146	7310.	7213.	97.	1.3	Fuel oil
35	147	3603.	4952.	-1349.	-27.2	LP gas and other fuel

Table B-1 continued. 1992 PERSONAL CONSUMPTION EXPENDITURES by Category

## A Comparison of NIPA and I-O Estimates

Bridge Category	Line UnPub	--- Million \$ ----		-- Difference --		
		NIPA	IO	Mil\$	Percent	
36	150	49567.	48008.	1559.	3.2	Tobacco products
37	151	2917.	2570.	347.	13.5	Expenditures abroad by u.s. residents
38	154	-1347.	-1610.	263.	-16.3	Less: personal remittances in-kind to nonresidents
134	4157	66891.	68769.	-1878.	-2.7	Prescription and nonprescription drugs (157 Prescrip, 158 Nonp)
135	5159	8094.	7125.	969.	13.6	Medical sundries (159 Med supplies, 160 Gyn supplies)
39	155	23244.	25572.	-2328.	-9.1	Semidurable house furnishings
41	161	41366.	37903.	3463.	9.1	Toilet articles and preparations
42	166	6753.	5721.	1032.	18.0	Stationery and school supplies
43	167	6776.	9129.	-2353.	-25.8	Greeting cards
44	170	3918.	3641.	277.	7.6	Photographic supplies
137	169	9268.	976.	8292.	849.6	Ammunition (split of 136 Toys and sport supplies)
138	171	21019.	31906.	-10887.	-34.1	Toys and sport supplies, non-durable, other (split of 136 Toys
45	172	12264.	11961.	303.	2.5	Flowers, seeds, and potted plants
46	174	5364.	4778.	586.	12.3	Lighting supplies
47	175	26031.	20922.	5109.	24.4	Cleaning preparations
48	176	15136.	15360.	-224.	-1.5	Household paper products
49	178	10646.	10369.	277.	2.7	Newspapers
50	179	10923.	11590.	-667.	-5.8	Magazines and sheet music
51	184	457824.	451983.	5841.	1.3	Owner-occupied nonfarm dwellings - space rent
52	187	160490.	160733.	-243.	-0.2	Tenant-occupied nonfarm dwellings - rent
53	191	5349.	5349.	0.	0.0	Rental value of farm dwellings
54	192	23141.	24509.	-1368.	-5.6	Other housing
55	201	77026.	79337.	-2311.	-2.9	Electricity
56	202	29537.	29537.	0.	0.0	Gas, natural
57	203	31146.	30293.	853.	2.8	Water and other sanitary services
58	206	70263.	70669.	-406.	-0.6	Telephone & telegraph
59	210	10896.	11356.	-460.	-4.1	Domestic service
60	214	7566.	6260.	1306.	20.9	Moving and storage
61	215	-208.	-244.	36.	-14.8	Household insurance
62	218	794.	1001.	-207.	-20.7	Rug and furniture cleaning
63	219	2781.	2351.	430.	18.3	Electrical repair
64	220	2593.	2807.	-214.	-7.6	Upholstery and furniture repair
65	221	9291.	6701.	2590.	38.7	Postage
66	222	6552.	8240.	-1688.	-20.5	Household operation nec
67	224	94353.	90293.	4060.	4.5	Repair, greasing, washing, parking, storage, rental, and leasin
68	227	2294.	2839.	-545.	-19.2	Bridge, tunnel, ferry and road tolls
69	228	25533.	25728.	-195.	-0.8	Motor vehicle insurance
70	229	2586.	2586.	0.	0.0	Taxicab
71	230	5431.	6463.	-1032.	-16.0	Mass transit systems
72	231	790.	647.	143.	22.1	Intercity railway
73	232	1053.	1595.	-542.	-34.0	Bus
74	233	23263.	21281.	1982.	9.3	Airline
75	234	2754.	3592.	-838.	-23.3	Other purchased intercity transportation

Table B-1 continued. 1992 PERSONAL CONSUMPTION EXPENDITURES by Category

## A Comparison of NIPA and I-O Estimates

Bridge Category	Line UnPub	--- Million \$ ----		-- Difference --		
		NIPA	IO	Mil\$	Percent	
76	236	167189.	166429.	760.	0.5	Physicians
77	237	38529.	37636.	893.	2.4	Dentists
78	238	78247.	85216.	-6969.	-8.2	Other professional medical services
79	241	30116.	30345.	-229.	-0.8	Proprietary hospitals
80	242	183589.	184823.	-1234.	-0.7	Nonprofit hospitals
81	243	55138.	55154.	-16.	0.0	Government hospitals
82	244	51163.	50166.	997.	2.0	Nursing homes
83	245	42677.	43224.	-547.	-1.3	Health insurance
84	250	582.	665.	-83.	-12.5	Shoe cleaning and repair
85	251	10781.	10700.	81.	0.8	Cleaning, laundering, dyeing, pressing and alterations
86	254	13430.	16042.	-2612.	-16.3	Miscellaneous personal, clothing and jewelry services
87	257	21774.	20065.	1709.	8.5	Barbershops, beauty parlors, and health clubs
88	261	30364.	28719.	1645.	5.7	Brokerage charges and investment counseling
89	262	28025.	30934.	-2909.	-9.4	Bank service charges, trust services,
90	263	142868.	137479.	5389.	3.9	Services furnished without payment by financial inter.
91	266	67459.	69380.	-1921.	-2.8	Expense of handling life insurance
92	267	46509.	44864.	1645.	3.7	Legal services
93	268	10055.	10962.	-907.	-8.3	Funeral and burial expenses
94	270	7054.	7898.	-844.	-10.7	Labor union expenses
95	271	3257.	3140.	117.	3.7	Professional association expenses
96	272	1455.	1721.	-266.	-15.5	Employment agency fees
97	273	568.	576.	-8.	-1.4	Money orders
98	274	676.	676.	0.	0.0	Classified ads
99	275	2261.	2888.	-627.	-21.7	Tax return preparation services
100	276	1105.	1992.	-887.	-44.5	Other personal business services nec
101	278	4207.	3438.	769.	22.4	Radio & television repair
102	279	4991.	4939.	52.	1.1	Motion picture theaters
103	280	6796.	6037.	759.	12.6	Legitimate theaters and opera and entertainments
104	281	4772.	5131.	-359.	-7.0	Spectator sports
105	282	10293.	10667.	-374.	-3.5	Clubs and fraternal organizations except insurance
106	284	1093.	2868.	-1775.	-61.9	Sightseeing
107	285	273.	273.	0.	0.0	Private flying
108	286	2198.	2267.	-69.	-3.0	Bowling and billiards
109	287	14207.	13931.	276.	2.0	Casino gambling
110	288	9441.	10546.	-1105.	-10.5	Commercial participant amusements, nec
111	289	3326.	3366.	-40.	-1.2	Parimutuel net receipts
112	291	3001.	2813.	188.	6.7	Pets and pet services excluding vets
113	292	5731.	5108.	623.	12.2	Veterinarians
114	293	17662.	19883.	-2221.	-11.2	Cable tv
115	294	5350.	5499.	-149.	-2.7	Film development
116	295	5431.	5318.	113.	2.1	Photo studios
117	296	1182.	1243.	-61.	-4.9	Sport and recreation camps
118	297	195.	184.	11.	6.0	Highschool recreation
119	298	9783.	9783.	0.	0.0	Lotteries
120	299	6014.	6290.	-276.	-4.4	Video cassette rental
121	300	18069.	19981.	-1912.	-9.6	Commercial amusements, nec

Table B-1 continued. 1992 PERSONAL CONSUMPTION EXPENDITURES by Category

A Comparison of NIPA and I-O Estimates

Bridge Category	Line UnPub	--- Million \$ ----		-- Difference --		
		NIPA	IO	Mil\$	Percent	
122	303	28400.	28804.	-404.	-1.4	Private higher education
123	304	23624.	23624.	0.	0.0	Government higher education
124	306	15074.	19054.	-3980.	-20.9	Elementary and secondary schools
125	307	4238.	4257.	-19.	-0.4	Nursery schools
126	309	13709.	13105.	604.	4.6	Commercial and vocational schools
127	310	8024.	7633.	391.	5.1	Foundations, nonprofit r&d
128	311	115647.	112314.	3333.	3.0	Religious & welfare activities
143	319	14191.	15620.	-1429.	-9.1	Foreign travel: transportation (Split from 129 For tvl & transp
144	8320	29247.	30323.	-1076.	-3.5	Foreign travel excl transp (Nipa 320 Travel & 321 Student exp,
130	322	-64700.	-64871.	171.	-0.3	Expenditures in the u.s. by nonresidents
0	1	4219796.	4208718.	11078.	0.3	Total PCE
	NIPA	IO	Diff	PctDif		

Average absolute percentage error 15.07

Weighted average absolute percentage error 4.60  
(Weights: IO PCE spending)

Sources: NIPA August 1997 release of Unpublished Detail  
1992 I-O Accounts, November 1997

Table B-2. 1992 PRODUCER DURABLE EQUIPMENT by Category

A Comparison of NIPA and I-O Estimates

Bridge Category	Line UnPub	-- Million \$ ---		-- Difference --		
		NIPA	IO	Mil\$	Percent	
0	1	394735.	398995.	-4260.	-1.1	Total PDE
1	5	43947.	43580.	367.	0.8	Computers and peripheral equipment
2	6	7351.	6150.	1201.	19.5	Office equipment except computers
3	7	47434.	47806.	-372.	-0.8	Communication equipment
4	8	20690.	26563.	-5873.	-22.1	Instruments
5	9	14754.	12571.	2183.	17.4	Photocopy and related equipment
6	11	9174.	9599.	-425.	-4.4	Fabricated metal products
27	13	3665.	2889.	776.	26.9	Steam engines and turbines
28	14	734.	774.	-40.	-5.2	Internal combustion engines
8	15	18525.	20501.	-1976.	-9.6	Metalworking machinery
9	16	22495.	22830.	-335.	-1.5	Special industry machinery, n.e.c.
10	17	18397.	20932.	-2535.	-12.1	General industrial, including materials handling, equipment
11	18	16328.	14850.	1478.	10.0	Electrical transmission, distribution, and industrial apparatus
12	20	33084.	36155.	-3071.	-8.5	Trucks, buses, and truck trailers
13	21	35257.	32029.	3228.	10.1	Autos
14	22	13199.	13721.	-522.	-3.8	Aircraft
15	23	1259.	1177.	82.	7.0	Ships and boats
16	24	3368.	3010.	358.	11.9	Railroad equipment
17	26	22866.	21276.	1590.	7.5	Furniture and fixtures
19	32	6706.	7132.	-426.	-6.0	Agricultural machinery, except tractors
29	30	5599.	5693.	-94.	-1.7	Tractors, farm & garden
30	31	1620.	1033.	587.	56.8	Tractors, construction
20	33	7788.	8442.	-654.	-7.7	Construction machinery, except tractors
21	34	1179.	1297.	-118.	-9.1	Mining and oilfield machinery
22	35	10975.	10108.	867.	8.6	Service industry machinery
23	36	11117.	9417.	1700.	18.1	Electrical equipment, n.e.c.
24	39	13978.	15545.	-1567.	-10.1	Other nonresidential equipment
25	40	-2802.	-2006.	-796.	39.7	Less: sale of equipment scrap, excluding autos
26	41	6048.	5921.	127.	2.1	Residential equipment
Average absolute percentage error						9.27
Weighted average absolute percentage error (spending as weights)						8.36

Sources: NIPA August 1997 release of Unpublished Detail  
1992 I-O Accounts, November 1997

## Appendix C. The Pre-Balance Adjustment

Prior to balancing, initial estimates for the update are adjusted. This adjustment insures that "known" flows are consistent with output. The pre-balancing adjustment is described below. If we let

T     be the row total  
K     be the sum of "known" flows in the row  
S     be the sum of the initial values of the other flows  
a     =  $K/(K + S)$

then we find z such that:

$$Sz + Kz^a = T.$$

We then adjust all the "known" flows by  $z^a$  and all the others by z. If K is large relative to S, the two kinds of flows receive almost the same adjustment; if K is small relative to S, the "known" flows will be relatively untouched by this preliminary adjustment. We then remove the adjusted "known" flows from row and column totals and proceed to the rAs balancing, which works much more smoothly after the preliminary adjustment than it does without it.

The preliminary adjustment is generalized to express different degrees of confidence in various groups of "known" flows. We then have

$$Sz + \sum_{i=1}^k K_i z^{a_i} = T$$

where k is the number of groups of "known" flows and the  $a_i$  expresses the degree of confidence in the flows in the  $i^{\text{th}}$  group. A value of  $a_i = 0$  means absolute confidence, while  $a_i = 1$  expresses minimal confidence. Our choice for a is convenient and, simultaneously, expresses approximately the confidence we feel in the estimate of the known flows.

This adjustment process is a key step in the update procedure. Because data is derived from many sources, our initial estimates may not be consistent with one another or with output. This technique helps reveal data inconsistencies. A table is included in the appendix which shows some examples which illustrate the need for a procedure such as this one.

