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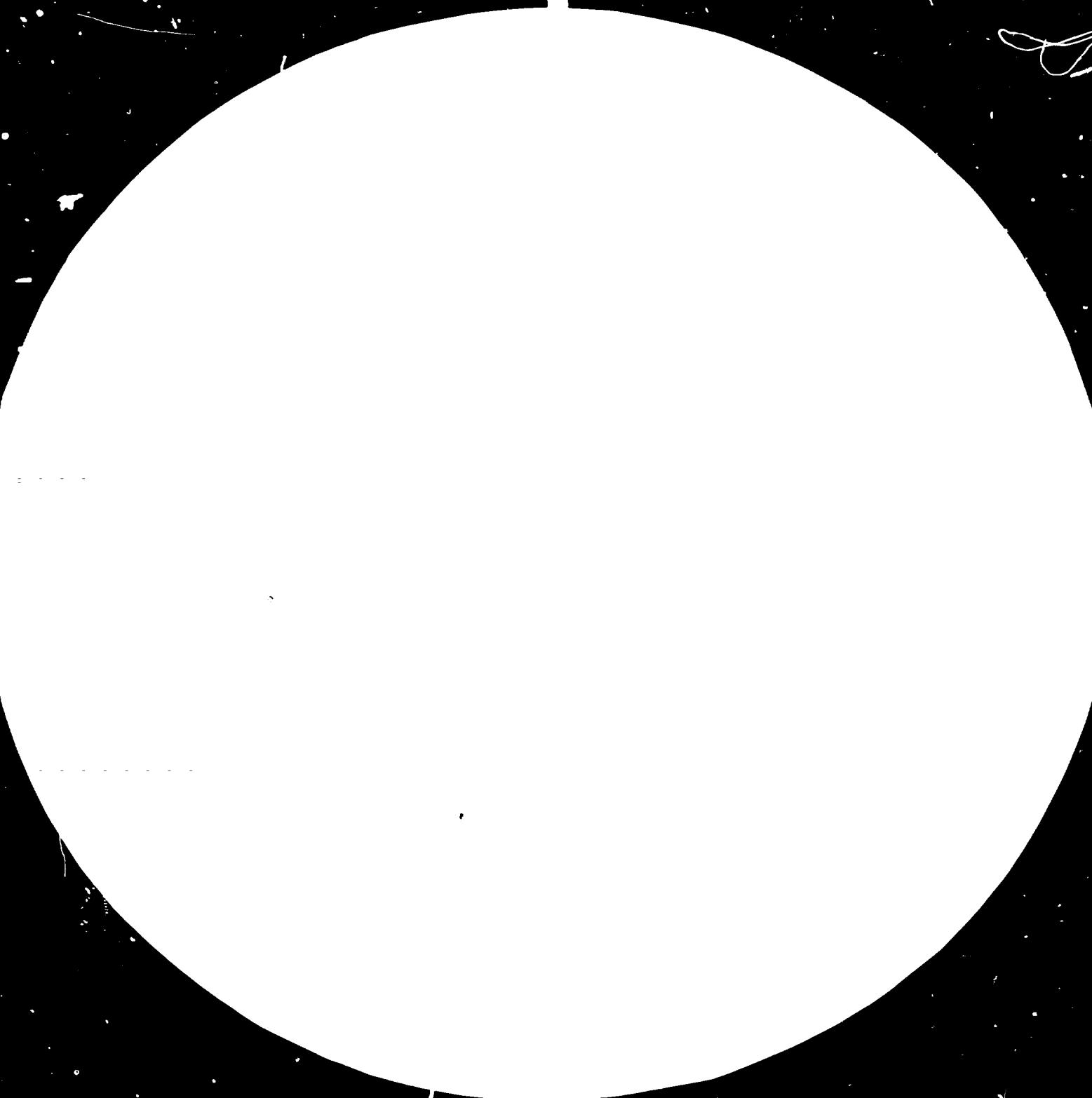
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THE ANALYSIS AND LONG-TERM PROJECTION  
OF INTERINDUSTRY STRUCTURES .

THE MAIN COMPONENTS ANALYSIS \*

(by B. Dissmann, A. Dival, J. Royer and M. Weisser)

6001-3

UNITAD Paper prepared for submission to the  
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**Introduction**

- A. Sector 1 - AGRICULTURE
- B. Sector 2 - FOOD-PROCESSING (AGRIC-FOOD)
- C. Sector 3 - ENERGY
- D. Sector 4 - BASIC PRODUCTS
- E. Sector 5 - LIGHT INDUSTRY
- F. Sector 6 - CAPITAL GOODS
- G. Sector 7 - CONSTRUCTION
- H. Sector 8 - SERVICES

## Introduction

This paper presents a technique and a set of conclusions based on its application to the input-output data already used in the regression analysis (Trend Projections of Input Coefficients for the Regional UNITAD Tables).

The technique of main components analysis is one which allows for the sorting of countries into groups which have a similar input structure for the sector under consideration. Such a classification of countries allows the identification and consideration of the underlying economic factors which the members of a group have in common, and thus leads to those factors which may be at work in giving similar input structure to the countries concerned. The technique is therefore one which can provide, before any projection work is done, an understanding of the economic determinants, at a broad level, of input structures.

While the technique was applied to the eight-sector tables referred to, and thus provided clusters of country groups based on similarities of production structure for each of these sectors, a further analysis was carried out to examine variations within each of the clusters. This was done by means of a set of disaggregated tables, which have forty-three sectors, and these were used to provide the detailed information needed to see why countries which had broadly similar structures for a sector still did not have entirely identical ones.

The procedure can be briefly described - without recourse to complicated mathematical presentation - as follows:

In the first step, a symmetric matrix of correlation coefficients between the input coefficients in each column vector for individual countries is calculated. This gives a picture of interdependence between the values of individual coefficients (e.g. between the input coefficients for agriculture).

In the second step eigenvectors of this matrix of correlation coefficients are calculated and adjusted to a length of 1. The input coefficients

for individual countries can then be written as linear combinations of these eigenvectors weighted by "explanatory shares", derived in the second step. The remarkable feature of the results in this specific case was that a combination of two or three eigenvectors explains about 90 per cent of the total variability of the input coefficients.

The important eigenvectors are reproduced for six sectors in Addendum 2 (on the first page of each section of the paper, in Tables Cb). They were used in the following analytical steps: (a) the values of the explanatory shares for individual countries as well as for the eight regions were plotted into two-dimensional charts; (b) the eigenvectors were used for the identification of important input coefficients in each sector. On the other hand, (c) the allocation of countries in the charts allowed us (i) to do a check for the consistency between the regional tables and tables of individual countries belonging to that region; (ii) to see the interrelationships between the explanatory shares and the values of important coefficients; (iii) to relate the values of the explanatory shares to certain characteristics of individual countries such as GDP per capita, population density, output mix, etc.; (iv) to establish a bridge between the main component analysis and the regression analysis, and to use it for tentative projections of the input coefficients for the UNITAD regional tables. This last step is described in the document "Trend Projections of Input Coefficients for the UNITAD Regional Tables".

The results of the graphical analysis are presented in the attached charts. For each sector two-dimensional charts with coordinates which are values of the explanatory shares for the most important eigenvectors (X, Y, and Z) are presented. One can see the location of countries and regions in the chart and judge (i) if the positions of regions and countries belonging to particular regions are consistent; (ii) if the location of countries can be explained by some obvious factors.

For each chart, the eigenvectors concerned are given as linear combinations of the most important (largest) coefficients. For example, there are two charts for agriculture. The eigenvector 'X' explains 69 per cent, the eigenvector 'Y' 22 per cent and the eigenvector 'Z', 6 per cent of the variance of the input coefficients of the agricultural sector. The three coefficients together, therefore explain 97 per cent of the total variance. The first graph, presenting

the location of countries for the combinations of the explanatory shares for the vectors X and Y, indicates that: (i) the values of X are strongly determined by the value added coefficients ; and (ii) these are strongly related to the level of industrialized agriculture.

In addition to the graphs, country figures are given for the input structures at the eight-sector level, and the 43-sector level. This is done for each of the sectors, and an analysis of the findings is also supplied. Not all the country tables could give details on all the 43 sectors: accordingly the sample size varies according to which of the eight sectors is being considered in terms of the more detailed sectors contained in it.

