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A DATA BASE IMPROVEMENT FOR ANALYSIS OF U.S. IMPORTS AND EXPORTS:  
PRICE INDICES BY END-USE, 1958:1-1974:4

by

Sung Y. Kwack

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A Data Base Improvement for Analysis of U.S. Imports and Exports:  
Price Indices by End-Use, 1958:1-1974:4

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I. Disaggregation by end-use categories is desirable for use in empirical studies of U.S. exports and imports.<sup>1</sup> Value data for trade by end-use categories are readily available. However, end-use price (unit value) indices are only available from 1967:1. Consequently, empirical studies frequently are faced with a problem of how to obtain end-use price indices prior to 1967 and call for such price indices. This note presents price indices by end-use categories over 1958:1-1974:4 calculated in a consistent way, thereby improving the data base for analyzing U.S. trade behavior.

II. The interrelations between economic class and end-use trade for the year 1965 has been privately obtained from the Bureau of the Census.<sup>2</sup> Assuming the relations hold for other years, it is possible to calculate a consistent set of end-use price indices for periods prior to 1967 with the use of available price series for economic class.

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\*This paper represents the views of the author and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or other members of its staff.

The author is an economist, Division of International Finance, Board of Governors of the Federal Reserve System. He wants to acknowledge the assistance of Sam Parrillo for programming work and Ken Pannell for collection of data.

<sup>1</sup>End-use disaggregation is likely to reduce the errors of specification by making the identification of demand, namely consumer or producer demands, easier than other alternative disaggregation.

<sup>2</sup>Mr. Kwack gratefully acknowledges the assistance of the Foreign Trade Division, U.S. Bureau of the Census, which supplied the information to him in 1968, while working as a research associate at the Brookings Institution.

The following procedures were used in creating the end-use price indices for the period 1958:1-1974:4. First, because of limited information on the interrelations between economic class and end-use unit values, exports and imports are divided into three major categories:

(1) foods, feeds and beverages, automotive vehicles, consumer goods, and others, (2) industrial supplies and materials, and (3) capital goods except automotive. Consumer goods exports (imports) hereafter are defined as those other than both industrial supplies and materials and capital goods excluding automotive.

Second, the interrelations between economic class and end-use price indices for the year 1965, derived on the basis of the Census information, are as follows:

$$PXC = 0.288PXMF + 0.458PXCF + 0.254PXF$$

$$PXISM = 0.277PXCM + 0.391PXSM + 0.332PXF$$

$$PXCGEA = (XT-XC-XISM)/((XT/PXT)-(XC/PXC)-(XISM/PXISM))$$

$$PMC = 0.219PMF + 0.234PMCF + 0.028PMCM + 0.023PMSM + 0.496PMFM$$

$$PMISM = 0.317PMCM + 0.406PMSM + 0.277PMFM$$

$$PMCGEA = (MT-MC-MISM)/((MT/PMT)-(MC/PMC)-(MISM/PMISM))$$

where:

MC Import value of consumer goods including automotive and foods, feeds and beverages

MCGEA Import value of capital goods except automotive

MISM Import value of industrial supplies and materials

MT Import value, all commodities

PMC Price index (end-use) for imports of consumer goods including automotive and foods, feeds and beverages

PMCF Price index (economic class) for imports of crude foods

PMCGEA	Price index (end-use) for imports of capital goods except automotive
PMCM	Price index (economic class) for imports of crude materials
PMFM	Price index (economic class) for imports of finished manufactures
PMISM	Price index (end-use) for imports of industrial supplies and materials
PMMF	Price index (economic class) for imports of manufactured foods
PMSM	Price index (economic class) for imports of semi-manufactures
PMT	Price index for total imports
PXC	Price index (end-use) for exports of consumer goods including foods, feeds and beverages and automotive
PXCF	Price index (economic class) for exports of crude foods
PXCGEA	Price index (end-use) for exports of capital goods; except automotive
PXCM	Price index (economic class) for exports of crude materials
PXFM	Price index (economic class) for exports of finished manufactures
PXISM	Price index (end-use) for exports of industrial supplies and materials
PXMF	Price index (economic class) for exports of manufactured foods
PXSM	Price index (economic class) for exports of semi-manufactures
PXT	Price index for total exports
XC	Export value of consumer goods including foods, feeds and beverages, and automotive
XCGEA	Export value of capital goods, except automotive
XISM	Export value of industrial supplies and materials
XI	Export value, all commodities

Table 1  
Error Statistics, 1967:1-1974:4

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	<u>Mean Bias</u>	<u>Root Mean Squared Error</u>	<u>Correlation Coefficient</u>
PXC	0.021	0.087	0.994
PXISM	0.047	0.058	0.992
PXCGEA	-0.048	0.088	0.900
PMC	-0.053	0.068	0.991
PMISM	0.028	0.043	0.999
PMCGEA	0.126	0.160	0.912

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Note: Mean Bias =  $\frac{1}{n}(\Sigma P - \Sigma A)$  and Root Mean Squared Error  
=  $\sqrt{\frac{1}{n} \Sigma (P-A)^2}$ , where P is the calculated value, A is  
the actual value, and n is the sample size.

Third, using the relationships above and the available price data for economic class, the values of PXC, PXISM, PXCGEA, PMC, PMISM and PMCGEA are computed for the period 1958:1-1974:4. The calculated price indices are listed in Appendix A, and the sources of data used for the computation and published trade price indices by end-use are given in Appendix B.

III. It is natural to ask how well the computed end-use price indices hold for years other than 1965. For this purpose, the calculated values of the price indices are compared to those published by the Bureau of the Census over 1967:1-1974:4. The mean bias, root mean squared error, and correlation coefficient given in Table 1 summarize the errors of the computed values compared with the actual. As indicated by Table 1 and Figures 1-6 in the appendix, the computed indices seem to move very closely with the actual values at least up to 1972:4. The index for capital goods imports is the least satisfactory. Considering that coverage in the compilation of the actual price index for capital goods imports changes frequently and the calculated values are derived residually, the discrepancy between actual and computed values is not surprising. Consequently, the price index for a particular end-use group can be approximately served by the series which combines the computed values for the period 1958:1-1966:4 and the officially published values for the period 1967:1-1974:4. The combined price data are presented in Table 2.

Table 2

Combined End-Use Price Indices, 1958:1-1974:4

I. Export Price Indices

(1967=1.00)

	PXT	PXC	PXISM	PXCGEA
1	0.905999	0.916914	0.957059	0.832916
2	0.893999	0.922446	0.935971	0.810852
3	0.890999	0.915463	0.934942	0.810836
4	0.896999	0.914789	0.945055	0.813700
5	0.902999	0.914161	0.949600	0.835254
6	0.899999	0.899866	0.949406	0.842073
7	0.899999	0.890484	0.950616	0.851409
8	0.905999	0.890297	0.957184	0.863073
9	0.908999	0.891879	0.958494	0.864623
10	0.905999	0.895824	0.955040	0.858338
11	0.911999	0.898220	0.954731	0.872801
12	0.907999	0.894252	0.948182	0.871472
13	0.913999	0.905729	0.954192	0.873038
14	0.927999	0.914154	0.976983	0.889424
15	0.922999	0.911717	0.967029	0.885226
16	0.930999	0.920011	0.969022	0.900482
17	0.927999	0.914412	0.967642	0.904693
18	0.913999	0.913333	0.949813	0.880250
19	0.910999	0.913428	0.937279	0.878319
20	0.913999	0.925585	0.930989	0.881809
21	0.917999	0.934130	0.937500	0.878989
22	0.914999	0.933294	0.933662	0.872226
23	0.911999	0.931739	0.927922	0.868890
24	0.912999	0.925878	0.934560	0.869662
25	0.916999	0.938500	0.929386	0.876228
26	0.913999	0.938212	0.923995	0.872931
27	0.919999	0.933434	0.936883	0.882930
28	0.931999	0.944596	0.958568	0.884360
29	0.956999	0.954958	0.989674	0.926313
30	0.952999	0.944784	0.986588	0.928241
31	0.950999	0.944489	0.980974	0.927418
32	0.946999	0.940672	0.972409	0.926768
33	0.964999	0.963618	1.00118	0.931651
34	0.974999	0.965344	1.01236	0.951589
35	0.988999	1.00142	1.01048	0.949923
36	1.00800	1.02124	1.01497	0.983242
37	1.00400	0.995114	1.01451	1.00347
38	0.995999	1.00939	1.00150	0.975655
39	0.995999	0.993767	0.997497	0.996519
40	1.00400	1.00170	0.986492	1.02434
41	0.994999	0.975678	1.00450	1.00844
42	1.01900	0.975796	0.986492	1.10581
43	1.01300	1.00377	0.967482	1.07799
44	1.02100	1.00866	0.966462	1.09865
45	1.03800	1.01692	0.975486	1.11475
46	1.03400	1.02042	0.975486	1.11773
47	1.05000	1.04068	0.991494	1.12965
48	1.06400	1.06342	1.01351	1.19423
49	1.09600	1.07326	1.01651	1.21112
50	1.10700	1.06357	1.04652	1.22603
51	1.11100	1.06868	1.04952	1.23199
52	1.11500	1.07661	1.05653	1.22801
53	1.15000	1.11314	1.05753	1.28465
54	1.14500	1.11232	1.06153	1.26974
55	1.13400	1.12581	1.07253	1.20914
56	1.14800	1.12443	1.04852	1.26577
57	1.16400	1.13253	1.07253	1.28961
58	1.17200	1.14402	1.08454	1.28763
59	1.17400	1.15893	1.09555	1.27173
60	1.21200	1.23212	1.10955	1.28961
61	1.25900	1.30807	1.15858	1.29160
62	1.31800	1.39565	1.19860	1.33432
63	1.40800	1.58716	1.28264	1.32637
64	1.50500	1.68606	1.39069	1.38400
65	1.62800	1.80537	1.57879	1.47441
66	1.68700	1.80292	1.76588	1.49329
67	1.79900	1.86007	1.98599	1.57275
68	1.91100	2.06020	2.12606	1.60755