## Appendix D. Data and Adjustments

The following table illustrates the pre-balancing adjustment procedure. Some Pre-Balancing Adjustments to 1995 Controls illustrates the adjustment made to each row prior to the rAs balance. This adjustment scales the entries in each row to conform with the row control. Large scaling factors often indicate problems with one or more of the data controls. The data shown in this table is our initial estimate. These initial estimates are often revised as a result of further data review or revisions in the estimation routines.

In this table, QBAL is the 1995 domestic output. CONTROL is the sum of output, adjusted for inventory change (ven), imports (imp), and "absolute precos". ABPTOT is the sum of the absolute precos (preconceived flows which are not subjected to the scaling in the pre-balance adjustment). PRECOS is the sum of preconceived flows and includes personal consumption expenditures (pce), gross private fixed investment (gpfi), and exports (exp). %PRECO is the ratio of precos to the control. NONPREC is the sum of other intermediate flows, nondefense (ndf) federal purchases, and state and local (slsum) purchases. "Z" is the adjustment made to the "nonprec" flows for which we had no control. "Z\*\*A" is the adjustment made to the "precos", the flows for which we had an initial data control. OVERALL is the average adjustment.



Appendix D. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL	(Line 1)
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum	(Line 2)
1	Dairy farm products	0.965	0.4	0.964	1.000	21044.	91.	20385.	0.	20361.	
			61.	0.	0.	30.	-24.	0.	0.	0.	
2	Poultry and eggs	1.026	13.4	1.029	1.004	16138.	2503.	19123.	0.	19087.	
			2252.	0.	0.	251.	-36.	0.	2.	208.	
3	Meat animals	0.958	0.3	0.958	1.000	52050.	160.	50017.	0.	48622.	
			0.	0.	200.	160.	-1595.	0.	0.	0.	
4	Miscellaneous livestock	1.190	46.8	1.258	1.113	2173.	1909.	4858.	0.	4016.	
			1556.	0.	0.	353.	-842.	2.	3.	15.	
5	Cotton	1.010	44.0	1.013	1.006	3842.	3018.	6926.	0.	6897.	
			0.	0.	-4.	3018.	-25.	0.	0.	0.	
6	Food grains: wheat,rye,rice	1.216	33.1	1.281	1.085	7072.	3492.	12847.	0.	11972.	
			0.	0.	-611.	3492.	-264.	0.	10.	0.	
7	Feed grains: corn,oats,barl	1.251	18.8	1.297	1.050	31225.	7225.	48090.	-291.	43616.	
			387.	0.	-3840.	6838.	-343.	0.	0.	109.	
8	Grass seeds	1.056	15.8	1.064	1.010	611.	115.	766.	0.	686.	
			0.	0.	0.	115.	-80.	0.	0.	36.	
9	Tobacco	1.069	0.0	1.069	1.000	2706.	0.	2891.	0.	2316.	
			0.	0.	-575.	0.	0.	0.	0.	0.	
10	Fruits	0.979	61.7	0.973	0.983	5698.	9166.	14558.	0.	9141.	
			7797.	0.	85.	1369.	-5502.	0.	0.	94.	
11	Tree nuts	1.050	36.8	1.066	1.024	1154.	673.	1919.	0.	1839.	
			455.	0.	0.	218.	-80.	0.	0.	0.	
12	Vegetables	1.183	63.5	1.244	1.149	5377.	9365.	17442.	0.	15161.	
			8330.	0.	10.	1035.	-2291.	0.	0.	372.	
13	Sugar crops	0.929	0.1	0.928	1.000	2246.	3.	2088.	0.	2088.	
			0.	0.	0.	3.	0.	0.	0.	0.	
14	Misc. Crops incl hops	1.110	12.4	1.124	1.015	1014.	144.	1285.	0.	907.	
			7.	0.	0.	137.	-378.	0.	0.	0.	
15	Oil bearing crops	1.017	29.9	1.021	1.006	11318.	4835.	16422.	0.	15306.	
			33.	0.	-1021.	4802.	-95.	0.	24.	0.	
16	Forest products	1.000	0.0	1.000	1.000	2618.	0.	2618.	0.	2618.	
			0.	0.	0.	0.	0.	0.	0.	0.	
17	Greenhse & nursery prod	0.988	44.9	0.985	0.993	6843.	5581.	12281.	0.	11159.	
			5112.	0.	80.	469.	-1202.	0.	0.	470.	
18	Forestry products: stumpage	0.993	23.0	0.991	0.998	10340.	3084.	13324.	-1422.	9850.	
			2860.	0.	0.	224.	-2052.	0.	0.	0.	
19	Commercial fishing	1.159	41.4	1.213	1.083	4919.	3471.	9726.	0.	3829.	
			919.	0.	0.	2552.	-5897.	0.	0.	42.	
20	Ag,for,fish services	1.029	4.2	1.030	1.001	16186.	704.	17374.	-438.	16915.	
			666.	0.	0.	38.	-21.	0.	0.	0.	
21	Landscape & horticultural	1.011	0.0	1.011	1.000	18331.	0.	18540.	-251.	18289.	
			0.	0.	0.	0.	0.	18.	22.	2669.	
22	Iron & ferroalloy ore	0.844	14.9	0.822	0.971	4008.	701.	3976.	-152.	2415.	
			0.	0.	30.	701.	-1439.	0.	1.	0.	
23	Copper ore mining	1.000	12.2	1.000	1.000	3881.	538.	4418.	0.	4338.	
			0.	0.	50.	538.	-130.	0.	0.	0.	
24	Nonferr metal ores exc coal	0.796	12.5	0.772	0.968	2460.	350.	2238.	-17.	5701.	
			0.	60.	20.	290.	3460.	0.	0.	0.	
25	Coal mining	0.973	9.4	0.971	0.997	26117.	2703.	28047.	0.	27837.	
			72.	0.	50.	2631.	-260.	1.	31.	56.	
26	Crude petroleum & gas	1.027	2.6	1.028	1.001	140247.	3758.	147868.	-152.	97699.	
			0.	35.	-497.	3723.	-49520.	0.	0.	0.	
28	Dimension, crushed stone	1.002	1.8	1.002	1.000	6220.	116.	6350.	0.	6220.	
			0.	0.	0.	116.	-130.	0.	0.	0.	
29	Sand & gravel mining	0.949	1.7	0.949	0.999	4385.	75.	4234.	-142.	4084.	
			0.	0.	0.	75.	-8.	0.	0.	0.	
30	Clay, ceramic, & refracto	0.958	26.6	0.948	0.986	1181.	428.	1541.	0.	1503.	
			0.	0.	0.	428.	-38.	0.	0.	0.	
31	Nonmetallic mineal servic	0.974	11.3	0.971	0.997	1197.	153.	1314.	0.	818.	
			37.	0.	0.	116.	-496.	0.	0.	0.	
32	Chem & fert mineral min	0.899	1.3	0.898	0.999	4174.	53.	3799.	0.	3399.	
			7.	0.	0.	46.	-400.	0.	6.	202.	