Sector 1 - AGRICULTURE

For Agriculture the equations of the first three eigenvectors and their contributions to total variance are as follows:

$$\begin{array}{lll} X_1 & = -0.4a_{21} - 0.2a_{61} - 0.9VA_1 & 58.8\% \\ Y_1 & = -0.6a_{21} - 0.1a_{41} + 0.8a_{81} & 22.2\% \\ Z_1 & = 0.7a_{21} - 0.2a_{41} + 0.5a_{81} + 0.4VA_1 & 6.0\% \\ & & \hline & & 97.0\% \end{array}$$

X is remarkable in that not only is value added a negative component, which, after a moment's reflection, is fairly plausible, but all the other components which have a significant first decimal are negative. Value added is the dominant component and reaches values of around 90% for countries such as Kenya and Papua New Guinea, and falls below 40% for the U.S.A.

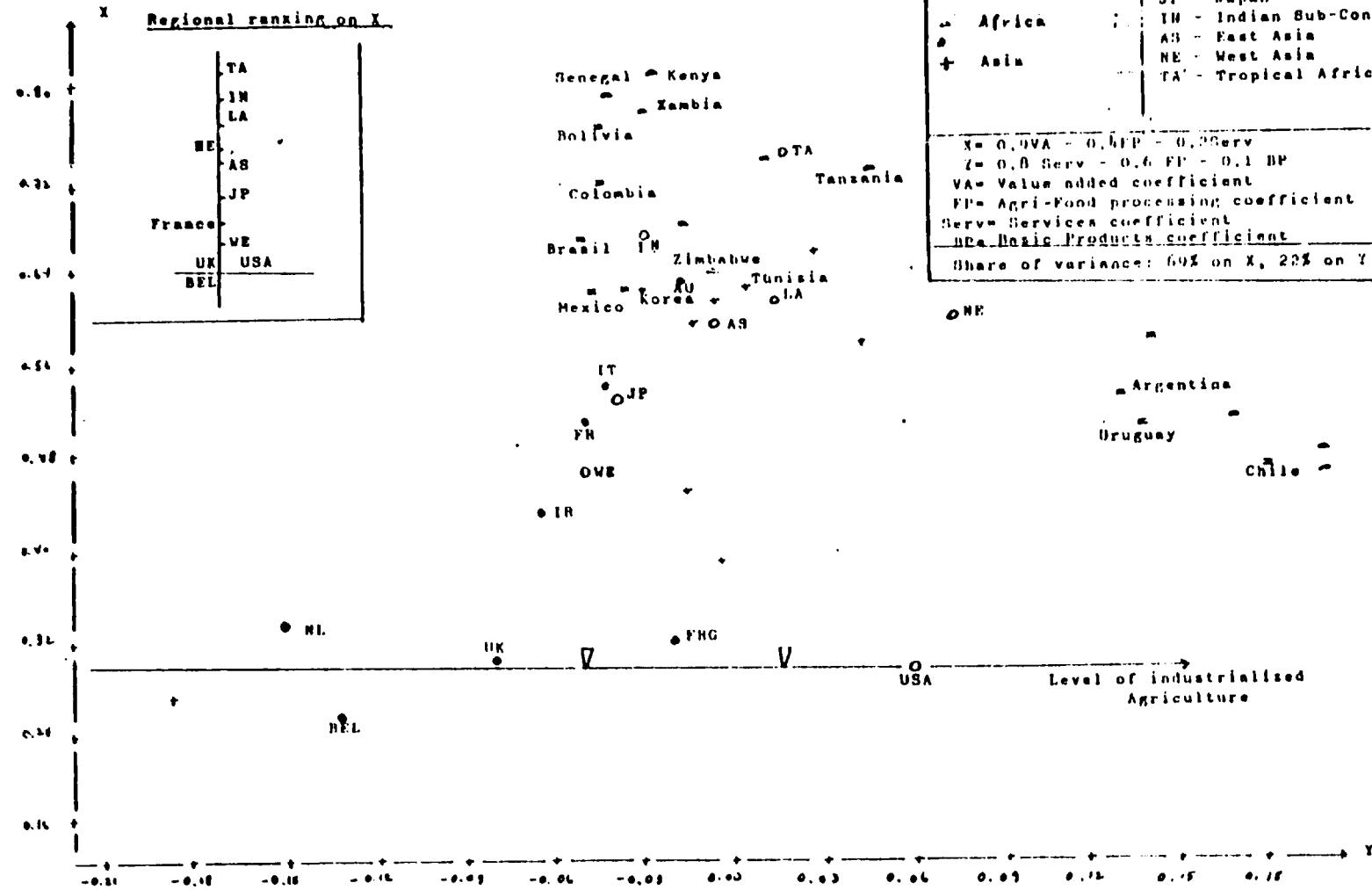
Y has Trade and Services as the dominant component and Food production as a secondary component. Some African countries like Zaire and the Ivory Coast as well as some South American countries like Ecuador, Peru, Argentina, Uruguay and Chile show high Trade and Service coefficients. High diagonal coefficients occur in U.S.A., Spain, Pakistan and Indonesia (20% - 30%). Low diagonal coefficients occur in the above mentioned African and South American countries as well as in some others like Malaysia, Colombia and Guatemala (less than 6%).

Z has the converse position of Y with Food production as the dominant component and Services as the secondary component. High values in this component occur only in a handful of countries: Singapore 38%, Belgium 28%, Netherlands 27%, U.K. 21%, Federal Republic of Germany 11%, Japan 8%. It seems clear that countries with land scarcity have high coefficients whereas in countries where livestock is produced with land intensive methods, coefficients are low. A classification effect may also be inferred for Z as the input coefficient for food processing discriminates between cattle and sheep on the one hand and poultry and pigs on the other, since the latter are less dependent on food processing inputs than the former.

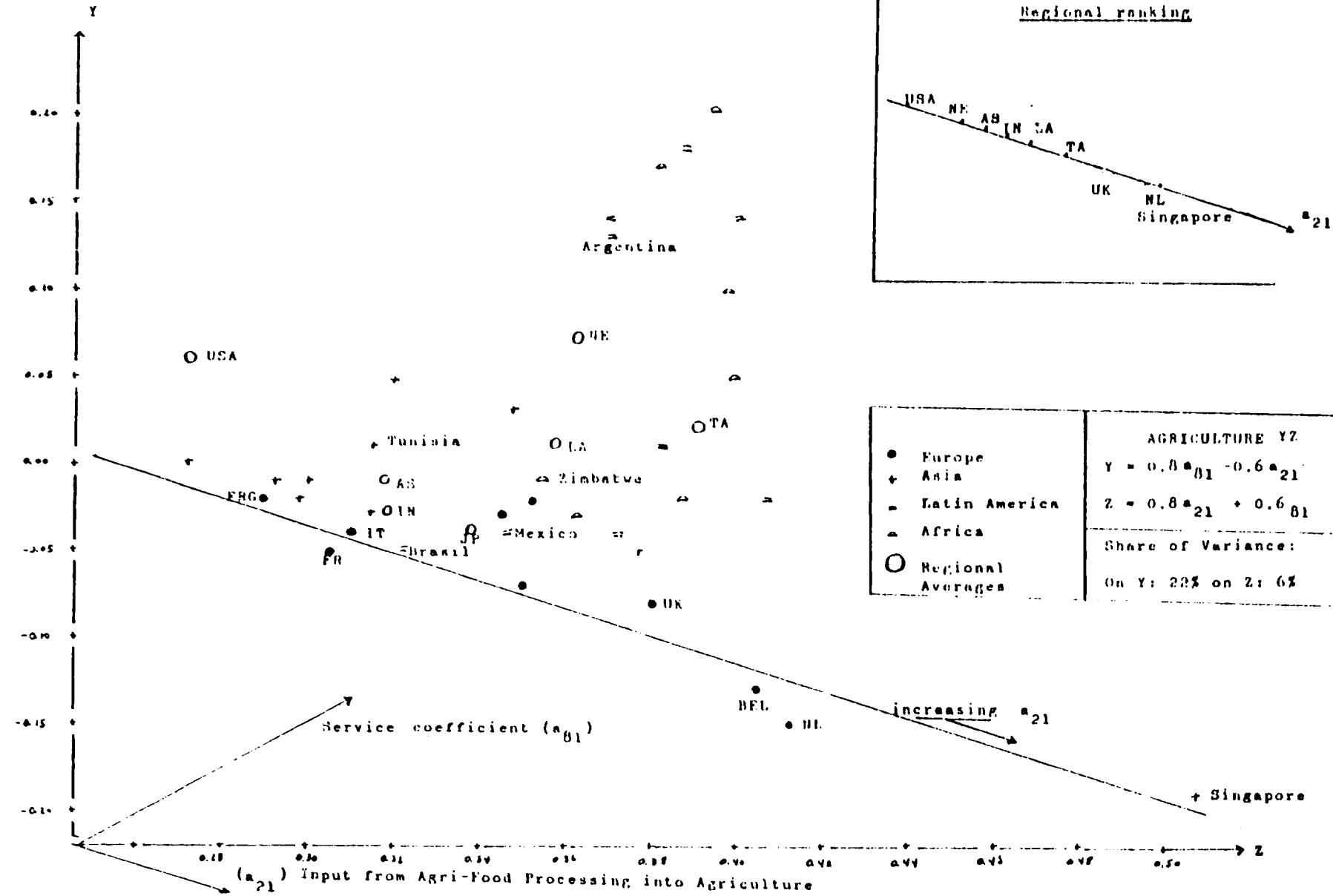
Although Agriculture and Livestock is the most important dominant sub-sector, it is of interest to look at other sub-sectors like Forestry where the inverse relation between GDP and value added is apparently violated in the case of Papua New Guinea which has 60% value added compared to New Zealand's 61%. The explanation is that forestry enterprises in Papua New Guinea are operated by foreign companies under government concessions. The story for Fishing is even more remarkable where the value added coefficient in Papua New Guinea is 32%, 76% in Spain, and 93% in India.