II. Import Price Indices

	PMT	PMC	PMISM	PMGEA
1	0.979999	0.964765	0.989632	1.03229
2	0.968999	0.955862	0.975621	1.04487
3	0.958999	0.945364	0.967928	1.01178
4	0.951999	0.942473	0.966382	0.875387
5	0.941999	0.922361	0.968283	0.813566
6	0.942999	0.917291	0.970116	0.877874
7	0.944999	0.916499	0.977661	0.872144
8	0.958999	0.930899	0.990324	0.860069
9	0.960999	0.925983	0.999563	0.846648
10	0.961999	0.922474	1.00477	0.884117
11	0.962999	0.927796	1.00432	0.858915
12	0.951999	0.924459	0.988691	0.826388
13	0.946999	0.923534	0.982126	0.840504
14	0.945999	0.921683	0.976957	0.839657
15	0.945999	0.916503	0.978957	0.884170
16	0.944999	0.914459	0.982393	0.850015
17	0.931999	0.904008	0.963253	0.850512
18	0.930999	0.906639	0.958480	0.845546
19	0.921999	0.900054	0.948766	0.843021
20	0.919999	0.901208	0.943726	0.863610
21	0.923999	0.906143	0.947845	0.841330
22	0.927999	0.914909	0.945964	0.858908
23	0.933999	0.922910	0.950044	0.866157
24	0.941999	0.928716	0.957975	0.909134
25	0.957999	0.954990	0.967213	0.898893
26	0.962999	0.964968	0.967372	0.910252
27	0.957999	0.960170	0.964343	0.888092
28	0.960999	0.960026	0.970126	0.893815
29	0.964999	0.962036	0.974928	0.906770
30	0.956999	0.945166	0.976701	0.884480
31	0.962999	0.954354	0.979760	0.896939
32	0.975999	0.967576	0.989701	0.939001
33	0.976999	0.975474	0.988810	0.917199
34	0.991999	0.999830	0.997770	0.923514
35	0.990999	0.988714	1.00093	0.947762
36	1.00500	1.00210	1.00047	0.997647
37	1.00500	1.00280	1.00275	1.02678
38	0.998999	1.00276	0.992750	1.01061
39	0.999999	1.00463	0.996749	0.990397
40	0.995999	0.989806	1.00775	0.972296
41	1.00400	1.01016	1.01674	0.913590
42	1.01500	1.00473	1.01674	1.06821
43	1.00700	1.02341	1.00275	0.935824
44	1.02000	1.05732	1.00575	0.886304
45	1.02900	1.05913	1.01275	0.936834
46	1.03300	1.07594	1.00975	0.921675
47	1.04300	1.10098	1.00975	0.899442
48	1.08200	1.15939	1.03074	0.898431
49	1.09700	1.19741	1.03774	0.900453
50	1.10500	1.19146	1.04674	0.934813
51	1.13100	1.19432	1.06473	1.07933
52	1.13900	1.21021	1.06173	1.08944
53	1.16400	1.24404	1.07073	1.13188
54	1.16700	1.26362	1.07473	1.06720
55	1.17700	1.26632	1.09173	1.08135
56	1.19400	1.29479	1.10572	1.03183
57	1.21600	1.32007	1.11972	1.05811
58	1.25500	1.38273	1.14871	1.08438
59	1.27200	1.38489	1.16271	1.17231
60	1.30200	1.42753	1.18070	1.19252
61	1.35100	1.47292	1.22969	1.27943
62	1.46600	1.62033	1.31067	1.38959
63	1.52100	1.68519	1.39765	1.34411
64	1.65400	1.75599	1.60460	1.43608
65	1.92500	1.76727	2.31042	1.39464
66	2.19200	1.90240	2.77630	1.49671
67	2.33900	2.02248	2.91727	1.58565
68	2.42200	2.11647	2.95626	1.64628



Appendices

A - Computed End-Use Price Indices, 1958:1-1974:4

B - Variable Notations, Sources, and Published  
Data, 1958:1-1974:4

Figures 1-6: Actual and Computed Price Indices,  
1967:1-1974:4

Appendix A

Calculated End-Use Price Indices, 1958:1-1974:4

I. Export Price Indices (1967=1.00)

	PXT	PXC	PXISM	PXCGEA
1	0.905999	0.916914	0.957059	0.832916
2	0.893999	0.922446	0.935971	0.810852
3	0.890999	0.915463	0.934942	0.810836
4	0.896999	0.914789	0.945055	0.813700
5	0.902999	0.914161	0.949600	0.835254
6	0.899999	0.899866	0.949406	0.842073
7	0.899999	0.890484	0.950616	0.851409
8	0.905999	0.890297	0.957184	0.863073
9	0.908999	0.891879	0.958494	0.864623
10	0.905999	0.895828	0.955040	0.858338
11	0.911999	0.898220	0.954731	0.872801
12	0.907999	0.894252	0.948182	0.871472
13	0.913999	0.905729	0.954192	0.873038
14	0.927999	0.914154	0.976983	0.889424
15	0.922999	0.911717	0.967029	0.882526
16	0.930999	0.920011	0.969022	0.900482
17	0.927999	0.914412	0.967642	0.904693
18	0.913999	0.913333	0.949813	0.880250
19	0.910999	0.913428	0.937279	0.878319
20	0.913999	0.925585	0.930989	0.881809
21	0.917999	0.934130	0.937500	0.878989
22	0.914999	0.933294	0.933662	0.872226
23	0.911999	0.931739	0.927922	0.868890
24	0.912999	0.925878	0.934560	0.869662
25	0.916999	0.938500	0.929386	0.876228
26	0.913999	0.938212	0.923995	0.872931
27	0.919999	0.933434	0.936883	0.882930
28	0.931999	0.944596	0.958568	0.884360
29	0.956999	0.954958	0.989674	0.926313
30	0.952999	0.944784	0.986588	0.928241
31	0.950999	0.944489	0.980974	0.927418
32	0.946999	0.940672	0.972409	0.928768
33	0.964999	0.963618	1.00118	0.931651
34	0.974999	0.965344	1.01236	0.951589
35	0.988999	1.00142	1.01048	0.949923
36	1.00800	1.02124	1.01497	0.983242
37	1.00400	1.01101	1.01458	0.985633
38	0.995999	1.00588	1.00214	0.979228
39	0.995999	0.999677	0.991827	0.996069
40	1.00400	0.983400	0.991444	1.04521
41	0.994999	0.990083	0.987107	1.00829
42	1.01900	1.00425	1.00306	1.05158
43	1.01300	0.979682	0.989639	1.07935
44	1.02100	0.985883	0.997483	1.09620
45	1.03800	1.01343	1.00329	1.09318
46	1.03400	1.01123	0.999935	1.10037
47	1.05000	1.01209	1.01973	1.13186
48	1.08400	1.01396	1.04596	1.23078
49	1.09600	1.02826	1.05773	1.21814
50	1.10700	1.03031	1.08055	1.23045
51	1.11100	1.05166	1.08477	1.21109
52	1.11500	1.06704	1.08858	1.20314
53	1.15000	1.09865	1.11285	1.24320
54	1.14500	1.10649	1.11428	1.21953
55	1.13400	1.09200	1.10926	1.21152
56	1.14800	1.07636	1.11301	1.27240
57	1.16400	1.09182	1.13206	1.27876
58	1.17200	1.10427	1.14588	1.28288
59	1.17400	1.11804	1.15716	1.26381
60	1.21200	1.20028	1.18234	1.25574
61	1.25900	1.31362	1.25342	1.19909
62	1.31800	1.40399	1.34037	1.20175
63	1.40800	1.66870	1.41683	1.15314
64	1.50500	1.89685	1.49886	1.14367
65	1.62800	2.05572	1.66903	1.24406
66	1.68700	2.04194	1.80894	1.30485
67	1.79900	2.02729	2.01586	1.43827
68	1.91100	2.22326	2.12662	1.49855