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
39	New petro & nat gas well	1.000	100.0	1.000	1.000	0.	124.	124.	13339.	13463.
			0.	0.	0.	0.	0.	0.	0.	0.
40	New explor:oil,gas,solid	1.000	100.0	1.000	1.000	0.	75.	75.	1908.	1983.
			0.	0.	0.	0.	0.	0.	0.	0.
52	New structures, other	0.000	100.0	1.000	1.000	0.	0.	258.	152351.	152609.
			0.	0.	0.	0.	0.	0.	0.	0.
64	Maint & repair, residenti	0.970	0.0	0.970	1.000	51616.	16.	50068.	22381.	72449.
			0.	0.	0.	16.	0.	495.	0.	0.
65	Maint & rep, highways & s	0.996	0.0	0.996	1.000	26128.	0.	26026.	0.	26026.
			0.	0.	0.	0.	0.	0.	32.	21196.
66	Maint&rep, oil&n.Gas well	1.000	0.0	1.000	1.000	1595.	0.	1595.	0.	1595.
			0.	0.	0.	0.	0.	0.	0.	0.
67	Maint & repair, other	1.025	0.1	1.025	1.000	151409.	77.	155336.	0.	155336.
			0.	0.	0.	77.	0.	5779.	4134.	15545.
81	Complete guided missile	0.897	6.4	0.891	0.993	11194.	768.	10735.	0.	10471.
			0.	25.	0.	743.	-264.	8462.	2471.	0.
82	Ammunition, exc. Small ar	0.606	7.5	0.578	0.960	2542.	207.	1667.	0.	1666.
			0.	0.	-1.	207.	0.	2538.	0.	0.
83	Tanks & tank components	0.537	55.7	0.428	0.623	1279.	1606.	1548.	0.	1498.
			0.	0.	-7.	1606.	-43.	1258.	3.	0.
84	Small arms	0.993	62.9	0.990	0.994	680.	1152.	1818.	0.	1370.
			987.	0.	26.	165.	-474.	509.	2.	30.
85	Small arms ammunition	0.943	70.2	0.929	0.949	391.	922.	1239.	0.	1186.
			514.	0.	30.	408.	-83.	228.	9.	146.
86	Oth ordnance & accessorie	1.324	23.4	1.398	1.082	1081.	331.	1869.	0.	1888.
			0.	0.	28.	331.	-9.	1075.	6.	0.
87	Meat packing plants	0.918	57.5	0.892	0.936	25878.	35054.	55916.	0.	53176.
			29545.	0.	37.	5509.	-2777.	42.	0.	1627.
88	Sausages & oth prep mea	0.923	68.1	0.903	0.933	6001.	12820.	17375.	0.	17350.
			12497.	0.	29.	323.	-54.	35.	1.	433.
89	Poultry slaughtering and	0.994	69.5	0.993	0.995	9393.	21410.	30628.	0.	30565.
			19322.	0.	61.	2088.	-124.	27.	2.	203.
90	Creamery butter	0.972	48.8	0.963	0.982	646.	616.	1226.	0.	1227.
			563.	0.	4.	53.	-3.	0.	48.	100.
91	Cheese, natural & process	0.986	45.8	0.981	0.991	9616.	8140.	17501.	0.	16844.
			7962.	0.	-45.	178.	-612.	10.	253.	312.
92	Milk, dried,condensed,eva	0.971	47.6	0.962	0.982	4378.	3971.	8111.	0.	7840.
			3361.	0.	117.	610.	-388.	9.	28.	456.
93	Ice cream & frozen desser	1.020	44.5	1.026	1.012	3326.	2670.	6114.	0.	6081.
			2565.	0.	-30.	105.	-3.	0.	1.	437.
94	Fluid milk	0.981	60.7	0.975	0.985	7897.	12220.	19736.	-118.	19622.
			12166.	0.	12.	54.	-8.	0.	0.	1889.
95	Canned & cured sea food	0.968	91.9	0.965	0.968	204.	2318.	2441.	0.	1091.
			1981.	0.	61.	337.	-1411.	14.	0.	131.
96	Canned specialties	0.983	88.7	0.981	0.983	705.	5518.	6118.	0.	6137.
			5426.	0.	58.	92.	-39.	0.	0.	169.
97	Canned fruits, vegetables	0.953	65.1	0.939	0.960	6181.	11536.	16876.	0.	15219.
			10775.	0.	-75.	761.	-1582.	10.	0.	958.
98	Dehydrated fruits,vegetab	0.996	49.5	0.994	0.997	1721.	1688.	3394.	0.	3204.
			1088.	0.	14.	600.	-204.	0.	0.	94.
99	Pickles, sauces, salad dr	0.966	67.5	0.957	0.971	2333.	4847.	6936.	0.	6601.
			4409.	0.	-17.	438.	-318.	0.	1.	154.
100	Fish & seafood, fresh or	0.906	27.0	0.884	0.967	5002.	1849.	6208.	0.	6320.
			1838.	0.	112.	11.	0.	0.	0.	314.
101	Frozen fruits, juices, ve	1.009	60.1	1.011	1.007	3905.	5873.	9862.	0.	9130.
			4981.	0.	62.	892.	-794.	0.	2.	197.
102	Frozen specialties	1.000	98.1	1.000	1.000	162.	8309.	8468.	0.	8477.
			8309.	0.	9.	0.	0.	0.	0.	8.
103	Flour & oth grain mill pr	1.017	15.0	1.020	1.003	5809.	1028.	6956.	0.	6881.
			603.	0.	-4.	425.	-71.	0.	1.	20.
104	Cereal breakfast foods	1.006	94.5	1.006	1.006	543.	9291.	9894.	0.	9775.
			9118.	0.	-13.	173.	-106.	13.	0.	223.
105	Prepared flour mixes and	1.020	79.6	1.024	1.019	1053.	4101.	5257.	0.	5221.
			4004.	0.	6.	97.	-42.	0.	0.	62.
106	Dog and cat foods	1.031	95.6	1.032	1.031	285.	6198.	6684.	0.	6517.
			5794.	0.	-31.	404.	-136.	2.	3.	115.
107	Prepared feeds, n.e.c.	1.029	7.9	1.032	1.002	17178.	1481.	19209.	0.	19027.
			883.	0.	14.	598.	-196.	11.	0.	43.
108	Rice millings	0.968	79.2	0.962	0.970	419.	1596.	1950.	0.	1836.
			668.	0.	22.	928.	-136.	0.	1.	6.
109	Wet corn milling	1.014	31.0	1.018	1.006	5297.	2383.	7791.	0.	7501.
			962.	0.	45.	1421.	-335.	0.	0.	1.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
110	Bread, cake, & rlted produ	1.000	61.3	1.000	1.000	10618.	16805.	27426.	0.	26627.
			16402.	0.	5.	403.	-804.	27.	4.	863.
111	Cookies & crackers	0.999	87.0	0.999	0.999	1108.	7381.	8478.	0.	8500.
			7381.	0.	22.	0.	0.	0.	2.	111.
112	Frozen bakery products, e	1.006	98.5	1.006	1.006	39.	2552.	2606.	0.	2614.
			2552.	0.	8.	0.	0.	0.	0.	1.
113	Sugar	0.993	25.0	0.992	0.998	5918.	1975.	7839.	0.	6901.
			1657.	0.	-6.	318.	-932.	6.	13.	128.
114	Chocolate & cocoa prods	1.083	38.1	1.110	1.040	1639.	1009.	2869.	0.	1684.
			696.	0.	15.	313.	-1200.	0.	0.	16.
115	Salted and roasted nuts a	0.969	76.1	0.963	0.971	808.	2566.	3270.	0.	2900.
			1630.	0.	53.	936.	-423.	3.	0.	34.
116	Confectionery products	1.020	91.9	1.022	1.020	1111.	12615.	14003.	0.	13388.
			12368.	0.	-33.	247.	-582.	8.	0.	97.
117	Malt beverages	0.956	69.0	0.944	0.961	7001.	15586.	21583.	0.	20276.
			14987.	0.	-2.	599.	-1305.	0.	0.	96.
118	Malt	1.142	6.9	1.151	1.010	542.	40.	665.	0.	682.
			0.	0.	35.	40.	-18.	0.	0.	0.
119	Wines brandy & brandy spi	1.002	81.5	1.003	1.002	1357.	5994.	7369.	0.	5730.
			5778.	0.	4.	216.	-1643.	1.	0.	6.
120	Distilled liquor, exc bra	0.898	61.5	0.868	0.916	3478.	5564.	8116.	0.	6772.
			5208.	0.	454.	356.	-1798.	2.	0.	10.
121	Bottled & canned soft dri	1.008	87.2	1.009	1.008	3670.	25112.	29017.	0.	28659.
			24804.	0.	4.	308.	-362.	9.	2.	95.
122	Flavor extracts & sirup	0.992	33.1	0.990	0.997	7349.	3641.	10902.	0.	7883.
			3229.	0.	-10.	412.	-3009.	0.	0.	62.
123	Cottonseed oil mills	1.053	11.2	1.059	1.006	794.	100.	941.	0.	906.
			0.	0.	-16.	100.	-19.	0.	0.	0.
124	Soybean oil mills	1.094	15.5	1.109	1.016	9423.	1732.	12207.	0.	12231.
			49.	0.	66.	1683.	-42.	0.	0.	0.
125	Vegetable oil mills, ne	1.039	36.6	1.051	1.018	1435.	827.	2351.	0.	912.
			320.	0.	-3.	507.	-1436.	0.	9.	0.
126	Animal & marine fats &	0.926	27.2	0.908	0.974	2576.	963.	3277.	0.	3154.
			0.	0.	-9.	963.	-114.	0.	0.	0.
127	Roasted coffee	1.063	59.5	1.083	1.049	2408.	3545.	6327.	0.	6036.
			3389.	0.	-7.	156.	-284.	0.	2.	231.
128	Edible fats and oils, nec	0.996	41.1	0.995	0.998	3436.	2396.	5808.	0.	5738.
			2042.	0.	13.	354.	-83.	8.	1.	111.
129	Manufactured ice	0.960	99.2	0.960	0.960	3.	438.	424.	0.	418.
			429.	0.	13.	9.	-19.	0.	0.	0.
130	Macaroni & spaghetti & no	1.021	89.5	1.023	1.021	179.	1527.	1742.	0.	1474.
			1514.	0.	-24.	13.	-244.	0.	0.	14.
131	Potato chips & similar sn	1.001	89.5	1.001	1.001	927.	7934.	8872.	-206.	8642.
			7705.	0.	1.	229.	-25.	0.	0.	0.
132	Food preparations, n.e.c.	0.992	84.8	0.991	0.992	2577.	14420.	16860.	0.	15592.
			13134.	0.	4.	1286.	-1272.	13.	10.	389.
133	Cigarettes	1.058	100.0	1.058	1.058	0.	31260.	33060.	-22.	32834.
			26871.	0.	-88.	4389.	-116.	0.	0.	0.
134	Cigars	1.054	96.5	1.056	1.054	17.	476.	520.	0.	351.
			469.	0.	-2.	7.	-167.	0.	0.	0.
135	Chewing & smoking tobacco	1.057	99.9	1.057	1.057	1.	1931.	2043.	0.	2012.
			1525.	0.	-2.	406.	-29.	0.	0.	0.
136	Tobacco stem & redrying	0.811	32.4	0.761	0.915	3130.	1498.	3754.	0.	3255.
			0.	0.	-93.	1498.	-406.	0.	0.	0.
137	Brdwov fab mills & finish	0.994	11.2	0.994	0.999	28929.	3643.	32383.	0.	28635.
			1530.	0.	197.	2113.	-3945.	26.	9.	275.
138	Narrow fabric mills	1.048	29.0	1.060	1.017	1248.	510.	1842.	0.	1525.
			105.	0.	8.	405.	-325.	20.	1.	0.
139	Yarn mills & textile fini	0.999	5.6	0.999	1.000	10700.	637.	11325.	0.	10913.
			153.	0.	30.	484.	-442.	1.	2.	0.
140	Thread mills	1.095	16.5	1.111	1.017	848.	167.	1112.	0.	1033.
			64.	0.	-13.	103.	-66.	1.	1.	0.
141	Carpets & rugs	0.967	74.6	0.959	0.969	3015.	8860.	11481.	0.	10587.
			5679.	2589.	14.	592.	-908.	0.	26.	21.
142	Coated fabrics, not rubbe	1.022	19.7	1.027	1.005	1659.	407.	2112.	0.	1867.
			0.	0.	5.	407.	-250.	0.	1.	0.
143	Tire cord & fabric	0.871	9.3	0.859	0.986	1242.	127.	1193.	0.	949.
			0.	0.	-3.	127.	-241.	0.	0.	0.
144	Cordage & twine	1.032	16.5	1.038	1.006	742.	147.	918.	0.	709.
			96.	0.	10.	51.	-219.	2.	7.	55.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
145	Nonwoven fabrics	1.033	20.6	1.039	1.008	3295.	854.	4286.	0.	4008.
			410.	0.	-57.	444.	-221.	1.	10.	9.
146	Textile goods,nec (incl D	0.983	12.9	0.981	0.998	2503.	370.	2825.	0.	2379.
			37.	17.	-6.	316.	-440.	0.	2.	0.
147	Womens hosiery, exc socks	1.018	90.1	1.020	1.018	302.	2757.	3114.	0.	2662.
			2556.	0.	7.	201.	-459.	0.	0.	0.
148	Hosiery, n.E.C.	1.005	99.3	1.005	1.005	10.	1419.	1437.	0.	1442.
			1343.	0.	5.	76.	0.	0.	0.	0.
149	Knit outerwear mills	1.000	100.0	1.000	1.000	0.	5492.	5492.	0.	5539.
			5492.	0.	47.	0.	0.	0.	0.	0.
150	Knit underwear & nightwea	1.000	100.0	1.000	1.000	0.	1177.	1177.	0.	1140.
			1177.	0.	-37.	0.	0.	0.	0.	0.
151	Knitting mills, n.e.c.	1.001	49.9	1.001	1.001	128.	127.	255.	0.	255.
			127.	0.	0.	0.	0.	0.	0.	0.
152	Knit fabric mills	0.996	9.8	0.996	1.000	7483.	810.	8264.	0.	7849.
			235.	0.	3.	575.	-418.	0.	0.	0.
153	Apparel from purchased ma	1.005	87.9	1.006	1.005	11956.	87203.	99700.	0.	53831.
			81810.	0.	298.	5393.	-46167.	477.	1.	1398.
154	Curtains & draperies	1.024	78.8	1.029	1.023	310.	1151.	1496.	0.	1335.
			1130.	0.	-12.	21.	-149.	6.	0.	71.
155	Housefurnishings, n.E.C	1.020	78.0	1.025	1.019	2136.	7585.	9920.	0.	8122.
			7275.	0.	33.	310.	-1831.	2.	9.	147.
156	Textile bags	1.008	26.6	1.010	1.003	710.	257.	974.	0.	884.
			222.	0.	-2.	35.	-88.	8.	1.	4.
157	Canvas and related produc	1.047	29.3	1.059	1.017	1112.	461.	1646.	0.	1386.
			432.	0.	6.	29.	-266.	17.	1.	52.
158	Pleating & stitching	0.949	49.3	0.932	0.966	443.	430.	828.	0.	725.
			405.	0.	6.	25.	-109.	0.	0.	0.
159	Auto & apparel trimming	0.982	23.7	0.978	0.995	5698.	1772.	7338.	0.	7291.
			1543.	0.	-9.	229.	-38.	1.	1.	0.
160	Schiffli mach embroiderie	1.250	21.0	1.302	1.057	282.	75.	446.	0.	441.
			75.	0.	-5.	0.	0.	0.	0.	0.
161	Fabricated textile produc	0.998	41.5	0.998	0.999	3223.	2288.	5502.	0.	4201.
			1818.	0.	-5.	470.	-1296.	109.	50.	279.
162	Logging camps & contracto	0.980	11.4	0.977	0.997	21940.	2817.	24251.	0.	23965.
			0.	0.	24.	2817.	-310.	0.	0.	0.
163	Sawmills & planing mill	1.034	6.4	1.036	1.002	28718.	1958.	31709.	0.	26231.
			0.	0.	99.	1958.	-5577.	0.	1.	59.
164	Hrdwd dim & floor mills	1.155	1.4	1.157	1.002	2503.	35.	2931.	0.	2882.
			0.	0.	11.	35.	-60.	0.	0.	20.
165	Spec prod sawmills n.e.c.	0.731	1.7	0.727	0.994	451.	8.	336.	0.	149.
			0.	0.	-2.	8.	-185.	0.	1.	0.
166	Millwork	0.982	1.7	0.982	1.000	11429.	194.	11413.	0.	10928.
			0.	0.	-23.	194.	-462.	0.	0.	0.
167	Wood kitchen cabinets	1.068	0.3	1.068	1.000	6091.	19.	6527.	0.	6359.
			0.	0.	9.	19.	-177.	0.	0.	0.
168	Veneer & plywood	1.042	6.3	1.045	1.003	8705.	588.	9683.	0.	8552.
			0.	0.	18.	588.	-1149.	0.	1.	0.
169	Struc wood members, n.e.c	1.309	6.7	1.329	1.019	2830.	202.	3968.	0.	3833.
			0.	0.	12.	202.	-147.	0.	0.	0.
170	Prefab wood bldgs & compo	1.046	2.9	1.047	1.001	2464.	73.	2653.	0.	2640.
			0.	0.	11.	73.	-24.	2.	0.	0.
171	Mobile homes	0.867	99.7	0.867	0.867	31.	9283.	8077.	0.	8083.
			0.	9260.	6.	23.	0.	0.	1.	0.
172	Wood preserving	1.145	1.9	1.148	1.003	3159.	61.	3688.	0.	3645.
			0.	0.	-7.	61.	-36.	3.	4.	0.
173	Wood pallets & skids	1.199	0.9	1.200	1.002	2637.	25.	3191.	0.	3188.
			0.	0.	7.	25.	-10.	2.	1.	5.
174	Wood products, n.e.c.	1.023	56.9	1.030	1.017	2563.	3389.	6088.	0.	4496.
			3124.	1.	29.	264.	-1621.	3.	4.	87.
175	Reconstituted wood produc	1.112	4.6	1.117	1.005	5283.	257.	6158.	0.	5148.
			0.	0.	10.	257.	-1020.	0.	0.	41.
176	Wood containers, n.e.c.	0.985	1.8	0.984	1.000	905.	17.	908.	0.	850.
			0.	0.	3.	17.	-61.	4.	4.	0.
177	Wood household furniture,	0.886	98.1	0.884	0.886	284.	14335.	12948.	0.	9569.
			12860.	677.	-31.	798.	-3348.	2.	42.	94.
178	Household furniture, n.e.	0.994	63.4	0.993	0.995	301.	520.	816.	0.	453.
			393.	26.	-2.	101.	-361.	0.	5.	0.
179	Wood tv & radio cabinet	1.136	6.3	1.145	1.009	458.	31.	556.	0.	550.
			28.	0.	0.	3.	-6.	0.	0.	0.
180	Upholstered hshld furnitu	1.007	99.4	1.008	1.007	52.	8138.	8251.	0.	7679.
			7401.	470.	-7.	267.	-565.	0.	9.	8.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECOC	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