## INPUT COEFFICIENTS FOR SECTOR AGRICULTURE . . .

	GDP PER CAPITA	AGRICULT	AGRO-FOO	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTRUC	SERVICE	INTERM.	VALUF AD
INDONESIA 1971	61.5	0.25078	0.00069	0.00385	0.01424	0.00862	0.00372	0.00154	0.03887	0.37430	0.67570
INDIA 1954	77.1	0.26512	0.01149	0.00046	0.00571	0.00012	0.0	0.00583	0.04046	0.32970	0.67030
BANGLADESH 1962	84.0	0.15352	0.0	0.00649	0.00417	0.00133	0.00254	0.0	0.08481	0.24679	0.75321
INDIA 1964	87.5	0.18198	0.00503	0.00287	0.02390	0.00399	0.00010	0.00548	0.01847	0.24182	0.75818
CONGO 1967 (Zaire)	90.9	0.08228	0.00432	0.01373	0.00846	0.00218	0.00254	0.00900	0.28617	0.40068	0.59132
TANZANIA 1970	94.0	0.02538	0.00604	0.00394	0.00345	0.01207	0.00151	0.00223	0.11686	0.17159	0.82841
PAKISTAN (West) 1962	109.1	0.20618	0.00116	0.00521	0.01257	0.00397	0.00517	0.0	0.10311	0.33737	0.4263
KENYA 1967	122.2	0.00037	0.00426	0.03170	0.00232	0.00791	0.00696	0.0	0.07468	0.08829	0.91171
BOLIVIA 1971	169.7	0.13574	0.0	0.00158	0.0	0.00497	0.0	0.0	0.00218	0.14467	0.85533
IVORY COAST 1960	204.1	0.03988	0.00151	0.00804	0.00247	0.00554	0.01452	0.00046	0.17727	0.25019	0.74981
URUGUAY 1970	229.3	0.11135	0.04602	0.00656	0.04312	0.01430	0.00316	0.00077	0.04885	0.27411	0.72589
SENEGAL 1969	236.0	0.04611	0.0	0.01117	0.00178	0.00279	0.00203	0.00178	0.00787	0.12256	0.87741
TUNISIA 1964	243.7	0.14962	0.00285	0.01593	0.01056	0.00777	0.00214	0.0	0.05712	0.29620	0.70380
ZIMBABWE 1965	249.4	0.00112	0.03125	0.11547	0.00493	0.00446	0.02232	0.00441	0.06574	0.25550	0.74450
ECUADOR 1963	265.8	0.04155	0.0	0.00600	0.0	0.03927	0.0	0.0	0.22190	0.30331	0.696
PAPEA NEW GUINEA 197	272.5	0.00646	0.03610	0.00075	0.00273	0.00318	0.00322	0.00247	0.08867	0.14329	0.85671
MALAYSIA 1965	310.4	0.00706	0.03718	0.00269	0.06225	0.0	0.00181	0.0	0.02961	0.14139	0.85860
IVORY COAST 1972	314.3	0.06292	0.00407	0.01714	0.01399	0.00719	0.02990	0.00123	0.25398	0.39042	0.60958
COLUMBIA 1970	320.0	0.05249	0.03924	0.00651	0.01419	0.00425	0.00249	0.00035	0.03406	0.17917	0.82083
ZAMBIA 1965	368.8	0.00718	0.00424	0.01175	0.04406	0.01599	0.01305	0.00326	0.07003	0.12957	0.87043
GUATEMALA 1971	370.5	0.03192	0.05722	0.00755	0.00712	0.01269	0.00007	0.0	0.07434	0.19051	0.80949
BRAZILIA 1970	393.3	0.13626	0.02556	0.00814	0.05210	0.00584	0.00250	0.0	0.01243	0.24303	0.75697
PERU 1968	399.3	0.11695	0.04051	0.00844	0.02033	0.00781	0.00746	0.0	0.33462	0.53611	0.46389
COSTA RICA 1966	426.2	0.02914	0.05034	0.01065	0.04500	0.02408	0.00380	0.00171	0.05607	0.27099	0.72901
CHILE 1962	595.0	0.06242	0.01297	0.02045	0.02662	0.00273	0.01519	0.0	0.27734	0.41818	0.58182
MEXICO 1970	613.4	0.10200	0.05743	0.01607	0.04318	0.01256	0.00360	0.0	0.03954	0.27437	0.72563
ARGENTINA 1963	728.2	0.04304	0.00554	0.00586	0.01026	0.04491	0.00287	0.0	0.20783	0.36531	0.63469
URUGUAY 1961	730.9	0.06965	0.01169	0.01160	0.03142	0.01026	0.02900	0.0	0.22305	0.38668	0.61332
TRINIDAD AND TOBAGO	733.6	0.00176	0.00409	0.01171	0.0	0.07061	0.0	0.0	0.07346	0.16123	0.83877
IRELAND 1969	1165.3	0.14024	0.14082	0.02134	0.06229	0.00232	0.00730	0.00464	0.06587	0.44484	0.55516
SINGAPUR 1973	1251.6	0.01335	0.38248	0.01516	0.01065	0.00706	0.01133	0.00680	0.07681	0.52379	0.47619
AUSTRIA 1964	1405.2	0.03437	0.04262	0.02458	0.05168	0.00752	0.03085	0.00448	0.06297	0.26756	0.73244
ITALY 1970	1572.7	0.21748	0.05576	0.01249	0.03526	0.00417	0.00108	0.00345	0.03506	0.36474	0.63526
JAPAN 1970	1713.1	0.12805	0.07065	0.01732	0.04671	0.01695	0.01078	0.00734	0.05929	0.36510	0.63490
UNITED KINGDOM 1970	2023.5	0.05237	0.21267	0.04237	0.07615	0.02275	0.01752	0.01494	0.09024	0.54192	0.45808
NETHERLAND 1970	2226.6	0.00437	0.26908	0.01364	0.04220	0.02174	0.00622	0.01947	0.04901	0.50553	0.49447
BELGIUM 1970	2457.1	0.13327	0.27988	0.01869	0.05283	0.00817	0.00730	0.00124	0.07738	0.57927	0.42073
GERMANY F.R. 1970	2558.3	0.25433	0.10899	0.03048	0.03991	0.01921	0.02491	0.01108	0.08859	0.57653	0.42347
AUSTRALIA 1974/75	2688.6	0.03707	0.01195	0.01071	0.06153	0.00679	0.02578	0.01167	0.14225	0.35984	0.60104
FRANCE 1970	2841.0	0.15970	0.07285	0.01922	0.06622	0.00826	0.01347	0.01764	0.04073	0.39810	0.60190
UNITED STATES 1967	4216.2	0.30662	0.06001	0.02268	0.04403	0.01203	0.00663	0.00961	0.14974	0.61136	0.38864



Graph 1.1  
Annex 1 Agriculture XY



Graph 1.2  
Annex 1 Agriculture XZ

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VECTOR .... 1 AGRICULTURE AND LIVESTOCK P.