II. Import Price Indices (1967=1.00)

	PMT	PMC	PMISM	PMCGEA
1	0.970099	0.964765	0.989632	1.03229
2	0.968999	0.955662	0.975621	1.04487
3	0.958999	0.945364	0.967928	1.01178
4	0.951999	0.942473	0.966382	0.875387
5	0.941999	0.922361	0.966283	0.813566
6	0.942999	0.917291	0.970116	0.877874
7	0.944999	0.916499	0.977661	0.872144
8	0.958999	0.930899	0.990324	0.860069
9	0.960999	0.925983	0.999563	0.846648
10	0.961999	0.922474	1.00477	0.884117
11	0.962999	0.927796	1.00432	0.856915
12	0.951999	0.924859	0.988691	0.826388
13	0.948999	0.923538	0.982126	0.840504
14	0.945999	0.921663	0.976957	0.839657
15	0.945999	0.916503	0.978957	0.884170
16	0.944999	0.914459	0.982393	0.850015
17	0.931999	0.904008	0.963253	0.850512
18	0.930999	0.908639	0.958480	0.845546
19	0.921999	0.900054	0.946766	0.843021
20	0.919999	0.901208	0.943726	0.863610
21	0.923999	0.906143	0.947845	0.841330
22	0.927999	0.914909	0.945964	0.858908
23	0.933999	0.922910	0.950044	0.866157
24	0.941999	0.928718	0.957975	0.909134
25	0.957999	0.954990	0.967213	0.898893
26	0.962999	0.964968	0.967372	0.910652
27	0.957999	0.960170	0.964343	0.888092
28	0.960999	0.960026	0.970126	0.893815
29	0.964999	0.962036	0.974928	0.906770
30	0.956999	0.945166	0.976701	0.884480
31	0.962999	0.954354	0.979760	0.896939
32	0.975999	0.967576	0.989701	0.939001
33	0.976999	0.975474	0.988810	0.917199
34	0.991999	0.999830	0.997770	0.923514
35	0.990999	0.988714	1.00093	0.947762
36	1.00500	1.00210	1.00947	0.997847
37	1.00500	1.00459	1.00530	1.00548
38	0.998999	0.998304	0.995820	1.01873
39	0.999999	1.00065	0.997651	1.00629
40	0.995999	0.996141	1.00122	0.968903
41	1.00400	1.00052	1.00954	0.993868
42	1.01500	1.01287	1.01458	1.02984
43	1.00700	1.01065	1.00464	0.996208
44	1.02000	1.02448	1.01132	1.03418
45	1.02900	1.02823	1.03657	0.999540
46	1.03300	1.03375	1.03391	1.02496
47	1.04300	1.04265	1.03825	1.06620
48	1.08200	1.09121	1.06995	1.07750
49	1.09700	1.11908	1.07704	1.06392
50	1.10500	1.13604	1.07816	1.04917
51	1.13100	1.16078	1.10417	1.08086
52	1.13900	1.16864	1.10702	1.10619
53	1.16400	1.18570	1.12237	1.21137
54	1.16700	1.17917	1.12597	1.28169
55	1.17700	1.18397	1.14073	1.30969
56	1.19400	1.19770	1.15738	1.34760
57	1.21600	1.21966	1.17181	1.36110
58	1.25500	1.26324	1.20146	1.43345
59	1.27200	1.29092	1.21479	1.41291
60	1.30200	1.32993	1.24076	1.40091
61	1.35100	1.37455	1.29650	1.44463
62	1.46600	1.49394	1.40418	1.55678
63	1.52100	1.55511	1.47643	1.52967
64	1.65400	1.66072	1.66920	1.56986
65	1.92500	1.73038	2.31064	1.50897
66	2.19200	1.88469	2.75587	1.57957
67	2.33900	2.01262	2.87573	1.68605
68	2.42200	2.10969	2.91731	1.74111

Appendix B

Variable Notations, Sources, and Published Data 1958:1-1974:4

I. Notations

MC	Imports of consumer goods including auto vehicles and foods, feeds and beverages
MCGEA	Imports of capital goods, except automotive
MISM	Imports of industrial supplies and materials
MT	Imports, all commodities
PMC	Unit value index (end-use) for imports of consumer goods
PMCF	Unit value index (economic class) for imports of crude foods
PMCGEA	Unit value index (end-use) for imports of capital goods except automotive
PMCM	Unit value index (economic class) for imports of crude materials
PMFM	Unit value index (economic class) for imports of finished manufactures
PMISM	Unit value index (end-use) for imports of industrial supplies and materials
PMTF	Unit value index (economic class) for imports of manufactured foods
PMSM	Unit value index (economic class) for imports of semi-manufactures
PMT	Unit value index for total imports
PXC	Unit value index (end-use) for exports of consumer goods, including automotive and foods, feeds and beverages
PXCF	Unit value index (economic class) for exports of crude foods
PXCGEA	Unit value index (end-use) for exports of capital goods except automotive
PXCM	Unit value index (economic class) for exports of crude materials
PXFM	Unit value index (economic class) for exports of finished manufactures

PXISM	Unit value index (end-use) for exports of industrial supplies and materials
PXMF	Unit value index (economic class) for exports of manufactured foods
PXSM	Unit value index (economic class) for exports of semi-manufactures
PXT	Unit value index for total exports
XC	Exports of consumer goods including automotive and foods, feeds and beverages
XCGEA	Exports of capital goods, except automotive
XISM	Exports of industrial supplies and materials
XT	Exports, all commodities

II. Sources (Bureau of the Census, Department of Commerce)

1. U.S. Exports & Imports: Classified by OBE End-Use Commodity Categories, 1923-1968, 1970
2. Indexes of U.S. Exports and Imports by Economic Class: 1919 to 1971, 1972
3. Survey of Current Business, various issues
4. Trends in U.S. Foreign Trade, various issues
5. Highlights of U.S. Export and Import Trade, FT 990, various issues
6. Indexes and Related Data for U.S. General Imports of All Commodities, various computer print outputs
7. Indexes and Related Data for U.S. Domestic Exports of All Commodities, various computer print outputs

III. Values of Exports by End-Use, 1958:1-1974:4

	XT	XCGEA	XISM	XC
1	17,6240	4,80400	6,48800	6,33200
2	18,3080	4,92000	6,54400	6,84400
3	16,7360	4,54800	6,11200	6,07600
4	18,9840	4,73200	6,60000	7,65200
5	16,5680	4,38800	5,62000	6,56000
6	17,8840	4,81600	6,00400	7,06400
7	17,5040	4,50800	6,19600	6,80000
8	18,6160	4,75600	6,76400	7,09600
9	19,6240	4,99600	7,58400	7,04400
10	21,5320	5,88400	8,04400	7,60400
11	19,7840	5,51600	7,76400	6,50400
12	21,4600	5,64800	8,30800	7,50400
13	21,1000	5,72000	7,97600	7,40400
14	20,7160	6,12000	7,45200	7,14400
15	19,8680	5,64800	7,51200	6,70800
16	22,4640	6,15200	7,88000	8,43200
17	21,1920	6,36800	6,88400	7,94000
18	23,3880	7,07600	7,36800	8,94400
19	20,8520	5,98400	7,23600	7,43200
20	21,6200	6,34400	7,04400	8,23200
21	21,0200	6,28000	6,84400	7,89600
22	24,4560	7,02800	7,79200	9,63600
23	22,3280	6,23200	7,90400	8,19200
24	25,7480	6,87600	8,74800	10,1240
25	25,7720	7,32000	8,57200	9,88000
26	26,5560	7,57200	8,92000	10,0640
27	25,0560	6,98000	9,06400	9,01200
28	29,2160	7,97600	10,1800	11,0600
29	23,3440	6,98400	7,57600	8,78400
30	29,5760	8,88000	9,75200	10,9440
31	26,5760	7,72800	8,71600	10,1320
32	30,5840	8,56400	9,62400	12,3960
33	29,0280	8,65200	9,02000	11,3560
34	31,2920	9,20000	9,53600	12,5560
35	29,2000	8,38800	9,81200	11,0000
36	32,2000	9,33200	10,0880	12,7800
37	31,4200	9,88400	9,96000	11,5760
38	32,5720	10,4440	10,4360	11,6920
39	29,8400	9,34000	9,64800	10,8520
40	32,6560	9,98000	9,84400	12,8320
41	32,6760	10,5960	9,92000	12,1600
42	35,2680	11,6360	11,2040	12,4280
43	34,3240	10,9320	11,8720	11,5200
44	36,2760	11,1240	11,0240	14,1280
45	30,9040	11,2040	8,49600	11,2040
46	41,3280	13,0520	13,0400	15,2360
47	37,7600	12,0040	12,4280	13,3280
48	42,0320	13,1320	13,1520	15,7480
49	41,3680	14,0200	13,3280	14,0200
50	45,4240	15,1840	14,5600	15,6800
51	41,0880	13,5880	13,2960	14,2040
52	45,0280	14,6720	14,0000	16,3560
53	44,9840	15,8520	12,9680	16,1640
54	46,2400	15,7640	13,4280	17,0480
55	44,3400	14,4720	13,7800	16,0880
56	40,9840	14,3360	10,5920	16,0560
57	48,1080	17,0160	13,9440	17,1480
58	48,7160	16,8000	13,1160	18,8000
59	46,8520	15,4320	13,4080	18,0120
60	55,3960	17,4360	15,4560	22,5040
61	62,6080	19,8680	17,0400	25,7000
62	70,2160	21,8240	19,1440	29,2480
63	68,9080	20,6200	19,9120	28,3760
64	83,5240	23,7560	23,9800	36,7880
65	90,9080	27,1240	26,7080	37,0760
66	101,128	30,3560	32,0600	38,7120
67	93,4480	28,5280	30,9040	34,0160
68	108,540	33,6760	31,9080	42,9560