181	Metal household furniture	0.962	94.0	0.960	0.962	171.	2669.	2733.	0.	2047.
			2453.	161.	19.	55.	-705.	0.	3.	38.
182	Mattresses & bedsprings	1.010	95.3	1.010	1.010	181.	3663.	3882.	0.	3844.
			3395.	219.	8.	49.	-46.	0.	0.	125.
183	Wood office furniture	1.039	81.9	1.046	1.038	481.	2174.	2759.	0.	2568.
			137.	1964.	-4.	73.	-187.	0.	4.	388.
184	Office furniture, except	1.019	78.7	1.022	1.018	1437.	5322.	6885.	0.	6479.
			0.	5029.	-10.	293.	-396.	2.	46.	1133.
185	Public building furniture	1.126	38.2	1.167	1.061	4637.	2868.	8454.	0.	6667.
			0.	1834.	3.	1034.	-1790.	1.	0.	601.
186	Wood partitions & fixture	0.995	69.4	0.993	0.995	1220.	2766.	3965.	0.	3969.
			0.	2766.	4.	0.	0.	1.	45.	106.
187	Non-wood partitions & fix	0.994	83.5	0.993	0.994	677.	3424.	4077.	0.	3836.
			0.	3262.	12.	162.	-253.	2.	6.	131.
188	Blinds, shades, & drapery	1.065	96.7	1.067	1.065	80.	2361.	2600.	0.	2250.
			1974.	350.	-23.	37.	-327.	0.	0.	55.
189	Furniture & fixtures, nec	1.016	96.7	1.017	1.016	127.	3725.	3915.	0.	2977.
			106.	3474.	9.	145.	-947.	1.	7.	70.
190	Pulp mills	1.105	36.9	1.138	1.049	7200.	4205.	12603.	0.	8974.
			0.	0.	169.	4205.	-3798.	0.	8.	0.
191	Envelopes	1.018	13.3	1.021	1.003	2720.	418.	3196.	0.	3206.
			326.	0.	21.	92.	-11.	24.	152.	547.
192	Sanitary paper products	1.006	75.9	1.007	1.006	3996.	12555.	16651.	0.	16368.
			11791.	0.	16.	764.	-299.	8.	37.	585.
193	Paper coating & glazing	1.031	12.5	1.035	1.004	11255.	1608.	13262.	0.	12880.
			682.	0.	77.	926.	-459.	15.	15.	556.
194	Bags, except textiles	1.032	19.6	1.038	1.007	8126.	1975.	10424.	0.	9794.
			1644.	0.	36.	331.	-666.	8.	47.	175.
195	Die-cut paper,paperboard,	1.067	9.2	1.074	1.007	2514.	256.	2957.	0.	2586.
			0.	0.	4.	256.	-375.	24.	179.	289.
196	Stationery,tablets,relate	0.910	33.7	0.884	0.959	1183.	602.	1624.	0.	1345.
			357.	0.	15.	245.	-294.	2.	9.	88.
197	Converted paper prod, nec	1.059	39.1	1.077	1.030	3474.	2226.	6034.	0.	5723.
			2152.	0.	31.	74.	-342.	9.	8.	303.
198	Paper & paperboard mills	1.161	8.3	1.174	1.013	61619.	5573.	78008.	0.	68154.
			0.	0.	778.	5573.	-10632.	4.	207.	1317.
199	Paperboard containers & b	1.090	4.0	1.094	1.004	36141.	1523.	41057.	0.	40713.
			423.	0.	142.	1100.	-486.	38.	56.	236.
200	Newspapers	0.946	22.3	0.934	0.985	30269.	8673.	36821.	0.	36807.
			8614.	0.	-3.	59.	-11.	5.	80.	218.
201	Periodicals	0.945	30.4	0.931	0.978	18079.	7899.	24560.	0.	24366.
			7223.	0.	37.	676.	-231.	7.	29.	561.
202	Book publishing	1.045	67.8	1.057	1.038	6514.	13705.	21119.	-317.	19754.
			12004.	0.	170.	1701.	-1218.	2.	0.	2852.
203	Book printing	0.934	0.7	0.934	1.000	5857.	41.	5511.	0.	5513.
			0.	0.	2.	41.	0.	25.	0.	129.
204	Misc. Publishing	0.947	14.9	0.940	0.991	11840.	2075.	13181.	0.	13111.
			2003.	0.	-1.	72.	-69.	7.	175.	557.
205	Commercial printing	0.986	2.6	0.985	1.000	67651.	1784.	68443.	0.	67825.
			475.	0.	-30.	1309.	-588.	149.	421.	1724.
206	Manifold business forms	0.874	0.5	0.873	0.999	8074.	44.	7094.	0.	7086.
			0.	0.	50.	44.	-58.	78.	361.	1741.
207	Blankbooks & looseleaf bi	0.991	18.0	0.989	0.998	3692.	813.	4463.	0.	4018.
			712.	0.	-1.	101.	-444.	10.	47.	239.
208	Greeting card publishin	1.011	91.7	1.012	1.011	321.	3566.	3929.	-20.	3782.
			3430.	0.	-14.	136.	-113.	0.	0.	0.
209	Bookbinding & related wor	0.933	0.0	0.933	1.000	1595.	0.	1488.	0.	1494.
			0.	0.	6.	0.	0.	0.	6.	402.
210	Typesetting	0.861	0.0	0.861	1.000	2388.	0.	2057.	0.	2057.
			0.	0.	0.	0.	0.	0.	0.	17.
211	Platemaking & related ser	0.826	1.7	0.823	0.997	4333.	77.	3644.	-134.	3510.
			0.	0.	2.	77.	-2.	2.	0.	162.
212	Indl chem: inorganic & or	0.983	18.3	0.980	0.996	105942.	23772.	127553.	0.	109979.
			644.	2102.	905.	21026.	-18479.	2592.	1300.	3655.
213	Fertilizers, nitrog&phosp	1.059	22.3	1.071	1.015	10073.	2885.	13719.	0.	12270.
			147.	0.	28.	2738.	-1477.	4.	14.	245.
214	Fertilizers mixing only	0.931	0.0	0.931	1.000	2311.	0.	2152.	0.	2136.
			0.	0.	-16.	0.	0.	0.	0.	0.
215	Agric chemicals, nec	1.012	21.3	1.014	1.003	8849.	2394.	11374.	0.	9793.
			725.	0.	51.	1669.	-1632.	4.	7.	324.
216	Gum & wood chemicals	1.010	57.0	1.014	1.008	455.	602.	1068.	0.	959.
			445.	0.	1.	157.	-110.	3.	0.	0.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
217	Adhesives & sealants	0.838	13.3 599.	0.817 0.	0.973 19.	6017. 324.	923. -176.	5815. 7.	0. 1.	5658. 51.
218	Explosives	0.963	10.3 0.	0.960 0.	0.996 2.	1392. 160.	160. -87.	1495. 222.	-64. 0.	1346. 0.
219	Printing ink	1.104	4.3 0.	1.109 0.	1.004 7.	3592. 162.	162. -251.	4145. 0.	0. 0.	3901. 31.
220	Carbon black	1.105	13.9 0.	1.119 0.	1.016 9.	702. 113.	113. -103.	900. 0.	0. 0.	806. 0.
221	Chemical preparations,n	0.976	22.5 703.	0.971 0.	0.994 80.	9794. 2135.	2838. -1045.	12334. 110.	0. 69.	11369. 249.
222	Plastics matls & resins	1.060	19.7 0.	1.072 0.	1.014 133.	36507. 8974.	8974. -4411.	48221. 5.	0. 3.	43943. 2.
223	Synthetic rubber	1.018	18.8 0.	1.021 0.	1.004 41.	4916. 1141.	1141. -731.	6165. 1.	0. 0.	5475. 0.
224	Cellulosic man-made fiber	0.888	27.9 0.	0.861 0.	0.959 -8.	1679. 650.	650. -154.	2069. 2.	0. 0.	1907. 0.
225	Manmade organic fibers, e	1.034	9.4 0.	1.037 0.	1.003 94.	12830. 1336.	1336. -1350.	14645. 3.	0. 3.	13389. 0.
226	Drugs	1.098	67.2 46706.	1.127 0.	1.084 -224.	26951. 8513.	55219. -16627.	90239. 344.	0. 182.	73388. 5502.
227	Soap & other detergents	1.000	76.9 9096.	1.000 0.	1.000 41.	2971. 797.	9893. -543.	12864. 19.	0. 35.	12362. 391.
228	Polishes & sanitation g	1.002	70.8 5448.	1.003 0.	1.002 -48.	2325. 192.	5640. -66.	7982. 17.	0. 23.	7868. 138.
229	Surface active agents	1.037	16.6 0.	1.044 0.	1.007 30.	4048. 803.	803. -318.	5033. 1.	0. 1.	4745. 268.
230	Toilet preparations	1.003	91.2 19230.	1.003 0.	1.003 101.	2050. 1882.	21112. -1895.	23228. 82.	0. 0.	21434. 65.
231	Paints & allied product	0.950	8.5 563.	0.946 0.	0.995 19.	16541. 975.	1538. -366.	17182. 0.	0. 7.	16835. 482.
232	Petroleum refining	0.884	37.6 54408.	0.850 0.	0.941 246.	105211. 8900.	63308. -10049.	148957. 2590.	0. 370.	139154. 13677.
234	Lubricating oils & grease	0.945	27.5 2098.	0.932 0.	0.981 -28.	5635. 39.	2137. 0.	7347. 23.	0. 0.	7319. 315.
235	Products of petroleum and	0.949	29.5 72.	0.936 0.	0.981 -5.	704. 222.	294. -10.	947. 2.	0. 1.	932. 0.
236	Paving mixtures & block	0.985	0.5 0.	0.985 0.	1.000 29.	4949. 25.	25. -57.	4899. 0.	0. 1.	4871. 0.
237	Asphalt felts & coating	0.941	1.6 0.	0.940 0.	0.999 24.	4349. 70.	4349. -71.	4157. 0.	0. 0.	4110. 0.
238	Tires & inner tubes	0.996	43.3 6361.	0.995 0.	0.998 113.	10002. 1283.	7644. -3331.	17583. 106.	0. 28.	14365. 235.
239	Rubber & plastic footwear	1.021	99.6 4256.	1.021 0.	1.021 17.	16. 138.	4394. -3737.	4504. 1.	0. 1.	784. 10.
240	Fabricated rubber prod,ne	1.032	15.6 1250.	1.036 201.	1.006 28.	12866. 921.	2372. -1988.	15720. 257.	0. 107.	13760. 1126.
241	Misc. plastic products	1.061	11.3 6010.	1.067 77.	1.007 302.	94674. 5930.	12017. -7001.	113159. 31.	0. 76.	106460. 856.
242	Rubber&plastic hose&belt	0.987	26.1 265.	0.984 0.	0.996 23.	3087. 826.	1091. -894.	4125. 4.	0. 0.	3254. 98.
243	Gaskets, pack&seal device	1.045	12.7 115.	1.051 0.	1.006 4.	4259. 507.	622. -913.	5101. 1.	0. 0.	4192. 29.
244	Leather tanning & finishi	1.109	18.2 0.	1.129 0.	1.022 -6.	3097. 691.	691. -957.	4202. 1.	0. 1.	3239. 0.
245	Footwear cut stock	0.987	30.9 1.	0.984 0.	0.995 2.	477. 212.	213. -358.	681. 0.	0. 0.	325. 64.
246	Shoes, except rubber	1.011	99.1 12347.	1.011 0.	1.011 26.	118. 325.	12672. -9616.	12934. 9.	0. 0.	3344. 86.
247	House slippers	0.984	89.3 180.	0.983 0.	0.984 -4.	22. 5.	185. -80.	204. 0.	0. 0.	120. 22.
248	Leather gloves & mitten	1.014	96.6 429.	1.015 0.	1.014 1.	16. 13.	442. -370.	464. 1.	0. 0.	95. 0.
249	Luggage	0.957	88.6 2777.	0.952 0.	0.957 1.	378. 160.	2937. -2384.	3172. 1.	0. 2.	789. 10.
250	Womens handbags & purse	1.041	99.9 1480.	1.041 0.	1.041 2.	2. 54.	1534. -1268.	1598. 0.	0. 0.	332. 0.
251	Personal leather goods	1.033	96.7 929.	1.034 0.	1.032 -4.	33. 29.	958. -562.	1023. 0.	0. 0.	457. 0.
252	Leather goods, n.e.c.	0.991	70.3 463.	0.989 0.	0.992 0.	235. 92.	555. -238.	783. 26.	0. 1.	545. 16.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECOC	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
253	Glass & glass prod,nec	1.000	15.6	1.000	1.000	15517.	2868.	18386.	0.	15777.
			954.	0.	116.	1914.	-2725.	15.	164.	491.
254	Glass containers	0.883	5.3	0.876	0.993	5144.	287.	4793.	0.	4393.
			152.	0.	3.	135.	-403.	0.	2.	0.
255	Cement, hydraulic	1.102	0.7	1.102	1.001	5216.	39.	5789.	0.	5194.
			0.	0.	47.	39.	-642.	0.	0.	0.
256	Brick & structural clay t	0.893	0.8	0.892	0.999	1273.	10.	1145.	0.	1160.
			0.	0.	22.	10.	-7.	0.	0.	0.
257	Ceramic wall & floor tile	0.989	2.3	0.989	1.000	1422.	33.	1439.	0.	774.
			0.	0.	34.	33.	-699.	0.	0.	0.
258	Clay refractories	0.966	9.5	0.963	0.996	990.	104.	1057.	0.	990.
			0.	0.	-2.	104.	-65.	0.	0.	0.
259	Structural clay prod,nec	0.879	4.5	0.874	0.994	172.	8.	158.	0.	147.
			0.	0.	1.	8.	-12.	0.	0.	0.
260	Vitreous plumbing fixture	0.964	5.2	0.963	0.998	1047.	58.	1066.	0.	913.
			0.	0.	12.	58.	-165.	0.	0.	0.
261	Vitreous china food utens	1.028	28.2	1.035	1.010	536.	211.	768.	0.	359.
			164.	0.	1.	47.	-410.	0.	0.	46.
262	Fine earthenware food utens	1.016	90.5	1.017	1.016	68.	643.	722.	0.	50.
			622.	0.	1.	21.	-673.	0.	0.	2.
263	Porcelain elec supplies	1.415	8.8	1.452	1.033	1072.	103.	1662.	0.	1463.
			0.	0.	-3.	103.	-196.	3.	0.	0.
264	Pottery products, n.E.C	1.012	85.8	1.013	1.011	243.	1474.	1737.	0.	675.
			1145.	0.	4.	329.	-1066.	1.	1.	24.
265	Concrete block & brick	1.089	0.2	1.089	1.000	2039.	5.	2226.	0.	2253.
			0.	0.	35.	5.	-8.	0.	0.	0.
266	Concrete products, n.E.	1.102	1.1	1.103	1.001	6699.	72.	7459.	0.	7298.
			8.	0.	27.	64.	-188.	0.	0.	19.
267	Ready-mixed concrete	1.024	0.0	1.024	1.000	14118.	0.	14452.	0.	14475.
			0.	0.	23.	0.	0.	0.	0.	0.
268	Lime	0.759	0.9	0.757	0.997	1050.	10.	805.	0.	773.
			0.	0.	-2.	10.	-30.	1.	2.	0.
269	Gypsum products	1.367	1.9	1.374	1.006	2366.	46.	3297.	0.	3207.
			0.	0.	-2.	46.	-88.	0.	10.	12.
270	Cut stone & stone produ	0.958	22.4	0.949	0.988	1334.	386.	1647.	0.	1109.
			356.	0.	42.	30.	-580.	2.	0.	16.
271	Abrasive products	0.945	15.4	0.937	0.990	3909.	713.	4367.	0.	3664.
			367.	0.	10.	346.	-713.	14.	54.	89.
272	Asbestos products	0.646	24.8	0.572	0.870	136.	45.	117.	0.	1.
			0.	0.	0.	45.	-116.	7.	0.	0.
273	Minerals, ground or treat	0.925	9.0	0.918	0.992	2279.	226.	2317.	0.	2095.
			81.	0.	-5.	145.	-217.	1.	1.	0.
274	Mineral wool	1.001	7.9	1.001	1.000	3609.	308.	3920.	0.	3779.
			0.	0.	26.	308.	-167.	0.	2.	0.
275	Nonclay refractories	0.872	15.7	0.852	0.975	1561.	291.	1614.	0.	1432.
			0.	0.	16.	291.	-198.	0.	0.	0.
276	Nonmetal mineral prod,nec	0.954	30.4	0.941	0.982	766.	335.	1050.	0.	877.
			188.	0.	7.	147.	-180.	0.	0.	0.
277	Blast furnaces & steel mi	1.023	5.4	1.024	1.001	76110.	4324.	82264.	0.	68961.
			0.	0.	330.	4324.	-13633.	0.	1.	38.
278	Electrometallurgical prod	1.064	4.9	1.067	1.003	2376.	122.	2658.	0.	1169.
			0.	0.	-7.	122.	-1482.	0.	0.	0.
279	Steel wire & related prod	0.997	0.9	0.997	1.000	6457.	59.	6499.	0.	5636.
			16.	0.	28.	43.	-891.	0.	2.	42.
280	Cold finishing of steel s	0.934	0.0	0.934	1.000	7016.	0.	6554.	0.	6543.
			0.	0.	-11.	0.	0.	0.	0.	0.
281	Steel pipe & tubes	0.995	0.0	0.995	1.000	6285.	0.	6251.	0.	6284.
			0.	0.	33.	0.	0.	0.	0.	0.
282	Iron & steel foundries	0.999	2.5	0.999	1.000	14793.	382.	15160.	0.	14778.
			0.	0.	39.	382.	-421.	32.	0.	0.
283	Iron & steel forgings	0.959	0.0	0.959	1.000	4442.	1.	4262.	0.	4268.
			0.	0.	6.	1.	0.	50.	3.	0.
284	Metal heat treating	1.332	0.0	1.332	1.000	2544.	0.	3390.	0.	3396.
			0.	0.	6.	0.	0.	29.	2.	27.
285	Primary metal prod,nec	1.057	11.4	1.064	1.007	2402.	310.	2867.	0.	2581.
			19.	23.	15.	268.	-301.	97.	1.	0.
286	Primary copper	1.054	8.6	1.059	1.005	8550.	804.	9861.	0.	7944.
			0.	0.	-21.	804.	-1896.	0.	20.	0.
287	Primary aluminum	1.148	5.4	1.156	1.008	13667.	786.	16587.	0.	12776.
			0.	0.	64.	786.	-3875.	16.	10.	0.
288	Primary nf metals, nec	0.946	9.8	0.941	0.994	11474.	1243.	12034.	-24.	7043.
			0.	0.	35.	1243.	-5002.	0.	0.	0.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