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COUNTRY: YEAR/RANK:	PAP.N.GN	PHILIPP.	INDIA	BANGLDSH	COSTA RICA	KOREA RP	TUNISIA	IRAN	AUSTRAL.	PAKISTAN	NEW ZLND
	1972/ 1	1969/ 2	1968/ 3	1962/ 4	1966/ 5	1970/ 6	1960/ 7	1973/ 8	1974/ 9	1962/ 10	1965/ 11
<b>AGRICULTURE</b>											
AGRO-FOOD	0.00613	0.07417	0.18706	0.17006	0.02158	0.12330	0.21856	0.19415	0.03899	0.29410	0.20906
ENERGY AND PETROLEUM PROD.	0.03102	0.01846	0.00516	0.0	0.06010	0.05253	0.00287	0.03254	0.04594	0.0	0.01359
BASIC PRODUCTS	0.00241	0.00268	0.00294	0.00083	0.00962	0.00176	0.01737	0.03666	0.02991	0.01001	0.00986
LIGHT INDUSTRY	0.00727	0.02140	0.02457	0.00654	0.0H932	0.04230	0.01203	0.03442	0.06502	0.02473	0.06195
CAPITAL GOODS	0.00913	0.00666	0.00407	0.00201	0.02106	0.00544	0.00613	0.02056	0.00419	0.00350	0.01819
CONSTRUCTION	0.00345	0.00064	0.00004	0.00367	0.00209	0.00046	0.0	0.0	0.02133	0.01044	0.07312
TRADE AND SERVICE	0.00149	0.0	0.00519	0.0	0.00126	0.00042	0.0	0.0	0.01217	0.0	0.00546
INTERMEDIATE INPUTS ALLOC.	0.05542	0.03639	0.01788	0.07055	0.04980	0.04306	0.05486	0.03628	0.14093	0.07036	0.09419
WAGES	0.11672	0.16040	0.24640	0.25167	0.25484	0.27567	0.31232	0.35461	0.35852	0.41313	0.44711
CONSUMPTION OF FIXED CAPITAL	0.06433	0.39077	0.0	0.0	0.0	0.06119	0.22291	0.0	0.09673	0.0	0.09917
TAXES LESS SUBSIDIES	0.00962	0.02097	0.0	0.0	0.0	0.00851	0.0	0.0	0.0	0.0	0.05313
OPERATING SURPLUS	0.00240	-0.00044	0.00483	0.00916	0.0	0.00389	0.01194	0.0	0.05122	-0.01035	0.02001
VALUE ADDED	0.80594	0.42031	0.0	0.0	0.0	0.65074	0.0	0.0	0.0	0.0	0.38059
GROSS OUTPUT	0.88329	0.83960	0.75310	0.74633	0.74516	0.72432	0.68774	0.64540	0.64146	0.58687	0.55289
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	SPAIN	U.S.A.FR
	1970/ 12	1967/ 13
<b>AGRICULTURE</b>		
AGRO-FOOD	0.25834	0.31159
ENERGY AND PETROLEUM PROD.	0.07046	0.05297
BASIC PRODUCTS	0.01900	0.02151
LIGHT INDUSTRY	0.04653	0.04457
CAPITAL GOODS	0.01092	0.00255
CONSTRUCTION	0.00559	0.00668
TRADE AND SERVICE	0.00470	0.01024
INTERMEDIATE INPUTS ALLOC.	0.04297	0.15520
WAGES	0.47283	0.62434
CONSUMPTION OF FIXED CAPITAL	0.12937	0.05761
TAXES LESS SUBSIDIES	0.03450	0.0
OPERATING SURPLUS	-0.01735	0.02906
VALUE ADDED	0.37665	0.0
GROSS OUTPUT	0.52717	0.37566
	1.00000	1.00000

VECTOR .... 2 AGRICULTURE SERVICES

COUNTRY:	AUSTRAL. U.S.AMER
YEAR/RANK:	1974/ 1 1967/ 2
-----	-----
AGRICULTURE	0.0 0.26192
AGRO-FOOD	0.0 0.01705
ENERGY AND PETROLEUM PROD.	0.02081 0.00272
BASIC PRODUCTS	0.0 0.05579
LIGHT INDUSTRY	0.00079 0.03061
CAPITAL GOODS	0.01492 0.00155
CONSTRUCTION	0.0 0.0
TRADE AND SERVICE	0.03337 0.05851
-----	-----
INTERMEDIATE INPUTS ALLOC.	0.06871 0.42814
WAGES	0.48253 0.26942
CONSUMPTION OF FIXED CAPITAL	0.0 0.0
TAXES LESS SUBSIDIES	0.06400 0.02326
OPERATING SURPLUS	0.0 0.0
VALUE ADDED	0.93090 0.57186
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GROSS OUTPUT	1.00000 1.00000

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VECTOR .... 4 FORESTRY

COUNTRY: YEAR/RANKS:	TUNISIA 1969/	SPAIN 1970/	KOREA RP 1970/	MEXICO 1970/	PAP. N.GN 1972/	NEW ZLND 1965/
AGRICULTURE	0.0	0.03732	0.06911	0.0	0.0	0.11111
AGRO-FOOD	0.0	0.00132	0.00024	0.0	0.00099	0.0
ENERGY AND PETROLEUM PROD.	0.0	1.00592	0.00027	0.01782	0.03707	0.00988
BASIC PRODUCTS	0.0	1.01231	0.02116	0.02017	0.00324	0.02469
LIGHT INDUSTRY	0.0	0.00393	0.01952	0.03309	0.03617	0.01975
CAPITAL GOODS	0.0	0.00820	0.04124	0.02040	0.07709	0.05185
CONSTRUCTION	0.0	0.00825	0.00036	0.0	0.00747	0.02222
TRADE AND SERVICE	0.0	0.02252	0.02350	0.06261	0.23198	0.14519
INTERMEDIATE INPUTS ALLOC.	0.0	0.10333	0.13439	0.15409	0.39600	0.43210
WAGES	0.32438	0.24488	0.23295	0.31764	0.32559	0.41975
CONSUMPTION OF FIXED CAPITAL	0.0	0.05188	0.00562	0.0	0.07192	0.05185
TAXES LESS SUBSIDIES	0.0	-0.00565	0.00036	0.04603	0.01726	0.01726
OPERATING SURPLUS	0.0	0.60556	0.67668	0.0	0.10924	0.08395
VALUE ADDED	0.99888	0.89667	0.86560	0.84591	0.60401	0.57284
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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## VECTOR .... 6 FISHING

Sector 2 - FOOD PROCESSING (AGRO-FOOD)

The equations of the eigenvectors for Food Processing and their contribution to total variance are as follows:

$X_2 = 0.9a_{12} - 0.5a_{32} - 0.1Va_2$	61.4%
$Y_2 = 0.3a_{12} + 0.3a_{32} + 0.9Va_2$	21.4%
$Z_2 = 0.4a_{12} + 0.3a_{32} - 0.4Va_2$	14.7%
<hr/>	
	97.5%

The dominant component in X is Agriculture. Low values of this component are found in Papua New Guinea and Zaire (10%-13%), high values in Senegal, Pakistan, Tunisia, Malaysia and Ireland (all at least 50%) U.S.A. (29%), Australia and West Germany (32%) and Japan (39%).

The dominant component of Y is value added. The leading high value added countries are the U.K., Zambia and Zaire (all over 40%). Low value added countries are India 1968 (22%), Tunisia (21%), Senegal (20%) and the Netherlands (22%). Explanations of the variability in value added is due to any of the following causes: different tax systems, different market structures, different input mix, different technique mix. The favourite in this sector is of course taxation, especially on such items as beverages and tobacco.

The dominant component of Z is Trade and Services. No clear pattern emerges as to the type of country which has high and which has low inputs. Thus, Tunisia has 3%, Zaire has 31%, U.S.A. has 13%, Japan 11%, U.K. 11% and Federal Republic of Germany 10% which indicates the level of advanced industrialized countries.