IV. Values of Imports by End-Use, 1958:1-1974:4

	MT	MCGEA	MISM	MC
1	13.1200	0.412000	7.04400	5.66400
2	13.1320	0.488000	6.73200	5.91200
3	12.8960	0.448000	6.60400	5.84400
4	14.5280	0.492000	7.40000	6.53600
5	14.7600	0.532000	7.98800	6.24000
6	15.8640	0.652000	8.48000	6.73200
7	15.8480	0.556000	8.09200	7.20000
8	16.2640	0.624000	8.80800	6.85200
9	15.7040	0.596000	8.53200	6.57600
10	15.7240	0.620000	8.21600	6.88800
11	14.5920	0.512000	7.54000	6.54000
12	14.2680	0.520000	7.26000	6.48800
13	13.9360	0.604000	7.26800	6.06400
14	14.1200	0.640000	7.52000	5.96000
15	14.9840	0.776000	7.76800	6.44000
16	15.9960	0.752000	8.30000	6.94400
17	15.9200	0.804000	8.59600	6.52000
18	16.6120	0.808000	8.83200	6.97200
19	16.2040	0.668000	8.39200	7.14400
20	17.0760	0.756000	8.47200	7.84800
21	15.9240	0.764000	8.33200	6.82800
22	17.1480	0.856000	9.06800	7.22400
23	17.5080	0.768000	9.04000	7.70000
24	18.2440	0.904000	9.06000	8.28000
25	17.5600	0.972000	9.16400	7.42400
26	18.4920	1.032000	9.55600	7.90400
27	18.7200	1.036000	9.62800	8.05400
28	20.2240	1.116000	9.90800	9.20000
29	18.4880	1.220000	9.91600	7.35200
30	21.9960	1.508000	11.62800	8.86000
31	21.9680	1.440000	11.16000	9.36800
32	23.6280	1.668000	11.39200	10.56800
33	23.6480	1.844000	11.42400	10.38000
34	25.4120	2.116000	12.47600	10.82000
35	26.2640	2.164000	12.52400	11.47600
36	27.1480	2.416000	12.12800	12.60400
37	26.5440	2.452000	12.06800	12.02400
38	26.4240	2.392000	11.85600	12.17600
39	25.6880	2.292000	11.06800	12.32800
40	28.9040	2.388000	12.42800	14.08800
41	31.0560	2.680000	14.04400	14.33200
42	33.0240	2.732000	14.37200	15.92000
43	33.8280	2.768000	14.28400	16.77600
44	34.9960	2.944000	13.93600	18.11600
45	29.6360	2.632000	12.13200	14.87200
46	39.1240	3.596000	15.66400	19.86400
47	36.7640	3.320000	14.41200	19.03200
48	38.6480	3.324000	14.43200	20.89200
49	37.8120	3.692000	14.59600	19.52400
50	40.2840	3.916000	15.04000	21.32800
51	39.5160	3.700000	14.96000	20.85600
52	42.2400	3.824000	15.87200	22.54400
53	42.0680	4.040000	15.41600	22.81200
54	48.0480	4.396000	18.04800	25.60400
55	47.1520	4.172000	17.93200	25.04800
56	45.1400	3.904000	16.48400	24.75200
57	53.2040	5.484000	17.88000	29.84000
58	54.9440	5.588000	19.92000	29.43600
59	54.1040	5.288000	20.12800	28.68800
60	59.9680	5.932000	22.08400	31.95200
61	63.8600	6.792000	23.96400	33.10400
62	69.1320	7.652000	25.44400	36.03600
63	67.7400	7.660000	26.11600	33.96400
64	75.7440	8.008000	30.64400	37.09200
65	84.6920	8.324000	35.96000	37.40800
66	103.308	9.864000	51.85600	41.56800
67	106.456	10.052000	55.98000	40.42400
68	109.432	9.944000	58.57600	40.91200

V. Published Export Price Indices by End-Use, 1958:1-1974:4

	PXT	PXC	PXISM	PXCGEA
1	0.905999			
2	0.893999			
3	0.890999			
4	0.896999			
5	0.902999			
6	0.898999			
7	0.899999			
8	0.905999			
9	0.908999			
10	0.905999			
11	0.911999			
12	0.907999			
13	0.913999			
14	0.927999			
15	0.922999			
16	0.930999			
17	0.927999			
18	0.913999			
19	0.910999			
20	0.913999			
21	0.917999			
22	0.914999			
23	0.911999			
24	0.912999			
25	0.916999			
26	0.913999			
27	0.919999			
28	0.931999			
29	0.956999			
30	0.952999			
31	0.950999			
32	0.946999			
33	0.964999			
34	0.974999			
35	0.988999			
36	1.00800			
37	1.00400	0.995114	1.01451	1.00347
38	0.995999	1.00939	1.00150	0.975655
39	0.995999	0.993767	0.997497	0.996519
40	1.00400	1.00170	0.986492	1.02434
41	0.994999	0.975678	1.00450	1.00844
42	1.01900	0.975796	0.986492	1.10581
43	1.01300	1.00377	0.967482	1.07799
44	1.02100	1.00866	0.966482	1.09885
45	1.03800	1.01692	0.975486	1.11475
46	1.03400	1.02042	0.975486	1.11773
47	1.05000	1.04066	0.991494	1.12965
48	1.06400	1.06342	1.01351	1.19423
49	1.09600	1.07326	1.01651	1.21112
50	1.10700	1.06357	1.04652	1.22603
51	1.11100	1.06868	1.04952	1.23199
52	1.11500	1.07661	1.05653	1.22801
53	1.15000	1.11314	1.05753	1.28465
54	1.14500	1.11232	1.06153	1.26974
55	1.13400	1.12581	1.07253	1.20914
56	1.14800	1.12443	1.04852	1.26577
57	1.16400	1.13253	1.07253	1.28961
58	1.17200	1.14402	1.08454	1.28763
59	1.17400	1.15893	1.09555	1.27173
60	1.21200	1.23212	1.10955	1.28961
61	1.25900	1.30807	1.15858	1.29160
62	1.31800	1.39565	1.19860	1.33432
63	1.40800	1.58718	1.28264	1.32637
64	1.50500	1.68606	1.39009	1.38400
65	1.62800	1.80537	1.57879	1.47441
66	1.68700	1.80292	1.76588	1.49329
67	1.79900	1.86007	1.98599	1.57575
68	1.91100	2.06020	2.12606	1.60755



VI. Published Import Price Indices by End-Use, 1958:1-1974:4

	PMT	PMC	PMISM	PMCGEA
1	0.979999			
2	0.968999			
3	0.958999			
4	0.951999			
5	0.941999			
6	0.942999			
7	0.944999			
8	0.958999			
9	0.960999			
10	0.961999			
11	0.962999			
12	0.951999			
13	0.948999			
14	0.945999			
15	0.945999			
16	0.944999			
17	0.931999			
18	0.930999			
19	0.921999			
20	0.919999			
21	0.923999			
22	0.927999			
23	0.933999			
24	0.941999			
25	0.957999			
26	0.962999			
27	0.957999			
28	0.960999			
29	0.964999			
30	0.956999			
31	0.962999			
32	0.975999			
33	0.976999			
34	0.991999			
35	0.990999			
36	1.00500			
37	1.00500			
38	0.998999	1.00280	1.00275	1.02678
39	0.999999	1.00276	0.992750	1.01061
40	0.995999	1.00463	0.996749	0.990397
41	1.00400	0.989806	1.00775	0.972206
42	1.01500	1.01016	1.01674	0.913590
43	1.00700	1.00473	1.01674	1.06821
44	1.02000	1.02341	1.00275	0.935824
45	1.02900	1.05732	1.00575	0.866304
46	1.03300	1.05913	1.01275	0.936834
47	1.04300	1.07594	1.00975	0.921675
48	1.08200	1.10098	1.00975	0.899442
49	1.09700	1.15939	1.03074	0.898431
50	1.10500	1.19741	1.03774	0.900453
51	1.13100	1.19146	1.04674	0.934813
52	1.13900	1.19432	1.06473	1.07933
53	1.16400	1.21021	1.06173	1.08944
54	1.16700	1.24404	1.07073	1.13188
55	1.17700	1.26362	1.07473	1.06720
56	1.19400	1.26632	1.09173	1.08135
57	1.21600	1.29479	1.10572	1.03183
58	1.25500	1.32007	1.11972	1.05811
59	1.27200	1.38273	1.14871	1.08438
60	1.30200	1.38489	1.16271	1.17231
61	1.35100	1.42753	1.18070	1.19252
62	1.46600	1.47292	1.22969	1.27943
63	1.52100	1.62033	1.31067	1.38959
64	1.65400	1.68519	1.39765	1.34411
65	1.92500	1.75599	1.60400	1.43608
66	2.19200	1.76727	2.31042	1.39464
67	2.33900	1.90240	2.77630	1.49671
68	2.42200	2.02248	2.91727	1.58565
		2.11647	2.95626	1.64628