	OVERALL	%PRECOC	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL	
		pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum	
289	Secondary nonferrous meta	0.971	0.0	0.971	1.000	7807.	0.	7584.	0.	7604.
			0.	0.	20.	0.	0.	0.	0.	0.
290	Copper rolling,drawing,ex	1.102	6.1	1.109	1.006	7603.	496.	8928.	0.	8066.
			0.	0.	56.	496.	-918.	3.	23.	0.
291	Aluminum rolling & drawin	1.075	12.7	1.085	1.010	16516.	2410.	20349.	0.	18628.
			0.	0.	135.	2410.	-1856.	32.	3.	0.
292	Nonferrous roll & draw, n	0.923	18.4	0.910	0.983	3416.	770.	3865.	-46.	2948.
			0.	0.	46.	770.	-917.	0.	11.	0.
293	NF wire drawing&insulatin	1.038	15.4	1.044	1.007	15545.	2829.	19075.	0.	16568.
			77.	69.	-29.	2683.	-2478.	71.	70.	0.
294	Aluminum castings	1.107	1.1	1.109	1.001	8685.	97.	9725.	0.	9678.
			15.	0.	19.	82.	-66.	6.	7.	90.
295	Copper foundries	0.822	0.0	0.822	1.000	1014.	0.	834.	0.	838.
			0.	0.	4.	0.	0.	0.	0.	0.
296	Nonferrous castings,nec	0.907	0.0	0.907	1.000	1938.	0.	1757.	0.	1758.
			0.	0.	1.	0.	0.	0.	0.	0.
297	Nonferrous forgings	1.213	0.0	1.213	1.000	1232.	0.	1495.	0.	1506.
			0.	0.	11.	0.	0.	3.	17.	0.
298	Metal cans	0.901	1.6	0.900	0.998	13113.	209.	12005.	0.	12123.
			0.	0.	195.	209.	-77.	3.	0.	8.
299	Metal barrels,drums,pails	0.980	17.5	0.977	0.996	1167.	247.	1386.	0.	1220.
			0.	48.	2.	199.	-168.	11.	0.	4.
300	Metal sanitary ware	0.929	6.2	0.924	0.995	932.	62.	923.	0.	804.
			0.	0.	-1.	62.	-118.	0.	0.	0.
301	Plumbing fixtures, etc	1.118	1.5	1.120	1.002	3274.	51.	3716.	0.	3415.
			0.	0.	-41.	51.	-260.	0.	0.	0.
302	Heating equip,exc elec	1.011	22.0	1.014	1.003	2229.	628.	2890.	0.	2720.
			323.	0.	-1.	305.	-169.	5.	3.	0.
303	Fabricated structural met	1.040	0.9	1.040	1.000	9833.	89.	10316.	0.	10193.
			0.	0.	-16.	89.	-107.	179.	92.	0.
304	Metal doors,sash,trim	0.973	2.3	0.972	0.999	7809.	181.	7772.	0.	7637.
			0.	0.	-19.	181.	-116.	2.	0.	0.
305	Boiler shops	0.973	43.9	0.964	0.984	6687.	5226.	11590.	0.	10950.
			0.	3916.	6.	1310.	-646.	57.	206.	1.
306	Sheet metal work	1.012	4.2	1.013	1.001	13380.	591.	14145.	0.	14100.
			0.	529.	-29.	62.	-16.	29.	0.	0.
307	Architectural metal work	1.168	1.5	1.171	1.002	2915.	44.	3456.	0.	3350.
			0.	0.	26.	44.	-132.	3.	40.	0.
308	Prefab metal buildings	1.238	7.2	1.255	1.016	3159.	244.	4214.	0.	4182.
			38.	0.	-1.	206.	-31.	8.	0.	12.
309	Miscellaneous metal work	1.156	7.7	1.168	1.012	3778.	315.	4733.	0.	4711.
			0.	0.	41.	315.	-63.	9.	8.	0.
310	Screw mach prod,bolts,nut	1.102	6.5	1.109	1.007	11825.	823.	13942.	0.	11432.
			150.	0.	59.	673.	-2569.	65.	13.	58.
311	Auto stampings	0.986	1.9	0.986	1.000	21531.	413.	21638.	0.	20959.
			0.	0.	32.	413.	-711.	0.	10.	0.
312	Crowns & closures	0.877	21.9	0.852	0.966	787.	220.	883.	0.	790.
			44.	0.	2.	176.	-95.	0.	0.	14.
313	Metal stampings, n.e.c.	1.098	11.6	1.109	1.012	10024.	1313.	12447.	0.	12238.
			1294.	0.	61.	19.	-270.	50.	55.	76.
314	Cutlery	1.000	80.8	1.001	1.000	497.	2084.	2582.	0.	1896.
			1760.	0.	-8.	324.	-678.	10.	3.	185.
315	Hand & edge tools, nec	1.054	32.4	1.070	1.022	3687.	1766.	5750.	0.	4675.
			1200.	39.	6.	527.	-1081.	57.	16.	600.
316	Hand saws & saw blades	1.303	39.9	1.408	1.146	760.	504.	1647.	0.	1436.
			88.	319.	12.	97.	-223.	1.	3.	120.
317	Hardware, n.e.c.	0.980	14.0	0.977	0.997	10427.	1692.	11877.	0.	10026.
			528.	0.	38.	1164.	-1889.	84.	127.	96.
318	Plating & polishing	0.940	0.0	0.940	1.000	6386.	0.	6003.	0.	6002.
			0.	0.	-1.	0.	0.	0.	0.	0.
319	Metal coating & allied se	1.061	0.0	1.061	1.000	6966.	0.	7393.	0.	7418.
			0.	0.	25.	0.	0.	0.	0.	0.
320	Misc fab wire products	1.051	9.7	1.055	1.005	8622.	924.	10028.	0.	9157.
			494.	0.	57.	430.	-928.	8.	1.	19.
321	Steel springs, exc wire	0.927	23.4	0.912	0.979	952.	291.	1153.	0.	572.
			31.	0.	1.	260.	-582.	0.	0.	4.
322	Pipe,valves,pipe fittin	1.014	20.9	1.016	1.003	16516.	4372.	21174.	0.	17887.
			0.	1981.	143.	2391.	-3430.	173.	6.	81.
323	Metal foil & leaf	0.966	22.5	0.959	0.991	2898.	840.	3611.	0.	3308.
			618.	0.	-26.	222.	-277.	6.	0.	0.
324	Fabricated metal prod,nec	1.062	26.7	1.078	1.020	8042.	2936.	11664.	0.	8929.
			503.	941.	-113.	1492.	-2622.	37.	57.	492.



Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
325	Turbines & turbine genera	0.941	75.2	0.928	0.945	1861.	5652.	7070.	0.	6321.
			0.	1961.	19.	3691.	-768.	426.	235.	153.
326	Internal combust engines,	1.035	32.2	1.044	1.014	12864.	6101.	19620.	0.	16688.
			226.	1103.	60.	4772.	-2992.	120.	19.	287.
327	Farm machinery & equip.	1.175	82.2	1.207	1.168	2426.	11236.	16050.	0.	12783.
			0.	8916.	79.	2320.	-3346.	5.	4.	321.
328	Lawn & garden equip.	1.058	86.7	1.066	1.057	797.	5194.	6341.	0.	6186.
			594.	4012.	30.	588.	-185.	20.	5.	51.
329	Construction mach & equip	1.097	76.3	1.119	1.090	4851.	15601.	22431.	0.	19074.
			0.	11365.	233.	4236.	-3590.	337.	21.	1307.
330	Mining mach,exc oil field	1.056	78.9	1.067	1.053	532.	1990.	2663.	0.	2163.
			0.	1023.	29.	967.	-529.	3.	1.	0.
331	Oil field machinery	0.976	86.8	0.973	0.976	473.	3101.	3488.	0.	3418.
			0.	95.	-10.	3006.	-60.	4.	0.	0.
332	Elevators & moving stairw	1.097	12.4	1.109	1.013	1104.	156.	1382.	0.	1238.
			0.	0.	-1.	156.	-143.	0.	0.	0.
333	Conveyers & conveying eq	1.015	88.9	1.016	1.015	625.	4992.	5700.	0.	5139.
			0.	4406.	-24.	586.	-537.	0.	3.	0.
334	Hoist, cranes, & monorail	1.065	53.2	1.088	1.046	652.	740.	1483.	0.	1318.
			0.	607.	-1.	133.	-164.	0.	0.	0.
335	Indl trucks & tractors	1.068	82.9	1.080	1.066	991.	4811.	6199.	0.	4488.
			0.	3898.	-14.	913.	-1697.	39.	11.	16.
336	Mach tools, metal cutting	0.946	89.3	0.941	0.947	863.	7240.	7666.	0.	4166.
			24.	6060.	23.	1156.	-3523.	12.	21.	227.
337	Mach tools, metal forming	0.998	87.5	0.998	0.998	383.	2695.	3072.	0.	1875.
			0.	1943.	19.	752.	-1216.	2.	4.	5.
338	Spec dies,tools,mach tool	1.066	61.8	1.087	1.053	8088.	13109.	22600.	0.	19402.
			0.	11593.	60.	1516.	-3258.	5.	15.	95.
339	Power driven hand tools	1.020	90.6	1.022	1.020	416.	3988.	4493.	0.	3392.
			892.	2565.	-1.	531.	-1100.	1.	0.	78.
340	Rolling mill machinery	0.972	95.8	0.971	0.972	42.	957.	971.	0.	802.
			0.	795.	4.	162.	-173.	0.	0.	0.
341	Welding & soldering eq, e	1.044	69.2	1.057	1.039	1197.	2685.	4054.	0.	3395.
			56.	1969.	7.	660.	-666.	0.	1.	46.
342	Industrial patterns	0.862	2.0	0.859	0.997	911.	19.	802.	0.	800.
			0.	0.	17.	19.	-19.	0.	0.	0.
343	Metalworking machines, n.	1.043	79.5	1.052	1.041	540.	2095.	2749.	0.	2778.
			0.	2095.	29.	0.	0.	0.	2.	0.
344	Food products machinery	0.990	84.4	0.988	0.990	481.	2614.	3064.	0.	2468.
			0.	1970.	9.	644.	-605.	7.	0.	42.
345	Textile machinery	0.974	83.7	0.970	0.975	590.	3021.	3519.	0.	1775.
			0.	2406.	8.	615.	-1752.	0.	0.	0.
346	Woodworking machinery	1.030	90.1	1.033	1.029	186.	1692.	1934.	0.	1296.
			306.	1218.	-2.	168.	-636.	0.	1.	102.
347	Paper industries machiner	0.983	76.3	0.979	0.984	960.	3091.	3981.	0.	3060.
			0.	2278.	40.	813.	-961.	0.	0.	0.
348	Printing trades machinery	1.064	81.9	1.076	1.062	975.	4402.	5723.	0.	3253.
			0.	3260.	13.	1142.	-2483.	1.	3.	108.
349	Special indl mach, n.e.c.	1.034	88.4	1.037	1.033	2478.	18896.	22091.	0.	18871.
			0.	14306.	52.	4590.	-3272.	10.	143.	34.
350	Pumps & compressors	0.996	65.9	0.995	0.997	4164.	8041.	12162.	0.	10147.
			0.	5588.	22.	2453.	-2037.	99.	23.	296.
351	Ball & roller bearings	1.003	11.0	1.004	1.000	5968.	739.	6729.	0.	5143.
			0.	0.	14.	739.	-1600.	71.	2.	0.
352	Blowers & fans	1.049	31.5	1.062	1.019	3583.	1646.	5484.	0.	3723.
			0.	681.	5.	965.	-1766.	1.	10.	158.
353	Power transmission equip,	1.023	11.5	1.026	1.003	5782.	750.	6682.	0.	5010.
			0.	0.	29.	750.	-1701.	3.	0.	0.
354	Indl furnaces & ovens	1.009	86.3	1.010	1.009	404.	2545.	2975.	0.	2692.
			0.	2016.	13.	529.	-296.	0.	0.	0.
355	Genl indl mach, n.e.c.	1.013	74.4	1.016	1.012	2564.	7462.	10154.	0.	6835.
			0.	3421.	35.	4041.	-3354.	30.	1.	69.
356	Packaging machinery	1.012	85.9	1.013	1.011	661.	4023.	4738.	0.	3803.
			0.	3254.	35.	769.	-970.	0.	9.	0.
357	Carburetors,pistons,rings	0.925	1.3	0.924	0.999	2423.	33.	2272.	0.	2290.
			33.	0.	18.	0.	0.	2.	0.	28.
358	Fluid power equipment	1.004	15.1	1.005	1.001	4056.	721.	4797.	0.	3982.
			0.	178.	11.	543.	-826.	116.	43.	0.
359	Scales & balances, except	0.961	86.2	0.956	0.962	122.	765.	853.	0.	635.
			106.	518.	20.	141.	-238.	0.	1.	47.
360	Indl & commercial mach &	1.162	9.7	1.177	1.016	23791.	2547.	30597.	0.	28567.
			0.	63.	38.	2484.	-2068.	369.	198.	215.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
361	Calculating & accounting	1.033	88.2	1.037	1.033	309.	2310.	2706.	0.	1691.
			66.	1933.	0.	311.	-1015.	14.	0.	192.
362	Electronic computers	1.106	76.2	1.130	1.098	17713.	56778.	82357.	0.	54409.
			4617.	28831.	308.	23330.	-28256.	424.	571.	1712.
363	Computer peripheral equip	1.067	56.4	1.090	1.050	22970.	29664.	56167.	0.	30729.
			2969.	20220.	185.	6475.	-25623.	519.	898.	1399.
364	Office mach, n.e.c. incl	1.013	64.9	1.017	1.011	1609.	2981.	4650.	0.	3110.
			255.	2012.	21.	714.	-1561.	1.	175.	951.
365	Automatic merchandis mach	0.995	75.5	0.994	0.995	254.	782.	1031.	0.	949.
			0.	635.	-8.	147.	-74.	0.	0.	8.
366	Commercial laundry equip	1.018	64.0	1.023	1.015	247.	438.	697.	0.	630.
			0.	369.	7.	69.	-74.	2.	0.	68.
367	Refrig & heating equipmen	1.072	32.3	1.093	1.029	17493.	8330.	27693.	0.	24248.
			1217.	3376.	66.	3737.	-3511.	86.	52.	501.
368	Measur & dispens pumps	0.993	99.2	0.993	0.993	10.	1245.	1246.	0.	1213.
			0.	1027.	-7.	218.	-26.	1.	1.	0.
369	Service ind mach, nec	1.073	69.3	1.094	1.064	1982.	4477.	6932.	64.	6873.
			0.	4300.	-1.	177.	-122.	2.	10.	551.
370	Transformers: power,distr	1.003	57.5	1.003	1.002	2269.	3072.	5355.	0.	4597.
			13.	2644.	71.	415.	-829.	17.	59.	189.
371	Switchgear&switchboard ap	0.981	30.9	0.976	0.993	5205.	2326.	7389.	0.	6455.
			104.	1736.	17.	486.	-951.	198.	97.	40.
372	Motors & generators	1.071	29.4	1.090	1.026	9506.	3967.	14432.	0.	11056.
			131.	1397.	-23.	2439.	-3353.	82.	16.	312.
373	Relays & industrial contr	1.131	22.4	1.159	1.034	8491.	2455.	12383.	0.	9716.
			0.	985.	24.	1470.	-2691.	93.	115.	160.
374	Carbon & graphite product	1.199	28.1	1.251	1.065	1238.	483.	2064.	0.	1764.
			0.	0.	14.	483.	-314.	2.	1.	0.
375	Elec indl apparatus, n.e.	0.995	65.2	0.994	0.996	906.	1698.	2591.	0.	2590.
			0.	1646.	15.	52.	-16.	61.	9.	36.
376	Household cooking equipme	1.013	90.6	1.014	1.013	509.	4884.	5463.	0.	3957.
			3327.	1319.	-9.	238.	-1497.	10.	0.	39.
377	Hhld refrig, freezers	1.008	93.9	1.009	1.008	332.	5138.	5516.	0.	5162.
			2997.	1478.	-20.	663.	-334.	2.	0.	50.
378	Household laundry equipme	0.986	92.3	0.985	0.986	295.	3543.	3783.	0.	3509.
			2894.	169.	-1.	480.	-273.	9.	0.	30.
379	Elec housewares & fans	0.994	85.9	0.993	0.994	686.	4174.	4830.	0.	2920.
			3461.	91.	-22.	622.	-1888.	4.	7.	85.
380	Hhld vacuum cleaners	0.997	93.8	0.997	0.997	140.	2106.	2239.	0.	1926.
			1615.	82.	1.	409.	-314.	0.	0.	7.
381	Household appliances,n.e.	0.985	56.1	0.980	0.989	1524.	1948.	3420.	0.	2680.
			1308.	328.	0.	312.	-740.	2.	1.	0.
382	Electric lamp bulbs & tub	0.922	35.2	0.899	0.963	2734.	1488.	3893.	0.	2869.
			1019.	0.	6.	469.	-1030.	2.	71.	517.
383	Lighting fixtures & equip	1.054	18.9	1.064	1.012	10232.	2385.	13300.	0.	10683.
			1269.	312.	41.	804.	-2658.	206.	0.	334.
384	Wiring devices	0.977	23.0	0.972	0.993	9635.	2870.	12211.	0.	8893.
			0.	24.	1.	2846.	-3319.	7.	53.	0.
385	Hhld audio & video equipm	0.939	89.8	0.933	0.940	3438.	30143.	31539.	0.	9342.
			26358.	715.	134.	3070.	-22331.	2.	22.	166.
386	Prerecorded records & tap	1.079	91.1	1.086	1.078	320.	3295.	3900.	0.	2572.
			2215.	0.	36.	1080.	-1364.	45.	15.	22.
387	Telephone & telegraph app	1.022	79.5	1.027	1.021	6770.	26285.	33799.	0.	26940.
			1795.	19530.	129.	4960.	-6988.	1306.	274.	357.
388	Communication equipment	1.118	64.8	1.156	1.098	11533.	21268.	36688.	0.	32076.
			1354.	12528.	392.	7386.	-5004.	3826.	1168.	268.
389	Electron tubes	0.930	24.0	0.915	0.979	4507.	1423.	5515.	0.	4012.
			0.	0.	18.	1423.	-1521.	224.	13.	41.
390	Semiconductors & related	1.479	33.1	1.629	1.175	40130.	19866.	88744.	0.	61140.
			0.	0.	165.	19866.	-27769.	444.	18.	50.
391	Electronic components,n.e	1.004	14.2	1.005	1.001	56678.	9408.	66354.	0.	52697.
			286.	0.	160.	9122.	-13817.	899.	256.	185.
392	Storage batteries	1.037	61.1	1.049	1.030	2159.	3387.	5752.	0.	4140.
			2636.	214.	-20.	537.	-1592.	50.	3.	40.
393	Primary batteries,dry&wet	0.976	87.1	0.973	0.976	272.	1840.	2061.	0.	1815.
			1340.	0.	-4.	500.	-242.	80.	2.	20.
394	Electric eq for internal	1.012	23.6	1.014	1.003	9885.	3045.	13081.	0.	8097.
			1366.	0.	-22.	1679.	-4962.	24.	2.	190.
395	Magnetic & optical record	0.974	34.4	0.967	0.988	5053.	2647.	7502.	0.	5361.
			292.	414.	-4.	1941.	-2137.	267.	177.	4.
396	Electrical mach,eq,suppli	0.990	80.3	0.988	0.991	1503.	6109.	7538.	0.	4807.
			1780.	1514.	66.	2815.	-2797.	593.	81.	255.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
397	Truck & bus bodies	1.058	59.9	1.077	1.045	3062.	4568.	8072.	0.	7845.
			0.	4398.	-14.	170.	-213.	22.	300.	0.
398	Truck trailers	1.028	96.7	1.029	1.028	202.	6009.	6384.	0.	6212.
			0.	5662.	47.	347.	-219.	149.	36.	0.
399	Motor vehicles & car bodi	1.050	96.0	1.052	1.050	10731.	258360.	282602.	0.	207366.
			123279.	115127.	5900.	19954.	-81136.	1229.	467.	6514.
400	Motor vehicle pts&accessor	1.042	22.0	1.051	1.011	102296.	28935.	136732.	0.	107820.
			5315.	0.	41.	23620.	-28953.	187.	52.	1987.
401	Aircraft	1.035	58.2	1.046	1.027	17490.	24348.	43303.	0.	40264.
			355.	10536.	133.	13457.	-3172.	16478.	437.	56.
402	Aircraft,missile engines	0.803	22.4	0.763	0.941	21862.	6313.	22632.	0.	17825.
			0.	381.	-61.	5932.	-4746.	8083.	611.	0.
403	Aircraft,missile eq,nec	0.782	34.6	0.723	0.894	18982.	10037.	22693.	0.	20327.
			0.	0.	29.	10037.	-2395.	7738.	567.	0.
404	Ship building & repairing	1.050	17.5	1.059	1.010	7529.	1600.	9586.	0.	9561.
			0.	656.	-5.	944.	-20.	6624.	113.	101.
405	Boat building & repairing	0.956	93.2	0.953	0.956	474.	6500.	6668.	0.	6034.
			5300.	531.	5.	669.	-639.	103.	46.	71.
406	Railroad equipment	1.085	65.0	1.112	1.071	2673.	4975.	8301.	0.	7159.
			0.	4236.	-13.	739.	-1129.	0.	36.	814.
407	Motorcycles,bicycles,&pts	1.059	86.2	1.067	1.057	623.	3894.	4783.	0.	2536.
			3062.	47.	13.	785.	-2260.	2.	0.	104.
408	Travel trailers & campers	1.031	92.5	1.033	1.030	183.	2264.	2522.	0.	2438.
			2017.	16.	-8.	231.	-76.	1.	0.	0.
409	Motor homes	1.006	97.4	1.006	1.006	75.	2851.	2943.	0.	2926.
			2851.	0.	-17.	0.	0.	0.	0.	0.
410	Transportation equip,n.e.	1.087	79.5	1.105	1.082	855.	3310.	4528.	0.	4318.
			1516.	1509.	34.	285.	-244.	410.	0.	203.
411	Search & navigation equip	0.969	33.4	0.961	0.987	20601.	10313.	29968.	0.	29166.
			51.	8417.	10.	1845.	-812.	15270.	1526.	77.
412	Lab apparatus & furniture	1.010	88.8	1.011	1.010	227.	1806.	2053.	0.	2056.
			0.	1804.	3.	2.	0.	42.	33.	138.
413	Mechanical measuring devi	1.018	63.9	1.024	1.015	7116.	12615.	20091.	0.	15932.