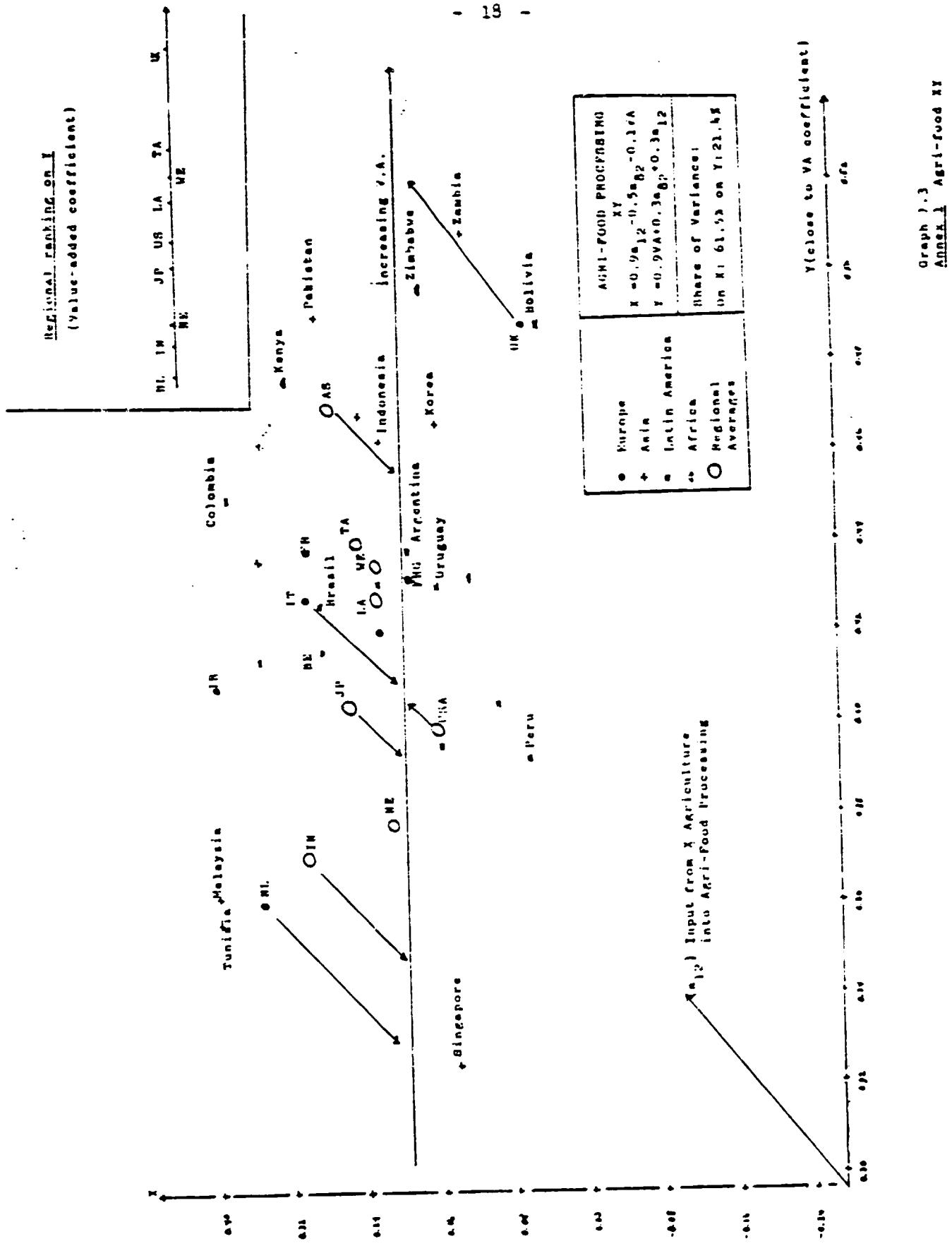
Taking a sectoral breakdown, we find that Food Manufacturing has a substantial quasi-diagonal element (quasi-diagonal because the intermediate part of columns has only 8 elements while the intermediate part of rows has 43 elements). Input of Agro-Food into Food Manufacturing varies from 3% in New Zealand to 23% in the U.K. Among countries with low agricultural input we find Papua New Guinea (16%), Iran (3%) and Australia (6%), among those with high input, New Zealand (61%), Ireland and Spain (51%), Costa Rica (56%).

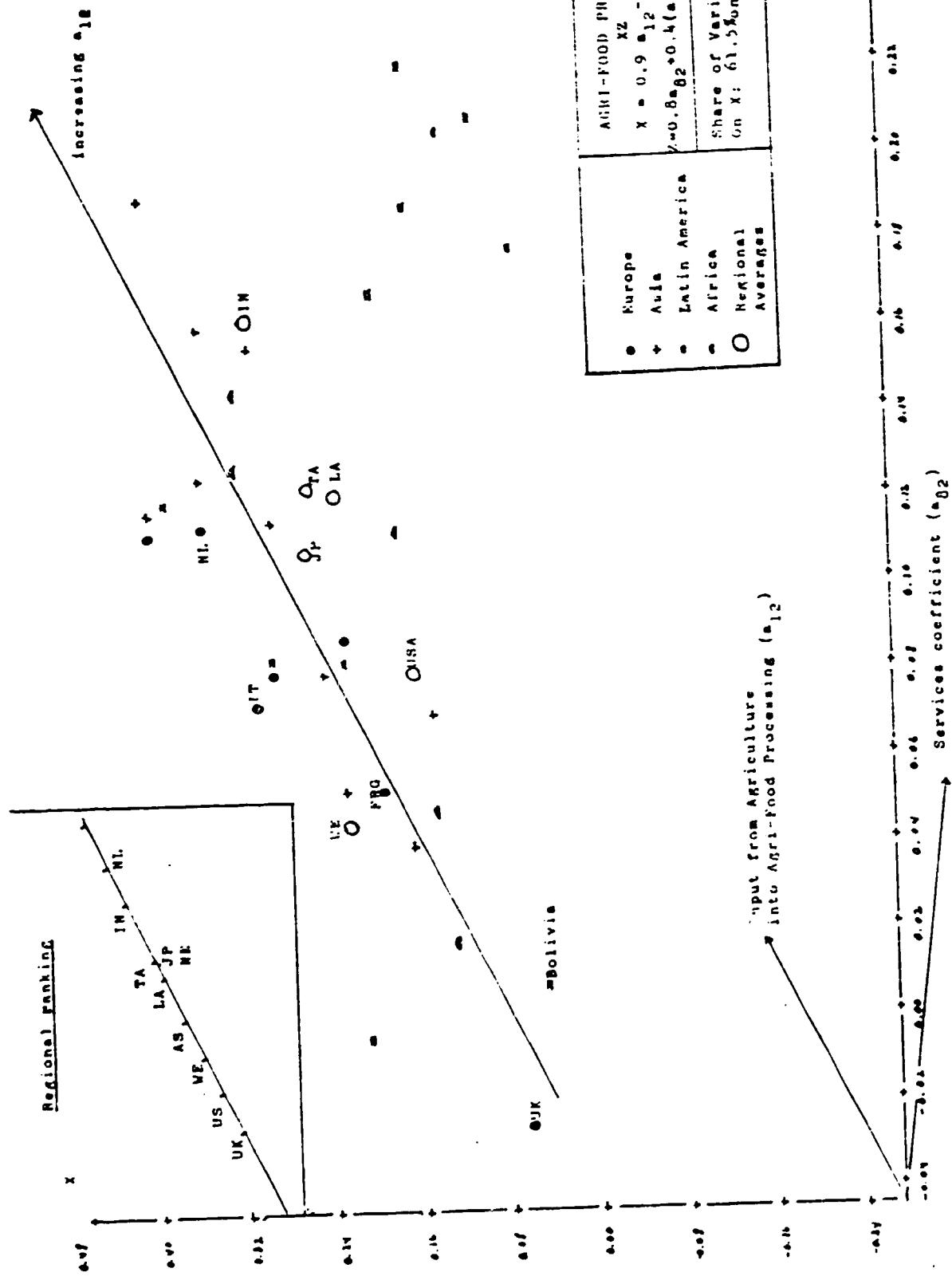
Trade and Services, and value added figures do not differ substantially from those of the sector aggregate.

Agricultural inputs into Beverages are high in countries like Spain and France (24%, 15%) where there is a flourishing wine industry, and low in countries like the U.K. and India (3%, 1%) where there is not. Agro-food inputs are comparatively low in wine producing countries with the exception of Greece. Another feature of the industry is its being a source of taxation, showing a remarkable coefficient of 50% in the U.K., 5% in Denmark and 5% in Ireland. The same point applies even more to tobacco. The tax coefficient in Denmark is 74%, in the U.K. 75% and in Italy 83%; on the other hand in the U.S.A. it is 2.3 and in Australia 1.5%. In view of the large federal excises in these countries on the final product, the low figures must reflect producers' subsidies.