VII. Published Export Price Indices by Economic Class

	PXT	PXCF	PXMF	PXCM	PXSM	PXFM
1	0.905999	0.930477	0.954360	0.974267	1.03578	0.849999
2	0.893999	0.937428	0.972217	0.952284	1.00675	0.838999
3	0.890999	0.931470	0.958329	0.941292	1.01276	0.837999
4	0.896999	0.918561	0.971225	0.935297	1.03778	0.843999
5	0.902999	0.937428	0.927575	0.933298	1.03978	0.856999
6	0.893999	0.933456	0.886900	0.926303	1.04678	0.853999
7	0.899999	0.913595	0.877972	0.921307	1.04578	0.862999
8	0.905999	0.901679	0.883924	0.894327	1.05980	0.876999
9	0.908999	0.922533	0.857139	0.907318	1.06480	0.875999
10	0.905999	0.914588	0.887892	0.909316	1.05879	0.870999
11	0.911999	0.915582	0.884916	0.906318	1.05079	0.881999
12	0.907999	0.912602	0.874996	0.908317	1.03177	0.882999
13	0.913999	0.932463	0.877972	0.931300	1.02577	0.866999
14	0.927999	0.927498	0.910710	0.972269	1.05079	0.893999
15	0.922999	0.943387	0.876980	0.953283	1.03878	0.893999
16	0.930999	0.956296	0.872019	0.962276	1.02477	0.908999
17	0.927999	0.958282	0.851186	0.958279	1.02577	0.906999
18	0.913999	0.955303	0.868051	0.959279	0.994744	0.866999
19	0.910999	0.955303	0.863091	0.956281	0.959718	0.894999
20	0.913999	0.967220	0.881940	0.940293	0.950711	0.899999
21	0.917999	0.992946	0.873012	0.952284	0.959718	0.898999
22	0.914999	0.988073	0.879956	0.950285	0.954714	0.894999
23	0.911999	0.985094	0.881940	0.947288	0.944707	0.891999
24	0.912999	0.977150	0.875988	0.955282	0.957717	0.889999
25	0.916999	0.991052	0.888864	0.954282	0.936701	0.899999
26	0.913999	0.999990	0.878964	0.929301	0.945708	0.893999
27	0.919999	0.980129	0.886900	0.949286	0.957717	0.901999
28	0.931999	0.991052	0.904757	0.966273	0.997747	0.905999
29	0.956999	0.983108	0.929559	1.00524	1.02677	0.932999
30	0.952999	0.957289	0.933527	1.00724	1.01576	0.934999
31	0.950999	0.947359	0.947416	0.994252	1.00976	0.935999
32	0.946999	0.934449	0.957336	0.961277	1.01376	0.932999
33	0.964999	0.967220	0.975194	1.01524	1.03978	0.943999
34	0.974999	0.962254	0.981146	1.04621	1.03878	0.952999
35	0.988999	1.00595	1.02281	1.03722	1.02677	0.968999
36	1.00800	1.01588	1.04761	1.01224	1.02877	1.00100
37	1.00400	1.02482	0.997019	1.03222	1.01276	1.00200
38	0.995999	1.02283	0.999995	1.00424	1.01776	0.981999
39	0.995999	0.994032	1.01190	0.998249	0.983736	0.995999
40	1.00400	0.958282	0.991066	0.965274	0.985738	1.02000
41	0.994999	0.975164	0.998011	0.992254	0.965723	1.00800
42	1.01900	0.973178	1.02480	0.988257	0.988757	1.03700
43	1.01300	0.927498	1.00595	0.982261	0.948710	1.04400
44	1.02100	0.931470	1.00793	0.998249	0.944707	1.05900
45	1.03800	0.967220	1.03174	1.00025	0.943706	1.07600
46	1.03400	0.972185	1.01884	0.983261	0.949711	1.07300
47	1.05000	0.969206	1.00892	0.998249	0.972728	1.09300
48	1.08400	0.944380	1.00992	1.00924	0.988740	1.14400
49	1.09600	0.958282	1.02777	1.02723	0.996746	1.15500
50	1.10700	0.957289	1.03472	1.05920	1.03077	1.15700
51	1.11100	0.980129	1.07341	1.07419	1.03177	1.15600
52	1.11500	1.02680	1.05257	1.10917	1.01676	1.15600
53	1.15000	1.07149	1.05158	1.15413	1.00875	1.20100
54	1.14500	1.06851	1.09325	1.15413	1.02176	1.19000
55	1.13400	1.03375	1.11408	1.17312	1.01076	1.17200
56	1.14800	0.995025	1.09226	1.17112	0.993744	1.20500
57	1.16400	1.01290	1.10515	1.24007	0.981735	1.21900
58	1.17200	1.00793	1.15277	1.25406	1.00375	1.22300
59	1.17400	1.02184	1.18551	1.28603	1.01676	1.21500
60	1.21200	1.12412	1.28372	1.32500	1.02977	1.24300
61	1.25900	1.26116	1.45932	1.47989	1.10182	1.24300
62	1.31800	1.33067	1.63789	1.63877	1.18789	1.27100
63	1.40800	1.66334	2.01388	1.70772	1.32099	1.28700
64	1.50500	2.06651	2.11110	1.74569	1.45209	1.34800
65	1.62800	2.35350	2.15078	1.96952	1.67525	1.41100
66	1.68700	2.36542	2.05753	2.11941	1.90142	1.44100
67	1.79900	2.31179	2.00197	2.45316	2.10758	1.54300
68	1.91100	2.65836	2.06249	2.65500	2.18163	1.62100