			96.	7973.	-2.	4546.	-4157.	488.	800.	405.
414	Environmental controls	0.962	5.8	0.959	0.998	3078.	190.	3143.	0.	2832.
			0.	0.	0.	190.	-311.	66.	0.	0.
415	Surgical & medical instru	1.008	62.1	1.010	1.006	6556.	10724.	17415.	0.	14742.
			88.	8474.	46.	2162.	-2719.	43.	100.	933.
416	Surgical appliances & sup	0.957	47.0	0.943	0.973	8440.	7483.	15233.	0.	14056.
			3466.	1651.	129.	2366.	-1306.	290.	297.	2201.
417	Dental equip & supplies	1.035	48.0	1.047	1.023	1186.	1095.	2362.	0.	2089.
			0.	739.	-2.	356.	-271.	2.	63.	28.
418	Watches, clocks, & part	1.023	71.4	1.029	1.021	959.	2394.	3431.	0.	660.
			2200.	0.	2.	194.	-2773.	5.	73.	103.
419	X-ray apparatus & tubes	0.984	82.6	0.982	0.985	697.	3310.	3944.	0.	2866.
			0.	2340.	7.	970.	-1085.	24.	132.	23.
420	Electromed & electrothera	1.001	74.6	1.001	1.001	2300.	6754.	9064.	0.	7467.
			0.	3883.	52.	2871.	-1649.	40.	972.	453.
421	Lab & optical instruments	1.023	88.1	1.025	1.022	1345.	9993.	11596.	0.	9083.
			136.	6448.	14.	3409.	-2527.	653.	178.	175.
422	Instrum to measure electr	1.089	79.8	1.107	1.085	2483.	9804.	13384.	0.	11404.
			0.	5908.	-62.	3896.	-1918.	1092.	50.	70.
423	Ophthalmic goods	1.023	91.8	1.025	1.023	360.	4028.	4489.	0.	2773.
			3568.	0.	-14.	460.	-1702.	7.	28.	201.
424	Photographic equip&suppli	0.961	48.9	0.949	0.975	15469.	14785.	29089.	0.	20586.
			3645.	7707.	309.	3433.	-8812.	1132.	53.	3176.
425	Jewelry, precious metal	1.074	97.6	1.076	1.074	188.	7721.	8492.	-167.	4786.
			7353.	0.	-49.	368.	-3490.	0.	0.	1.
426	Jewelers matl&lapidary wo	0.851	81.4	0.826	0.856	1712.	7484.	7821.	0.	2695.
			7196.	0.	-9.	288.	-5117.	0.	0.	0.
427	Silverware & plated ware	1.001	67.6	1.001	1.001	330.	690.	1021.	0.	633.
			609.	0.	-2.	81.	-386.	0.	1.	58.
428	Costume jewelry	1.030	98.7	1.031	1.030	32.	2428.	2535.	0.	1865.
			2299.	0.	5.	129.	-675.	0.	0.	0.
429	Musical instruments	1.040	79.6	1.048	1.038	424.	1656.	2164.	0.	1226.
			1158.	178.	9.	320.	-947.	0.	0.	155.
430	Games, toys, kids' vehicl	0.989	93.2	0.988	0.989	704.	9625.	10213.	0.	4414.
			9002.	0.	-5.	623.	-5794.	8.	7.	323.
431	Dolls	0.966	98.1	0.965	0.966	61.	3113.	3065.	0.	246.
			3015.	0.	-2.	98.	-2817.	0.	8.	0.
432	Sport & athletic goods, n	0.991	87.0	0.989	0.991	1754.	11688.	13315.	0.	9578.
			8492.	1485.	-37.	1711.	-3700.	7.	15.	608.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
433	Pens & mechanical pencils	0.985	61.6 1064.	0.980 0.	0.988 14.	775. 178.	1242. -593.	1987. 3.	0. 4.	1408. 31.
434	Lead pencils & art good	0.988	48.4 413.	0.985 0.	0.993 1.	485. 41.	454. -173.	928. 2.	0. 10.	756. 47.
435	Marking devices	0.949	4.0 18.	0.947 0.	0.998 20.	800. 15.	33. -55.	791. 1.	0. 22.	756. 108.
436	Carbon paper & ink ribbon	1.082	27.7 58.	1.103 0.	1.027 2.	960. 310.	368. -308.	1437. 4.	0. 9.	1131. 355.
437	Fasteners,buttons,needles	1.076	25.4 181.	1.094 0.	1.023 -1.	938. 138.	319. -363.	1353. 0.	0. 0.	989. 78.
438	Brooms & brushes	0.973	35.7 542.	0.965 0.	0.987 17.	1150. 96.	638. -447.	1740. 3.	0. 19.	1310. 126.
439	Hard surface floor coveri	0.940	4.4 0.	0.937 0.	0.997 -2.	1871. 87.	87. -177.	1841. 0.	0. 0.	1662. 0.
440	Burial caskets & vaults	0.992	0.0 0.	0.992 0.	1.000 5.	1177. 0.	0. 0.	1168. 0.	0. 0.	1173. 0.
441	Signs & advertis displa	1.023	51.2 0.	1.031 3709.	1.016 17.	3580. 54.	3763. -55.	7513. 1.	0. 4.	7475. 0.
442	Manufacturing, n.e.c.	1.092	52.7 3319.	1.123 1418.	1.063 14.	4899. 720.	5457. -4023.	11304. 96.	0. 4.	7295. 690.
443	Railroads & related servi	0.974	24.7 4248.	0.968 1456.	0.992 200.	32042. 4829.	10533. -192.	41469. 510.	0. 268.	41477. 543.
444	Hwy passenger transit	0.983	60.4 18403.	0.978 0.	0.987 0.	12112. 40.	18443. 0.	30040. 79.	0. 45.	30040. 4425.
445	Trucking & courier servic	1.005	27.1 29404.	1.006 5863.	1.002 800.	130088. 12976.	48243. -2420.	179200. 3994.	0. 176.	177580. 2296.
446	Warehousing	1.080	16.0 1628.	1.093 0.	1.014 0.	11848. 625.	2253. 0.	15236. 82.	0. 888.	15236. 335.
447	Water transportation	0.929	53.1 7293.	0.906 27.	0.949 40.	16896. 11845.	19165. 6133.	33501. 1435.	0. 114.	39674. 481.
448	Air transportation	1.023	57.2 43123.	1.031 2121.	1.018 200.	54542. 27502.	72746. -11327.	130267. 2562.	0. 671.	119140. 3656.
449	Pipelines,exc natural g	1.038	17.2 699.	1.045 0.	1.008 10.	6265. 605.	1304. 0.	7860. 29.	0. 0.	7870. 131.
450	Transportation services,	1.006	11.6 0.	1.006 0.	1.001 0.	9096. 1190.	1190. 0.	10346. 0.	0. 0.	10346. 0.
451	Arrangement of passenger	1.016	29.9 3360.	1.020 0.	1.006 0.	10949. 1312.	4672. 0.	15873. 0.	0. 0.	15873. 131.
452	Communications, other, in	1.022	44.7 90448.	1.029 6343.	1.013 0.	124575. 4018.	100809. 0.	230308. 1388.	0. 2034.	230308. 9909.
453	Cable & oth pay TV	1.011	72.3 26419.	1.013 0.	1.010 0.	10104. 0.	26419. 0.	36908. 0.	0. 2.	36908. 34.
454	Radio & TV broadcasting	1.005	6.9 2432.	1.005 0.	1.000 0.	32864. 0.	2432. 0.	35464. 0.	0. 0.	35464. 0.
455	Electric utilities	0.920	39.6 90661.	0.895 0.	0.957 0.	138712. 299.	90960. -960.	211187. 1839.	0. 553.	210227. 18154.
456	Natural gas transportatio	0.896	1.6 0.	0.894 0.	0.998 20.	15105. 239.	239. 0.	13745. 0.	-21. 0.	13744. 0.
457	Natural gas distribution	0.809	36.9 31507.	0.756 0.	0.902 0.	54547. 442.	31949. 0.	70017. 327.	0. 168.	70017. 4279.
458	Water supply & sewerage s	1.002	68.5 19129.	1.002 0.	1.001 0.	8831. 67.	19196. 0.	28071. 264.	0. 66.	28071. 2409.
459	Sanitary services, steam	1.015	18.1 6331.	1.018 0.	1.003 0.	28715. 10.	6341. 0.	35585. 203.	-2118. 530.	33467. 1803.
460	Wholesale trade	1.050	45.6 176438.	1.067 63706.	1.030 3000.	358758. 60005.	300149. 19400.	691904. 2859.	0. 1143.	714304. 13065.
461	Retail trade	1.010	92.2 545633.	1.010 20913.	1.010 0.	48206. 24.	566570. 0.	620685. 0.	0. 2.	620685. 521.
462	Banking	0.982	63.4 176901.	0.976 0.	0.985 0.	112989. 18619.	195520. -271.	302806. 0.	0. 1133.	302535. 6374.
463	Credit agencies	1.172	35.9 15332.	1.225 0.	1.076 0.	27990. 350.	15682. 0.	51167. 0.	0. 0.	51167. 202.
464	Security & commodity brok	1.195	35.4 36721.	1.255 0.	1.084 0.	76530. 5209.	41930. 0.	141508. 0.	0. 2.	141508. 6389.
465	Insurance carriers	1.092	82.3 165222.	1.109 0.	1.089 0.	36075. 2262.	167484. -4619.	222386. 16.	0. 2513.	217767. 633.
466	Insurance agents & broker	0.899	0.4 0.	0.899 0.	1.000 0.	80608. 315.	315. 0.	72787. 0.	0. 0.	72787. 0.
467	Owner-occupied dwelling	1.000	100.0 531242.	1.000 0.	1.000 0.	0. 0.	531242. 0.	531242. 0.	0. 0.	531242. 0.
468	Real estate	0.957	37.5 188148.	0.944 33747.	0.978 0.	371618. 977.	222872. 0.	568719. 483.	0. 3503.	568719. 12325.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
469	Royalties	0.995	47.6	0.994	0.997	35267.	32017.	66978.	0.	66967.
			4405.	0.	0.	27612.	-11.	0.	0.	0.
470	Hotels	0.992	36.7	0.989	0.996	39363.	22778.	61616.	0.	61616.
			22720.	0.	0.	58.	0.	913.	164.	5473.
471	Other lodging places	0.955	100.0	0.955	0.955	0.	13381.	12784.	-4428.	8356.
			13381.	0.	0.	0.	0.	0.	0.	0.
472	Laundry, cleaning, shoe rep	0.980	55.4	0.973	0.985	10672.	13270.	23458.	0.	23458.
			13270.	0.	0.	0.	0.	32.	11.	894.
473	Funeral services	1.025	100.0	1.025	1.025	0.	8407.	8616.	0.	8616.
			8407.	0.	0.	0.	0.	0.	0.	0.
474	Photo studios & oth misc	0.983	99.0	0.983	0.983	299.	28615.	28416.	0.	28416.
			28615.	0.	0.	0.	0.	0.	0.	27.
475	Electrical repair shops	1.017	24.7	1.021	1.005	17430.	5725.	23549.	0.	23549.
			5688.	0.	0.	37.	0.	8.	8.	2169.
476	Watch, clock, jewelry, furn	1.171	98.0	1.175	1.171	89.	4312.	5154.	0.	5154.
			4299.	0.	0.	13.	0.	8.	1.	41.
477	Beauty & barber shops	1.015	85.6	1.017	1.014	2983.	17724.	21012.	0.	21012.
			17724.	0.	0.	0.	0.	0.	0.	0.
478	Misc repair shops (mov	1.080	15.4	1.092	1.014	31481.	5726.	40178.	0.	40165.
			3887.	0.	0.	1839.	-13.	135.	15.	1067.
479	Services to dwellings & b	0.991	10.5	0.990	0.999	27861.	3278.	30858.	0.	30858.
			3217.	0.	0.	61.	0.	0.	186.	2140.
480	Personnel supply services	1.254	5.3	1.267	1.013	46546.	2617.	61645.	0.	60965.
			2509.	0.	0.	108.	-680.	473.	75.	3295.
481	Computer & data processin	1.213	9.6	1.233	1.020	132021.	14042.	177153.	0.	176923.
			3585.	5138.	0.	5319.	-230.	7467.	9704.	10388.
482	Detective & protective se	1.081	16.9	1.095	1.015	13822.	2815.	17987.	-239.	17748.
			2675.	0.	0.	140.	0.	60.	79.	1865.
483	Equipment rental & leasin	1.062	12.1	1.069	1.008	32977.	4534.	39831.	0.	39831.
			3549.	0.	0.	985.	0.	0.	2.	1397.
484	Photofinishing labs & com	1.003	29.3	1.004	1.001	12917.	5349.	18320.	0.	18289.
			5291.	0.	0.	58.	-31.	0.	0.	25.
485	Oth business services, in	1.093	4.0	1.097	1.004	94216.	3963.	107331.	-4710.	102614.
			3879.	0.	0.	84.	-7.	772.	246.	1513.
486	Management & consulting s	1.082	3.1	1.084	1.003	91884.	2959.	102591.	0.	101897.
			0.	0.	0.	2959.	-694.	3646.	852.	9900.
487	Testing & research labs	1.090	2.7	1.093	1.002	30245.	842.	33893.	0.	33514.
			0.	0.	0.	842.	-379.	8323.	6296.	997.
488	Advertising	0.994	1.0	0.994	1.000	165728.	1667.	166333.	0.	165352.
			862.	0.	0.	805.	-981.	52.	13.	1738.
489	Legal services	0.919	36.9	0.896	0.960	84580.	49491.	123261.	0.	122784.
			47329.	0.	0.	2162.	-477.	258.	554.	4376.
490	Engineering, architectural	0.952	24.3	0.941	0.985	77585.	24926.	97542.	-3241.	93878.
			0.	20246.	0.	4680.	-423.	2338.	107.	1040.
491	Account, audit, bookkeep, mi	1.055	2.6	1.056	1.001	62859.	1667.	68058.	0.	67881.
			1428.	0.	0.	239.	-177.	354.	8.	2059.
492	Eating & drinking place	0.956	83.5	0.949	0.957	55286.	279752.	320339.	-6777.	313562.
			279387.	0.	0.	365.	0.	477.	799.	3847.
493	Auto rental & leasing	1.019	29.8	1.023	1.007	41698.	17722.	60520.	0.	60520.
			17712.	0.	0.	10.	0.	401.	44.	1862.
494	Auto repair & services	0.968	67.0	0.959	0.973	46846.	95081.	137418.	0.	137412.
			95049.	0.	0.	32.	-6.	6.	28.	1792.
495	Auto parking, car washes	1.045	77.3	1.055	1.042	2991.	10157.	13740.	-180.	13560.
			10157.	0.	0.	0.	0.	0.	0.	906.
496	Motion pictures	0.998	33.0	0.998	0.999	30694.	15096.	45717.	0.	45612.
			9570.	0.	0.	5526.	-105.	287.	19.	63.
497	Video tape rental	1.113	100.0	1.113	1.113	0.	7611.	8470.	0.	8470.
			7603.	0.	0.	8.	0.	0.	0.	0.
498	Theatrical producers, ban	1.042	37.8	1.056	1.021	12834.	7803.	21511.	0.	21377.
			7687.	0.	0.	116.	-134.	125.	0.	34.
499	Bowling centers	0.851	99.7	0.851	0.851	6.	2143.	1829.	0.	1829.
			2143.	0.	0.	0.	0.	0.	0.	0.
500	Commercial sports, exc ra	1.487	26.9	1.615	1.138	5873.	2166.	11953.	0.	11953.
			2162.	0.	0.	4.	0.	0.	0.	0.
501	Racing	1.008	70.0	1.010	1.007	1757.	4101.	5903.	0.	5903.
			4101.	0.	0.	0.	0.	0.	0.	0.
502	Phys fitness facil, member	1.051	89.8	1.057	1.051	1555.	13694.	16032.	-18.	16014.
			13694.	0.	0.	0.	0.	1.	1.	2.
503	Oth amusement & recreatio	0.955	99.4	0.954	0.955	345.	57456.	55174.	-2326.	52848.
			57445.	0.	0.	11.	0.	105.	8.	219.
504	Physicians	0.993	99.6	0.993	0.993	1010.	251845.	251033.	0.	251033.
			251841.	0.	0.	4.	0.	0.	479.	530.