INPUT COEFFICIENTS FOR SECTOR AGRO-FISHING

	GDP PER CAPITA	AGRICULTURE	AGRO-FISH	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTANT	SERVICE	INTERIM.	VALVE AD
INDONESIA 1971	61.5	0.30091	0.10210	0.02115	0.00163	0.01386	0.00639	0.00279	0.10846	0.34725	0.30540
INDIA 1965	77.1	0.30409	0.09613	0.01054	0.01170	0.00930	0.01206	0.00207	0.15862	0.60160	0.30540
HUNGARIAN 1965?	84.0	0.45534	0.05446	0.00424	0.00349	0.01555	0.01206	0.01291	0.65498	0.34502	0.65498
IBORY 1968	67.5	0.44107	0.1260	0.01869	0.01613	0.02676	0.00373	0.01271	0.10982	0.21759	0.21759
COLOU 1967 (FAIDF)	96.9	0.13706	0.01498	0.02356	0.04358	0.01150	0.04404	0.00300	0.31479	0.59165	0.40655
TANZANIA 1970	94.0	0.36734	0.06514	0.00644	0.01177	0.01794	0.00175	0.00173	0.17770	0.63115	0.36664
PAKISTAN 1965? 1968?	109.1	0.50716	0.01429	0.00621	0.01444	0.01608	0.00202	0.00202	0.7070	0.29330	0.29330
KENYA 1967	122.7	0.47438	0.01941	0.0206	0.00467	0.02150	0.00295	0.00295	0.67796	0.32204	0.32204
BOLIVIA 1971	164.7	0.19174	0.1944	0.02754	0.01038	0.01792	0.00170	0.00170	0.57745	0.42524	0.42524
IVORY COAST 1960	204.1	0.10070	0.1624	0.01345	0.01976	0.01947	0.00327	0.00327	0.40916	0.74706	0.75296
KOREA 1970	220.3	0.10168	0.1299	0.01024	0.04669	0.02180	0.00373	0.00373	0.62732	0.62732	0.37268
SINGAPORE 1965	236.0	0.54006	0.07324	0.01350	0.00391	0.01178	0.00541	0.00541	0.80030	0.19961	0.26940
THAILAND 1964	243.7	0.51044	0.21116	0.01102	0.01304	0.01740	0.00147	0.00147	0.20713	0.79219	0.20713
ZIMBABWE 1968?	249.4	0.46663	0.01447	0.01447	0.00450	0.02713	0.0	0.0	0.10551	0.21151	0.21151
PHILIPPINES 1967	265.0	0.12105	0.00230	0.01123	0.01026	0.05703	0.00532	0.00532	0.30726	0.60011	0.19189
MALAYSIA 1965	310.4	0.43177	0.01455	0.01029	0.01133	0.0250	0.00461	0.00461	0.91644	0.19156	-
IVORY COAST 1972	314.3	0.12607	0.04655	0.01150	0.01211	0.02254	0.005203	0.005203	0.24414	0.27604	0.27604
COLOMBIA 1970	320.0	0.52611	0.07319	0.05581	0.01941	0.01949	0.00691	0.00691	0.70591	0.29404	0.29404
ZAMBIA 1968	368.4	0.28618	0.09963	0.01910	0.01102	0.00747	0.01461	0.01461	0.57934	0.42466	0.42466
GUATEMALA 1971	379.5	0.29046	0.09004	0.02617	0.01664	0.06908	0.0	0	0.26712	0.74771	0.25229
PERU 1970	393.3	0.42224	0.14362	0.01168	0.02111	0.02742	0.0	0	0.72449	0.49995	0.30005
PERU 1968	399.1	0.24123	0.1361	0.02490	0.01673	0.06097	0.01531	0.01531	0.73057	0.26143	0.26143
COSTA RICA 1966	426.2	0.47806	0.1127	0.01263	0.01017	0.0130	0.00004	0.00004	0.73205	0.26795	0.26795
CHILE 1962	595.0	0.3105	0.12562	0.01174	0.0174	0.02470	0.00175	0.00175	0.20444	0.21362	0.21362
MEXICO 1970	613.4	0.36009	0.14626	0.01344	0.02142	0.02739	0.00164	0.00164	0.10792	0.68480	0.31520
AGUANTEHUA 1963	728.2	0.36763	0.09071	0.01671	0.0123	0.02406	0.00572	0.00572	0.19102	0.70999	0.29001
URUGUAY 1961	730.9	0.35112	0.07657	0.01840	0.02396	0.01167	0.02136	0.002136	0.21989	0.72274	0.27724
TOGO 1960 TOAGO	731.6	0.35111	0.07341	0.02311	0.0	0.03742	0.0	0.01107	0.04771	0.56002	0.41991
ITALY 1963	1165.3	0.51705	0.11600	0.01308	0.01074	0.02139	0.00171	0.00171	0.60074	0.74296	0.25712
SRI LANKA 1971	1251.0	0.24629	0.1446	0.01460	0.01113	0.02407	0.00020	0.00020	0.04137	0.75449	0.24511
AUSTRIA 1968	1405.2	0.35602	0.1242	0.01124	0.03670	0.01002	0.00749	0.00749	0.1234	0.69122	0.30278
ITALY 1970	1472.1	0.42749	0.13270	0.01006	0.01133	0.01215	0.00210	0.00210	0.04424	0.44569	0.30431
JAPAN 1970	1713.1	0.39162	0.12616	0.01116	0.01932	0.01116	0.00319	0.00319	0.11142	0.71792	0.20206
UNITED KINGDOM 1970	2023.5	0.20457	0.14127	0.01116	0.02497	0.01016	0.00275	0.00275	0.11148	0.54452	0.41444
NETHERLAND 1970	226.6	0.40514	0.1005	0.01124	0.01640	0.01467	0.00101	0.00101	0.71113	0.21667	0.21667
NETHERLAND 1970	2457.1	0.41702	0.11694	0.01467	0.01510	0.01510	0.00154	0.00154	0.70942	0.70942	0.29304
GERMANY F.R. 1970	2658.3	0.32005	0.1007	0.0107	0.01777	0.01777	0.00211	0.00211	0.66773	0.31227	0.31227
AUSTRALIA 1970/71	2680.6	0.32401	0.17416	0.01570	0.03590	0.01694	0.00126	0.00126	0.66494	0.72614	0.27060
FRANCE 1970	2941.0	0.43012	0.12496	0.01112	0.02319	0.02319	0.00211	0.00211	0.66493	0.71429	0.31429
UNITED STATES 1967	4216.2	0.29265	0.17000	0.00991	0.04275	0.01743	0.00281	0.00281	0.70497	0.29503	0.29503





Graph 1.4  
Annex 1 Agric-food XZ

FOUND MANUFACTURE [No.]

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PROGRAM TECASHT - VERS.1.01

DATE = 07-04-80

V E C T O R .... 7 FOOD MANUFACTURERS

COUNTRY: YEAR/HANK:	DEFINMARK
AGRICULTURE	0.53511
AGRO-FOOD	0.14514
ENERGY AND PETROLEUM PROD.	0.01176
BASIC PRODUCTS	0.01047
LIGHT INDUSTRY	0.02279
CAPITAL GOODS	0.00321
CONSTRUCTION	0.00617
TRADE AND SERVICE	0.05390
INTERMEDIATE INPUTS ALLOC.	0.00073
WAGES	0.11936
CONSUMPTION OF FIXED CAPITAL	0.0
TAXES LESS SUBSIDIES	-0.02680
OPERATING SURPLUS	0.04112
VALUE ADDED	0.14124
GROSS OUTPUT	1.00000

PAGE 2 FROM 2

PROGRAM TECHSRT - VERS.1.01

DATE = 07-08-80

VECTOR .... 8 REVERAGE

PAGE 1 FRO4 2

### **GROSS OUTPUT**

1

1

1

PROGRAM TECHSRT - VERS.1.01

DATE = 07-08-80

PAGE 2 FROM 2

VECTORS ... R BEVERAGE

COUNTRY:	CHILE
YEAR/RANK:	1962/ 23
-----	-----
AGRICULTURE	0.23038
AGRO-FOOD	0.03758
ENERGY AND PETROLEUM PROD.	0.00814
BASIC PRODUCTS	0.02927
LIGHT INDUSTRY	0.01633
CAPITAL GOODS	0.00147
CONSTRUCTION	0.0
TRADE AND SERVICE	0.40059
-----	-----
INTERMEDIATE INPUTS ALLOC.	0.72417
WAGES	0.05125
CONSUMPTION OF FIXED CAPITAL	0.01139
TAXES LESS SUBSIDIES	0.07990
OPERATING SURPLUS	0.13329
VALUE ADDED	0.27583
-----	-----
GROSS OUTPUT	1.00000

PROGRAM TECHSRT - VERS. 1.01

DATE = 07-08-80

VECTO R .... 9 TOBACCO

PAGE 1 FROM 2

1  
12

COUNTRY:  
YEAR/RANK:

PROGRAM TECHSRT - VERS.1.01

DATE = 07-08-80

PAGE 2 FROM 2

VECTOR ... 9 TOBACCO

COUNTRY: YEAR/RANK:	PAKISTAN 1962/ 23	INDIA 1968/ 24	AUSTRAL. 1974/ 25	IRELAND 1969/ 26
AGRICULTURE	0.38088	0.38355	0.31011	0.63095
AGRO-FOOD	0.0	0.00101	0.02732	0.0
ENERGY AND PETROLEUM PROD.	0.00235	0.00269	0.01132	0.00179
BASIC PRODUCTS	0.04526	0.04364	0.05347	0.03155
LIGHT INDUSTRY	0.00054	0.000562	0.12245	0.00476
CAPITAL GOODS	0.00344	0.00286	0.00703	0.00238
CONSTRUCTION	0.0	0.00235	0.00273	0.00060
TRADE AND SERVICE	0.12527	0.15505	0.12998	0.01310
INTERMEDIATE INPUTS ALLOC.	0.55775	0.54678	0.67330	0.88571
WAGES	0.0	0.0	0.14633	0.03908
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.0	0.01667
TAXES LESS SUBSIDIES	0.18755	0.04272	0.01600	0.01131
OPERATING SURPLUS	0.0	0.0	0.0	0.04702
VALUE ADDED	0.44225	0.40322	0.32670	0.11488
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000

Sector 3 - ENERGY

The equations of the eigenvectors for the third sector Energy and their contributions to total variance are as follows:

$$\begin{aligned} X_3 &= 0.7a_{83} + 0.7VA_3 & 53.3\% \\ Y_3 &= 0.7a_{83} + 0.7VA_3 & 26.6\% \\ && \hline && 79.9\% \end{aligned}$$

The eigenvector  $Z_3 = 1.Ca_{43}$  with a contribution of 15.1% is due to a mis-classification because in a number of countries coal mining could not be separated from other mining, and was therefore allocated to Sector 4 instead of to Sector 3, and Z has therefore to be omitted.

As may be seen from graph 1.5 the variability of the value added and of the services coefficient which constitute the two components of X and of Y is rather limited. We, therefore, proceed at once to the sectoral breakdown. The sub-sectors comprise coal mining; crude petrol and natural gas, electricity gas and steam, water supply, petroleum refineries, miscellaneous coal and petrol products.

In coal mining we find substantial quasi-diagonal elements for Belgium (1%), Netherlands (2%), U.S.A. (1%) and France (2%). This may reflect the fabrication of briquettes etc. In the other ten countries it does not exceed 8%. There is no systematic relation between the sectoral and the sub-sectoral service input coefficients. Five countries out of the fourteen pay net subsidies to the industry. The largest appear to be paid in Belgium and Spain. Value added below 60% occurs in five countries including Belgium, Netherlands, U.S.A. and France, seven between 60% and 80% including the U.K. and India, and 2 over 80%.

In crude Petrol and Natural Gas, intermediate inputs are nearly 40% in the U.S.A. and Mexico, and around 15% in India, Spain and Tunisia. This may possibly be due to a conceptual imbroglio between recovering and refining petrol.

In electricity gas and steam, a substantial number of countries show a strong quasi-diagonal element from 10% to 37%, and only 3, Australia, Brazil

and Papua New Guinea fail to do so. Four countries have value added coefficients from 55-65%, four up to 75% and five up to 92%.

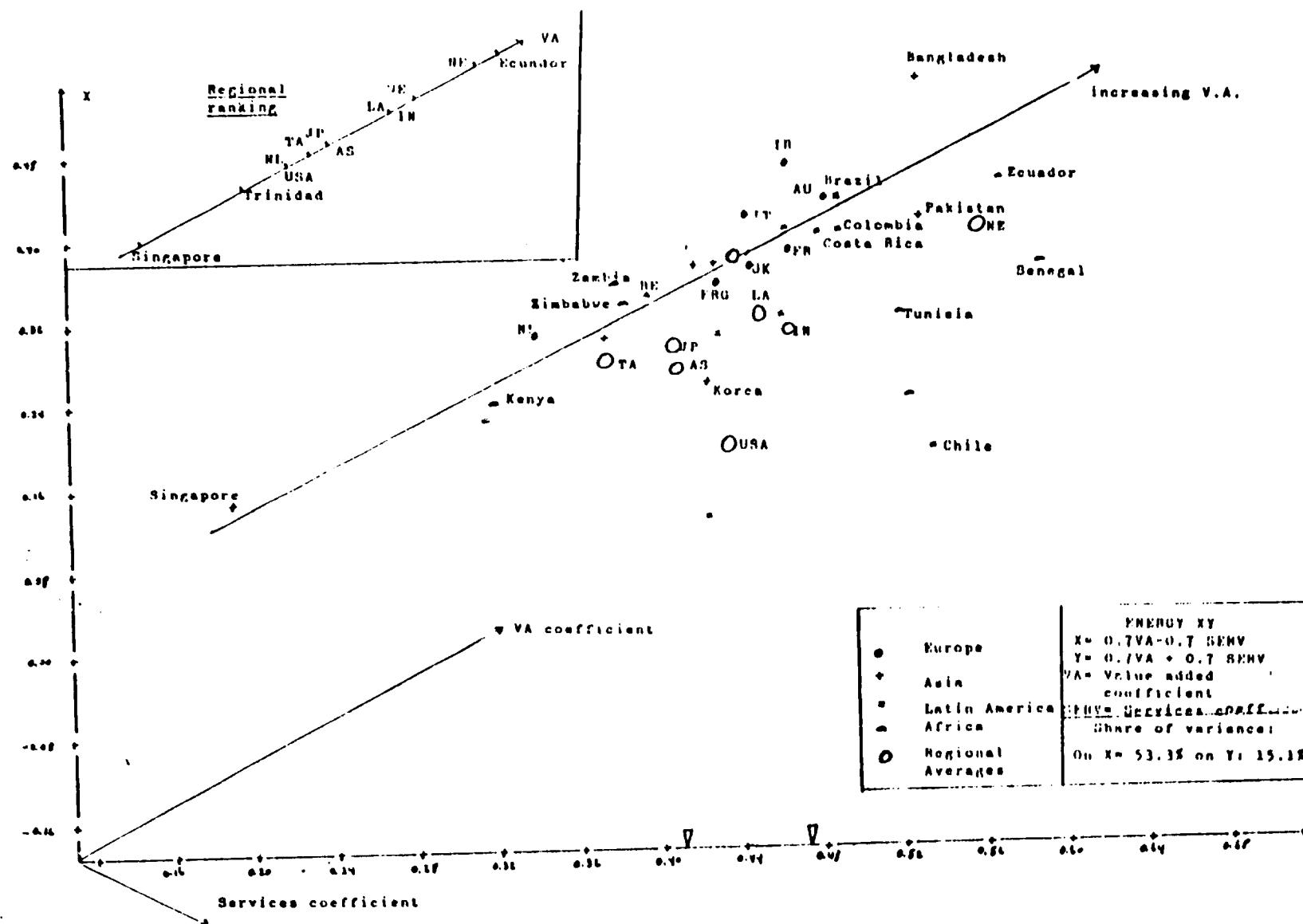
In water supply (sub-sector 13) we find again a quasi-diagonal element ranging from 38% (Iran) to 7% (Australia); a service coefficient of around 15% in South Korea Tunisia and Brazil; a construction coefficient of around 10% in South Korea and Australia. Value added ranges from just below 50% to 70%.

In sub-sector 14 (petroleum refinery) one expects a large quasi-diagonal element and small value added. The expectation are fulfilled in five cases. In four cases the dominant input is not classified as energy but basic products. In one case the dominant input is classified as agro-food (Spain). The origin of these aberrations can only be guessed at due to reclassification problems of original sectors.