VIII. Published Import Price Indices by Economic Class

	PMT	PMCF	PMMF	PMCM	PKSM	PMFM
1	0.979999	1.08246	0.864916	1.02748	0.987999	0.948710
2	0.968999	1.05147	0.869910	1.02648	0.956999	0.944707
3	0.954999	1.01249	0.881895	1.00450	0.959999	0.937702
4	0.951999	0.960518	0.884891	1.00949	0.939999	0.955715
5	0.941999	0.915541	0.872906	1.02349	0.943999	0.940704
6	0.942999	0.921536	0.858924	1.00849	0.964999	0.933699
7	0.944999	0.885556	0.877900	1.02449	0.966999	0.939703
8	0.958999	0.889554	0.884891	1.04048	0.969999	0.962720
9	0.960999	0.905546	0.852931	1.06247	0.978999	0.957717
10	0.961999	0.869554	0.847938	1.06946	0.984999	0.959718
11	0.962999	0.880558	0.864916	1.05847	0.986999	0.967724
12	0.951999	0.880558	0.863917	1.01949	0.980999	0.964722
13	0.948999	0.867565	0.864916	1.01449	0.965999	0.968725
14	0.945999	0.846575	0.867912	0.995501	0.963999	0.974729
15	0.945999	0.858569	0.860921	1.01149	0.965999	0.960719
16	0.944999	0.850573	0.858924	1.01849	0.968999	0.968719
17	0.931999	0.842577	0.855927	1.00749	0.939999	0.946738
18	0.930999	0.840578	0.860921	1.00250	0.925999	0.955715
19	0.921999	0.828584	0.854929	0.995501	0.912999	0.947709
20	0.919999	0.818589	0.865915	0.988504	0.903999	0.950711
21	0.923999	0.831583	0.872906	1.00150	0.903999	0.950711
22	0.927999	0.825586	0.928836	0.996500	0.905999	0.946708
23	0.933999	0.824586	0.958799	0.996500	0.913999	0.949711
24	0.941999	0.842577	0.954804	1.00650	0.922999	0.953714
25	0.957999	0.935531	0.965790	1.02149	0.931999	0.956716
26	0.962999	1.01249	0.933830	1.01349	0.939999	0.954714
27	0.957999	1.03648	0.898874	0.995501	0.949999	0.949711
28	0.960999	1.04448	0.885990	0.997500	0.961999	0.950711
29	0.964999	1.03448	0.897875	0.998499	0.970999	0.953714
30	0.956999	0.990503	0.910859	1.00749	0.981999	0.933699
31	0.962999	0.982507	0.916851	1.00350	0.978999	0.953714
32	0.975999	0.991503	0.929835	1.00550	0.990999	0.969726
33	0.976999	1.02349	0.946814	1.01649	0.984999	0.962720
34	0.991999	1.05747	0.961770	1.02349	0.989999	0.979733
35	0.990999	1.01649	0.977775	1.03648	0.988999	0.977732
36	1.00500	1.02249	1.00075	1.05847	0.983999	0.990741
37	1.00500	1.00650	0.992756	1.01549	0.994999	1.00875
38	0.998999	0.989504	0.994754	0.986505	0.996999	1.00475
39	0.999999	1.00350	1.00174	1.00050	0.993999	0.999748
40	0.995999	1.00050	1.01073	0.997500	1.01400	0.986738
41	1.00400	1.01049	0.993755	0.997500	1.02700	0.997747
42	1.01500	1.01749	0.999747	0.995501	1.02800	1.01674
43	1.00700	1.01149	1.01772	1.00849	0.999999	1.00775
44	1.02000	1.01449	1.03470	0.999499	1.01000	1.02677
45	1.02900	1.04248	1.03271	1.05247	1.03700	1.01776
46	1.03300	1.02648	1.05468	1.03148	1.04000	1.02777
47	1.04300	1.02149	1.06866	1.03548	1.03800	1.04178
48	1.08200	1.10145	1.09363	1.08246	1.04800	1.08781
49	1.09700	1.18541	1.09263	1.06946	1.06400	1.10483
50	1.10500	1.22638	1.12060	1.04348	1.08500	1.10783
51	1.13100	1.25337	1.13358	1.06047	1.11600	1.13685
52	1.13900	1.25737	1.12958	1.05547	1.11600	1.15286
53	1.16400	1.21439	1.14556	1.07046	1.11000	1.19990
54	1.16700	1.15242	1.17353	1.04248	1.13800	1.20390
55	1.17700	1.13943	1.18052	1.06147	1.15200	1.21491
56	1.19400	1.16442	1.17353	1.09145	1.15800	1.23192
57	1.21600	1.16542	1.19850	1.09745	1.16700	1.26395
58	1.25500	1.20639	1.24943	1.09745	1.21000	1.30798
59	1.27200	1.27236	1.27041	1.11444	1.22000	1.32199
60	1.30200	1.35732	1.38639	1.13643	1.24700	1.35101
61	1.35100	1.37831	1.35830	1.19740	1.30800	1.39304
62	1.46600	1.50824	1.46417	1.30235	1.40800	1.51513
63	1.52100	1.60120	1.56704	1.38031	1.50800	1.54015
64	1.65400	1.70115	1.70386	1.61919	1.74100	1.62121
65	1.92500	1.67616	1.74781	2.79060	2.38100	1.65824
66	2.19200	1.79310	1.88064	3.60919	2.74700	1.79234
67	2.33900	1.83308	2.10936	3.72213	2.86800	1.91844
68	2.42200	1.73713	2.43994	3.63318	2.97500	2.01351