Appendix D continued. PRE-BALANCING ADJUSTMENTS TO THE INITIAL 1995 ESTIMATES

		OVERALL	%PRECO	Z	Z**A	NONPREC	PRECOS	CONTROL	ABPTOT	QBAL
			pce	gpfi	ven	exp	imp	defsum	ndfsum	slsum
506	Hospitals	0.990	99.7	0.990	0.990	1068.	312349.	310223.	-61700.	248510.
			312321.	0.	0.	28.	-13.	0.	1038.	29.
507	Nursing & personal care f	1.001	99.5	1.001	1.001	323.	63940.	64314.	0.	64314.
			63940.	0.	0.	0.	0.	0.	323.	0.
508	Home health care services	1.076	100.0	1.076	1.076	0.	34543.	37184.	-8183.	29001.
			34543.	0.	0.	0.	0.	0.	0.	0.
509	Veterinary services	1.047	81.1	1.056	1.045	1502.	6458.	8336.	0.	8336.
			6458.	0.	0.	0.	0.	8.	0.	31.
510	Oth medical & health serv	1.162	80.9	1.195	1.155	14061.	59529.	85534.	-3846.	81688.
			59529.	0.	0.	0.	0.	0.	2.	0.
511	Elementary & secondary sc	0.973	100.0	0.973	0.973	0.	24866.	24202.	-2958.	21244.
			24866.	0.	0.	0.	0.	0.	0.	0.
512	Colleges, universities, p	0.994	79.4	0.992	0.994	16744.	64619.	80843.	-28409.	52278.
			64187.	0.	0.	432.	-156.	61.	9773.	2301.
513	Libraries, corresp & voca	0.981	94.0	0.979	0.981	1104.	17225.	17973.	-1346.	16271.
			17191.	0.	0.	34.	-356.	8.	64.	129.
514	Business assoc & prof mem	0.929	23.9	0.913	0.979	12582.	3948.	15356.	0.	15356.
			3948.	0.	0.	0.	0.	0.	10.	334.
515	Labor organiz & civil, so	0.940	99.4	0.940	0.940	125.	20541.	19432.	0.	19432.
			20419.	0.	0.	122.	0.	0.	0.	0.
516	Religious organizations	1.003	100.0	1.003	1.003	0.	37007.	37122.	0.	37122.
			37007.	0.	0.	0.	0.	0.	0.	0.
517	Oth membership organizati	0.899	93.3	0.892	0.899	1754.	24323.	23433.	-90.	23343.
			24323.	0.	0.	0.	294.	171.	0.	0.
518	Job training & related se	1.007	73.8	1.008	1.006	2200.	6187.	8442.	0.	8442.
			6187.	0.	0.	0.	0.	4.	48.	695.
519	Child day care services	1.107	97.9	1.109	1.107	443.	20712.	23415.	0.	23415.
			20712.	0.	0.	0.	0.	0.	0.	443.
520	Residential care	1.070	94.4	1.074	1.070	1044.	17456.	19792.	0.	19792.
			17456.	0.	0.	0.	0.	0.	0.	1044.
521	Social services, nec	1.112	95.9	1.117	1.112	1511.	35105.	40724.	0.	40724.
			35105.	0.	0.	0.	0.	0.	3.	1428.
522	US postal service	0.989	14.5	0.987	0.998	47147.	8011.	54525.	0.	54525.
			7962.	0.	0.	49.	0.	1019.	321.	3046.
523	Federal electric utilitie	0.994	0.0	0.994	1.000	6987.	0.	6943.	0.	6943.
			0.	0.	0.	0.	0.	0.	0.	0.
524	Oth fed govt enterprise	0.929	0.0	0.929	1.000	9515.	0.	8842.	-236.	8606.
			0.	0.	0.	0.	0.	0.	0.	0.
525	Loc govt passenger transi	0.957	0.0	0.957	1.000	6818.	0.	6522.	0.	6522.
			0.	0.	0.	0.	0.	0.	0.	0.
526	St & loc elec utilities	1.039	0.0	1.039	1.000	20151.	0.	20930.	0.	20930.
			0.	0.	0.	0.	0.	0.	0.	0.
527	Oth loc & st govt enterpr	0.922	70.1	0.903	0.931	12370.	29007.	38162.	0.	38162.
			29007.	0.	0.	0.	0.	156.	44.	766.
528	Noncomparable imports	1.000	100.0	1.000	1.000	0.	48066.	48066.	47369.	0.
			0.	0.	0.	0.	-95435.	0.	0.	0.
529	Scrap (with diagonal offs	1.157	-4.7	1.149	0.993	8768.	-396.	9686.	-7727.	0.
			0.	0.	50.	2408.	-2009.	0.	0.	0.
530	Used & secondhand	0.916	84.7	0.904	0.918	6229.	34389.	37198.	-35241.	0.
			29056.	0.	200.	5545.	-2157.	894.	139.	4393.
531	General government indust	1.000	0.0	1.000	1.000	841013.	0.	840671.	0.	840671.
			0.	0.	0.	0.	0.	185707.	84342.	570964.
532	Rest of the world adj to	1.009	100.0	1.009	1.009	0.	76991.	77694.	-77611.	0.
			0.	0.	0.	76991.	-83.	0.	0.	0.
533	Household industry	0.999	100.0	0.999	0.999	0.	11857.	11845.	0.	11845.
			11857.	0.	0.	0.	0.	0.	0.	0.
536	Compensation of employees	0.968	0.0	0.968	1.000	4352997.	0.	4215400.	0.	4215400.
			0.	0.	0.	0.	0.	0.	0.	0.
537	Indirect business taxes	0.975	0.0	0.975	1.000	597575.	0.	582800.	0.	582800.
			0.	0.	0.	0.	0.	0.	0.	0.
538	Profit-type income, net i	0.999	-2.2	0.999	1.000	2524059.	-53271.	2467200.	0.	2467200.
			0.	0.	0.	0.	0.	0.	0.	0.