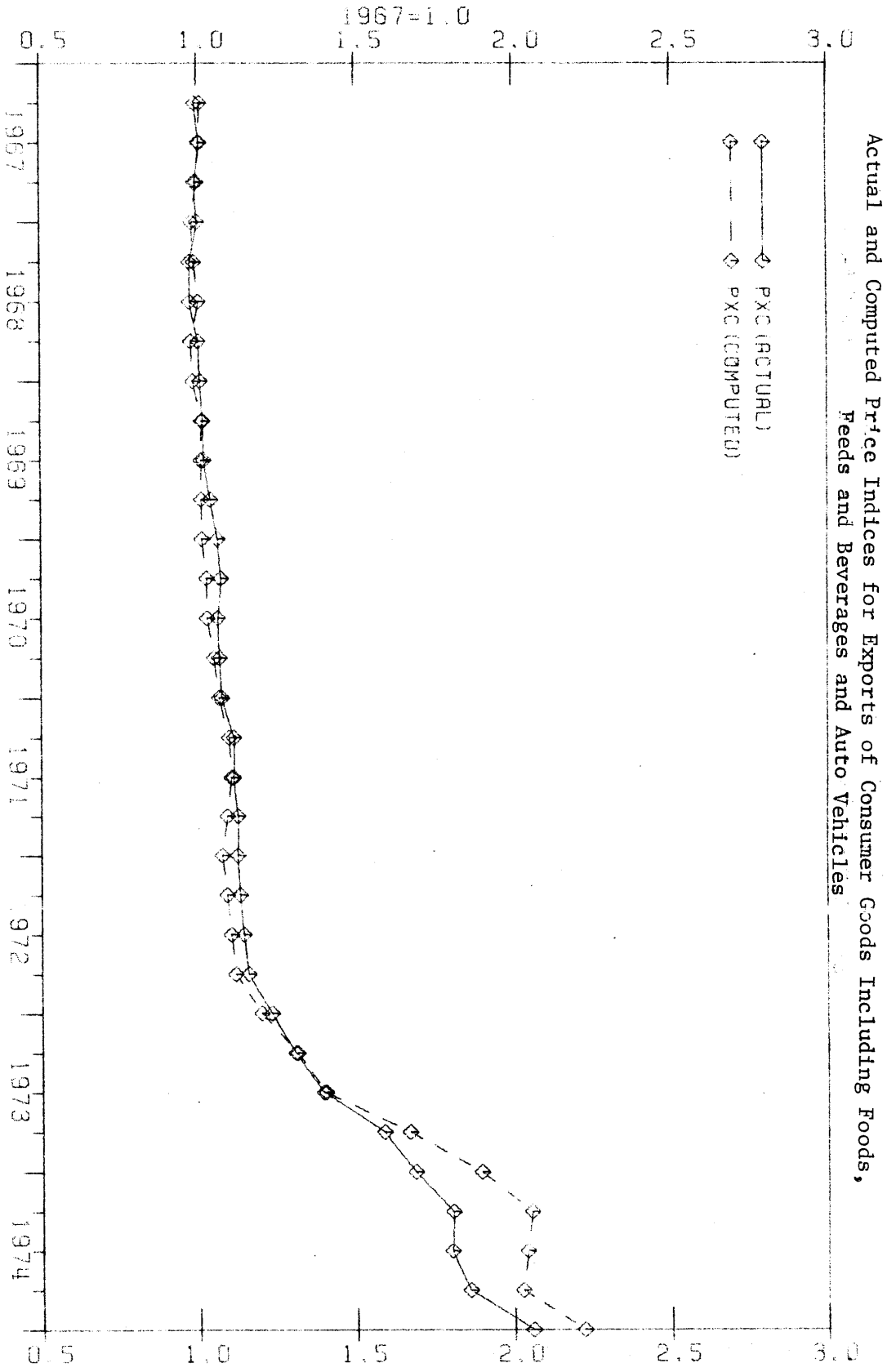


Figure 1

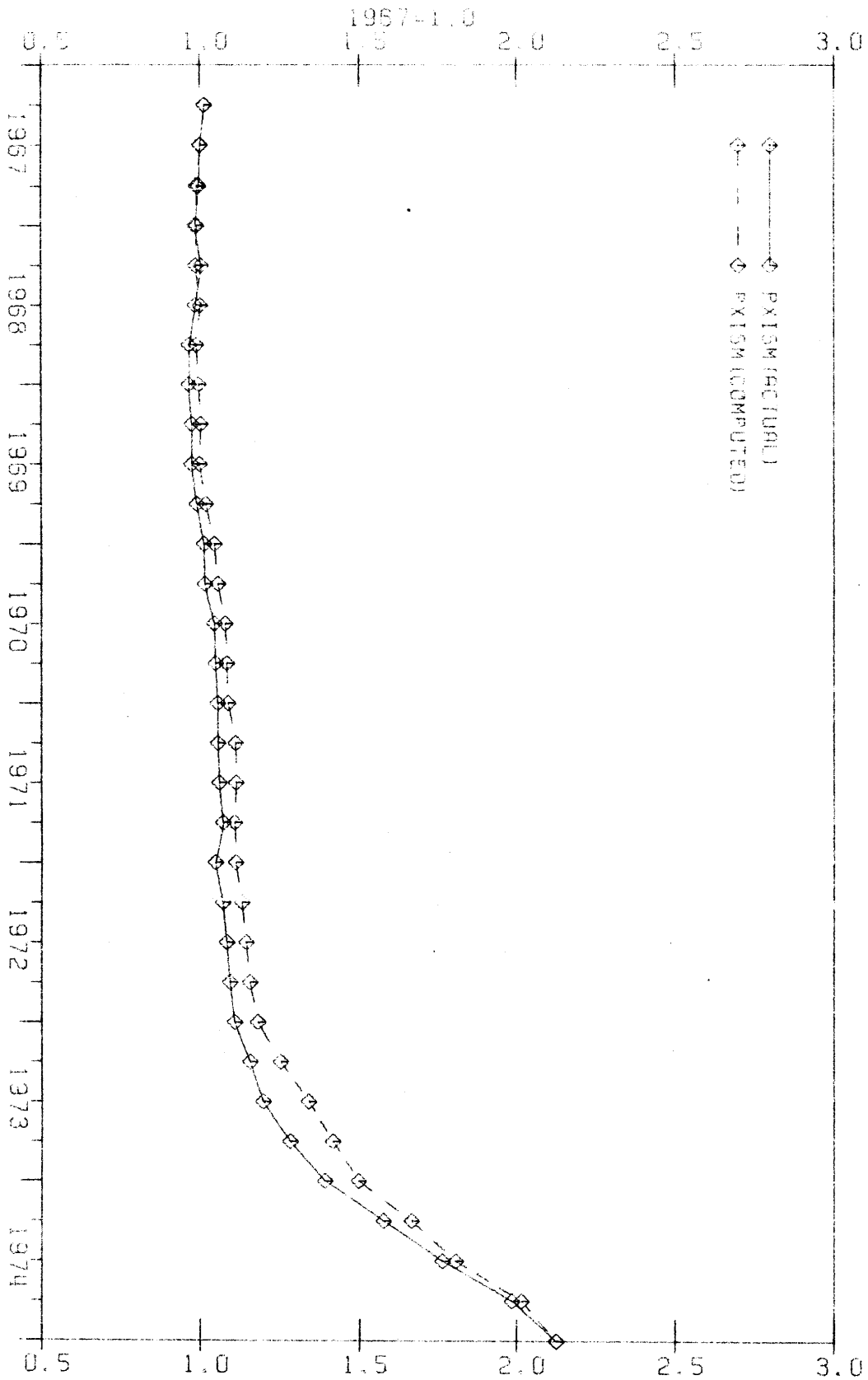
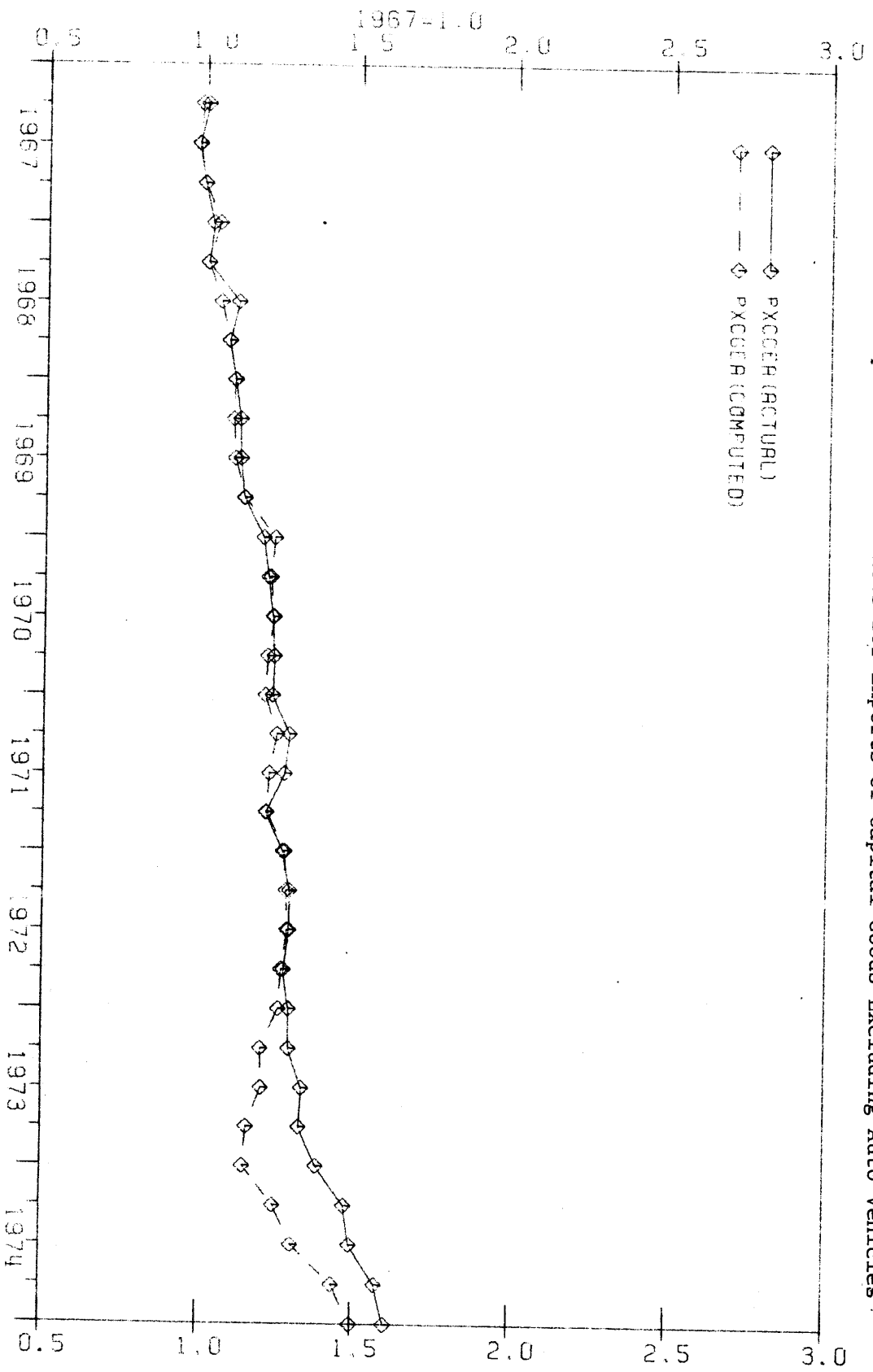


Figure 2



Actual and Computed Price Indices for Exports of Capital Goods Excluding Auto Vehicles

Figure 3

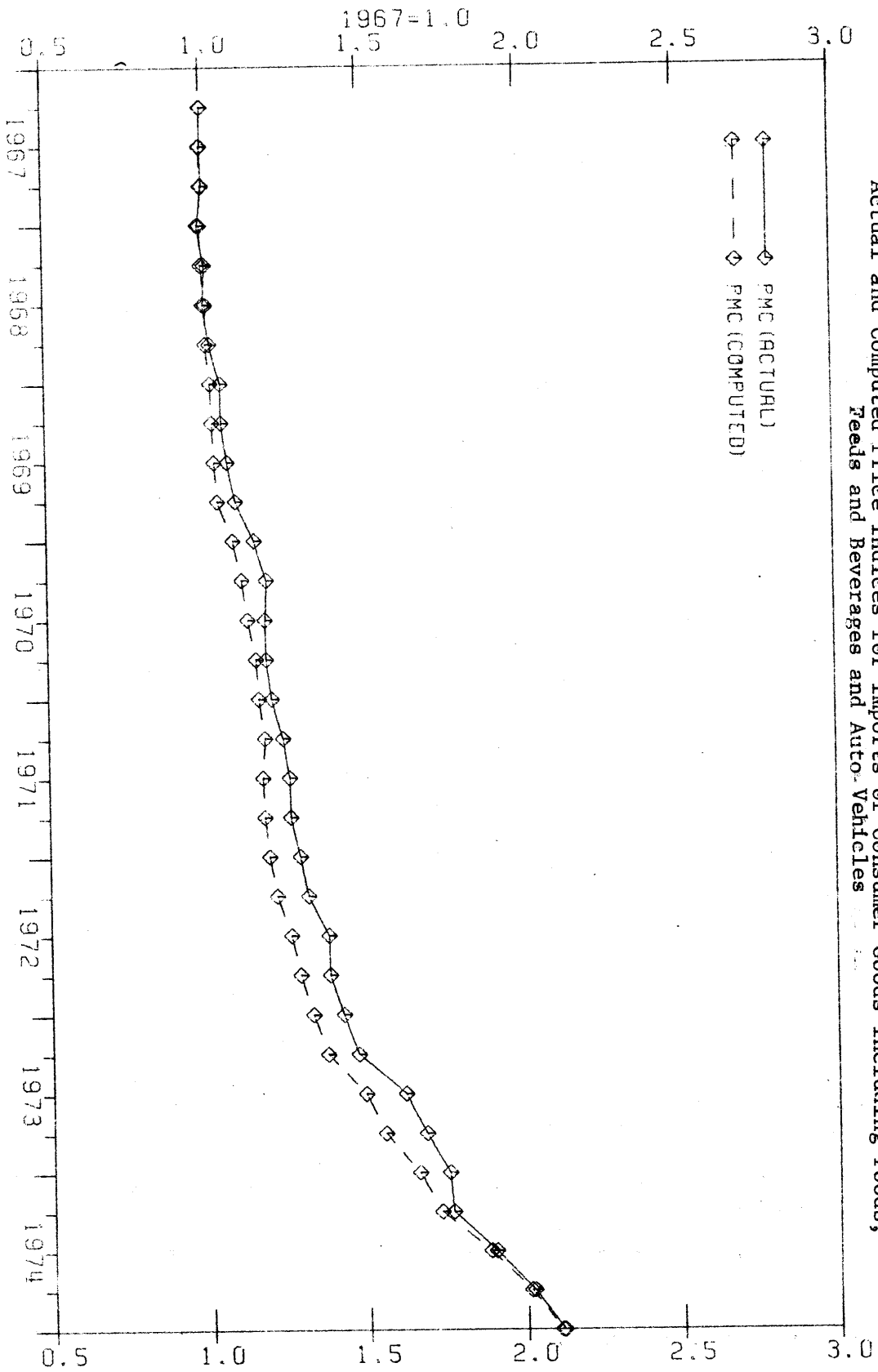


Figure 4

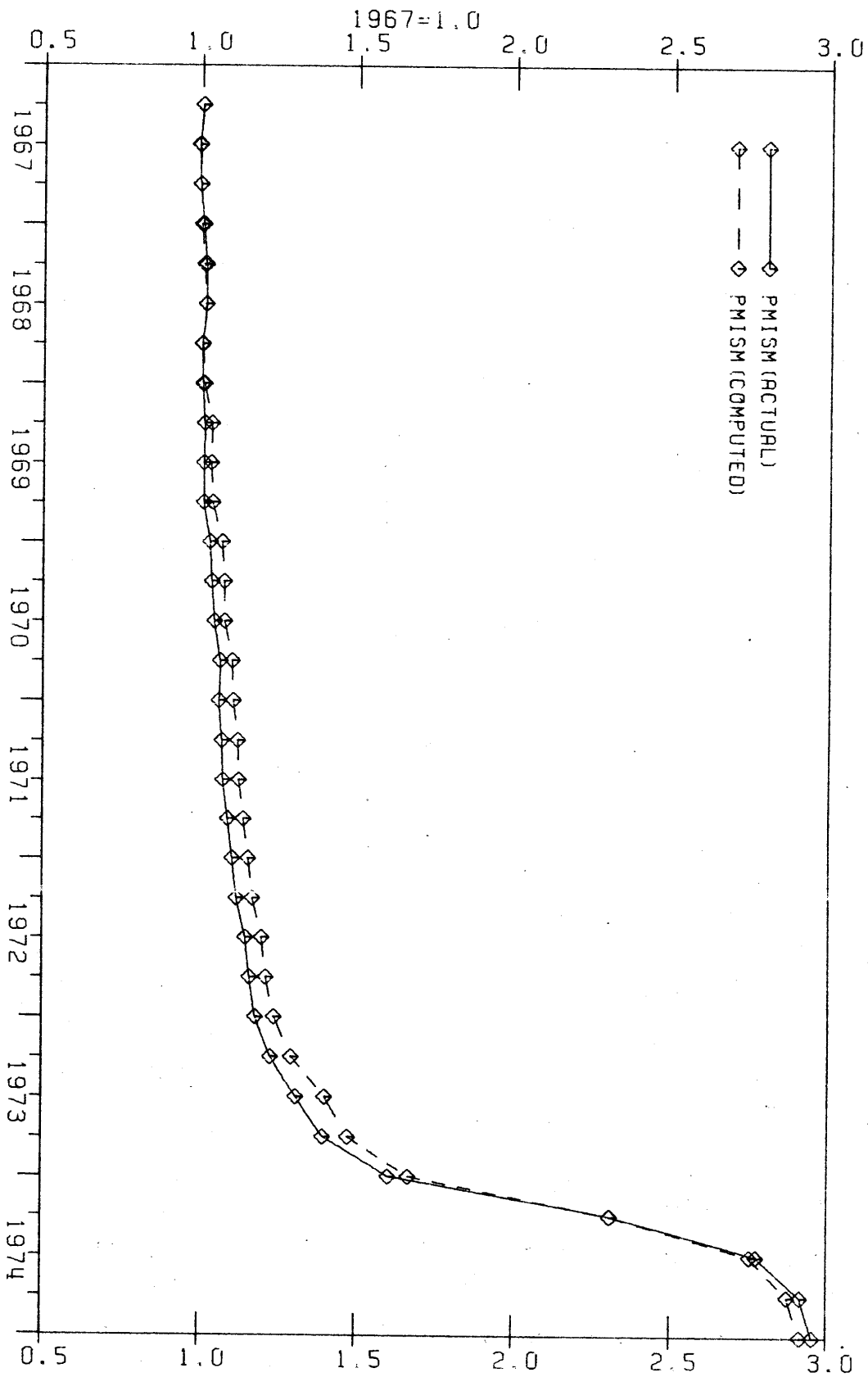


Figure 5

Actual and Computed Price Indices for Imports of Industrial Supplies and Materials



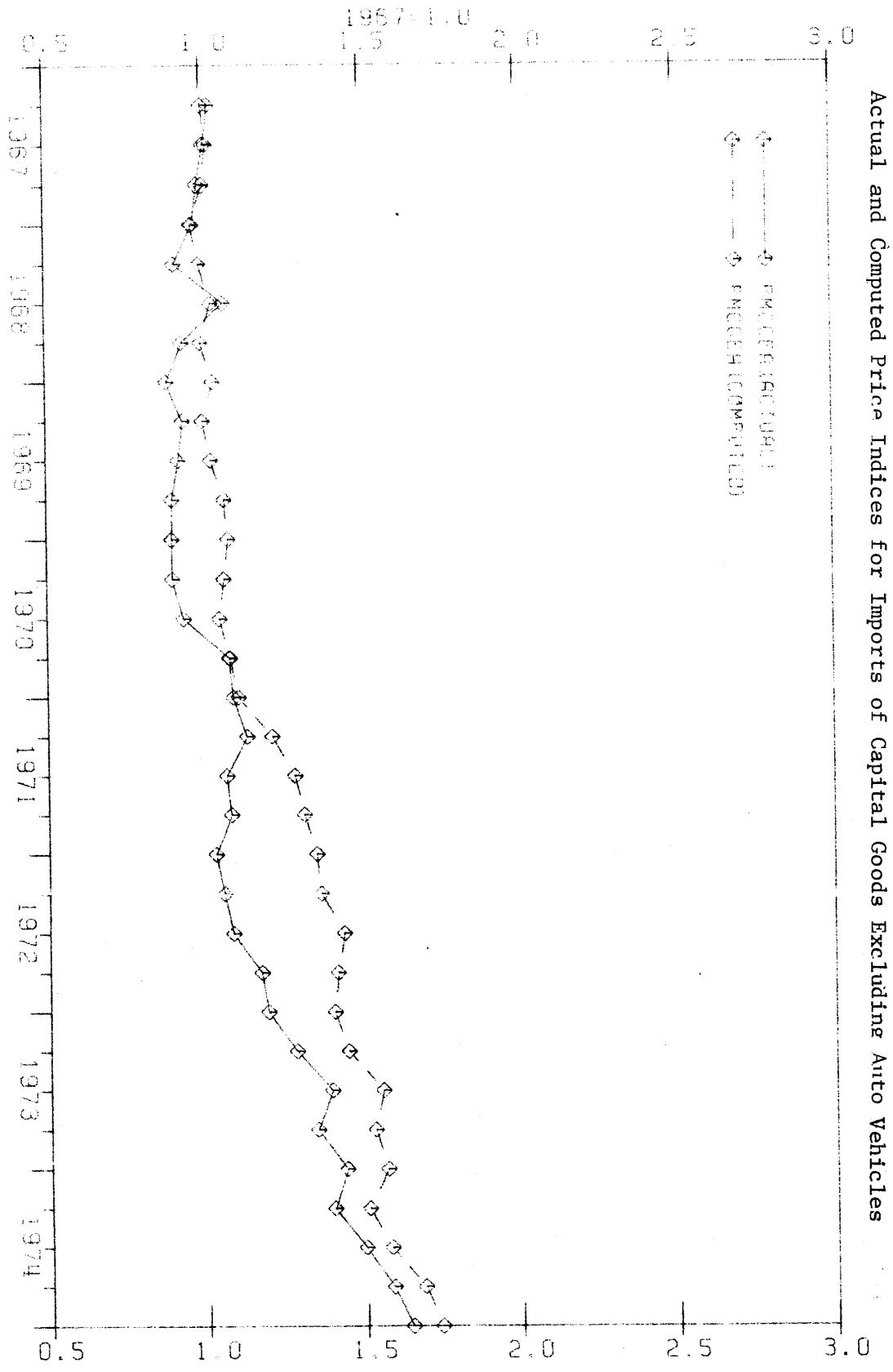


Figure 6