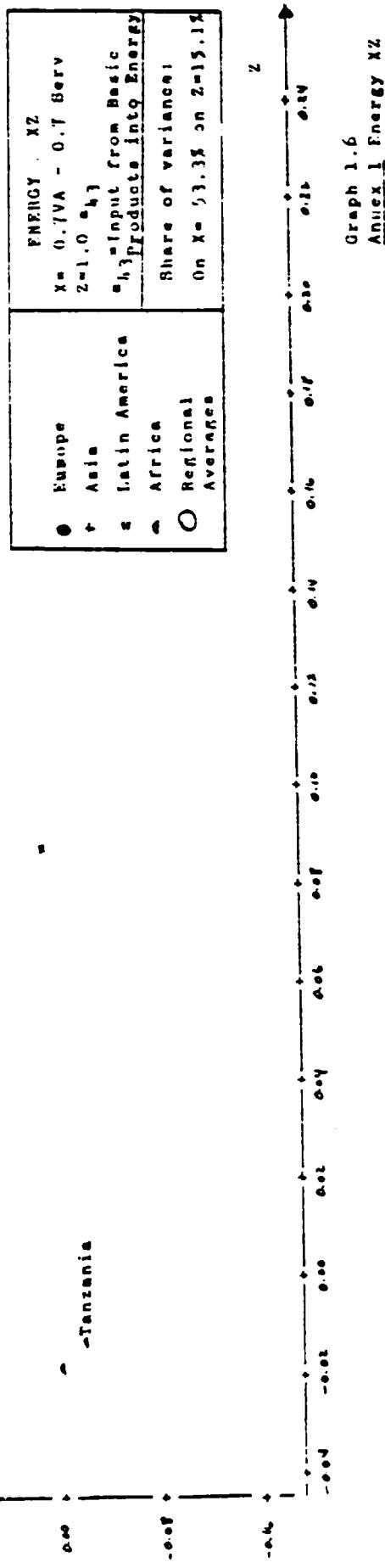
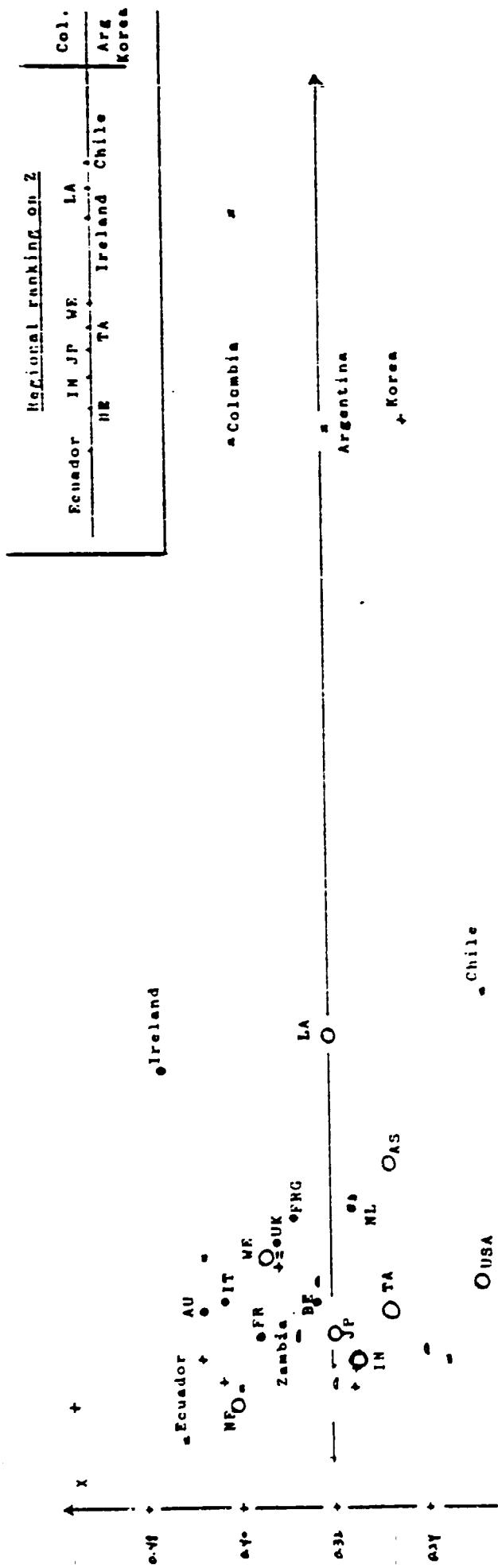
Sub-sector 15 - Miscellaneous coal and petrol products. This sub-sector shows similarity to the previous one: 2 countries with a large quasi-diagonal element, the same country with a dominant agro-food coefficient and one country with a significant basic product coefficient.

## INPUT COEFFICIENTS FOR SECTOR ENERGY

	GDP PER CAPITA	AGRICULT	AGRO-FIND	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTRUC	SERVICE	INTERM.	VALUE AD
INDONESIA 1971	61.5	0.0	0.0	0.27064	0.00704	0.00983	0.00452	0.00341	0.06115	0.33663	0.66337
INDIA 1959	77.1	0.0	0.0	0.22608	0.05695	0.0	0.01647	0.0	0.10460	0.40410	0.59590
BANGLADESH 1962	84.0	0.0	0.0	0.21577	0.0	0.00423	0.01693	0.0	0.00339	0.24132	0.75868
INDIA 1968	87.5	0.00004	0.00098	0.30616	0.00339	0.00821	0.00979	0.00252	0.12323	0.45431	0.54569
CONGO 1967 (ZAIHE)	90.9	0.0	0.0	0.03462	0.00083	0.00340	0.06392	0.00635	0.45752	0.56664	0.47736
TANZANIA 1970	94.0	0.06106	0.00957	0.05247	0.00908	0.04037	0.01463	0.02421	0.40621	0.61967	0.38030
PAKISTAN (WEST) 1962	109.1	0.0	0.0	0.21303	0.00447	0.01102	0.00478	0.0	0.09246	0.33057	0.66943
KENYA 1967	122.2	0.07796	0.00008	0.43223	0.00356	0.00954	0.01536	0.00094	0.05723	0.59705	0.40295
BOLIVIA 1971	169.7	0.00056	0.0	0.31652	0.0	0.01352	0.0	0.0	0.06232	0.19712	0.60688
IVORY COAST 1960	204.1	0.0	0.00038	0.01839	0.00263	0.00450	0.02065	0.00694	0.38682	0.44032	0.55968
KOREA 1970	229.3	0.00517	0.00003	0.16620	0.20933	0.00763	0.01446	0.00578	0.12852	0.52672	0.47328
SENEGAL 1959	236.0	0.0	0.0	0.13946	0.0	0.0	0.00923	0.00108	0.16423	0.32000	0.68000
TUNISIA 1969	243.7	0.0	0.0	0.22954	0.00211	0.00780	0.02173	0.0	0.15277	0.41000	0.59000
ZIMBABWE 1965	249.4	0.0	0.0	0.36687	0.01995	0.02313	0.03140	0.00478	0.03729	0.48540	0.51460
Ecuador 1953	265.0	0.0	0.0	0.00556	0.0	0.18699	0.0	0.0	0.00936	0.29100	0.70820
PAPUA NEW GUINEA 197	272.5	0.00034	0.00171	0.0	0.04681	0.00103	0.02151	0.04736	0.21839	0.33920	0.66680
MALAYSIA 1965	310.4	0.0	0.0	0.34371	0.0	0.00264	0.0	0.10978	0.05000	0.51510	0.48487
IVORY COAST 1972	314.3	0.0	0.0	0.04420	0.17010	0.00252	0.03786	0.00284	0.20178	0.46730	0.57670
COLUMBIA 1970	320.0	0.0	0.00088	0.05043	0.20649	0.00688	0.04073	0.00388	0.06454	0.37783	0.62617
ZAMBIA 1965	368.8	0.0	0.0	0.43692	0.00762	0.0	0.00677	0.0	0.02625	0.47756	0.52244
GUATEMALA 1971	379.5	0.00009	0.00008	0.19354	0.10084	0.03526	0.04567	0.0	0.30817	0.68764	0.31636
BRASILIA 1970	393.3	0.00010	0.00039	0.25676	0.02989	0.00518	0.00566	0.0	0.05596	0.35396	0.64606
PERU 1968	399.3	0.0	0.00018	0.20496	0.02758	0.02780	0.01060	0.0	0.06236	0.42340	0.57652
COSTA RICA 1965	426.2	0.0	0.0	0.04124	0.26651	0.00172	0.00947	0.01184	0.06163	0.38241	0.61759
CHILE 1962	595.0	0.00003	0.00026	0.12227	0.03675	0.02427	0.00864	0.00291	0.24443	0.48956	0.51044
MEXICO 1970	613.4	0.00009	0.00006	0.30085	0.03775	0.01392	0.03162	0.0	0.09622	0.48072	0.51928
ARGENTINA 1963	728.2	0.00000	0.00004	0.10956	0.20464	0.03039	0.00249	0.0	0.10475	0.45687	0.54313
URUGUAY 1961	730.9	0.0	0.00025	0.36880	0.01233	0.00159	0.00965	0.0	0.22081	0.61344	0.39656
TRINIDAD AND TOBAGO	733.6	0.0	0.0	0.51115	0.0	0.01380	0.0	0.00149	0.07592	0.62236	0.37764
IRELAND 1969	1155.1	0.0	0.00227	0.23541	0.06923	0.00076	0.02154	0.0	0.00829	0.33760	0.64240
SINGAPOUR 1973	1251.6	0.0	0.00004	0.70745	0.01146	0.01034	0.00062	0.00076	0.03499	0.76567	0.23433
AUSTRIA 1964	1405.2	0.00234	0.00043	0.21333	0.01782	0.00246	0.01395	0.01358	0.05298	0.35689	0.64311
ITALY 1970	1572.3	0.00011	0.00056	0.29696	0.01870	0.01151	0.01678	0.01780	0.03540	0.39346	0.60654
JAPAN 1970	1713.1	0.00173	0.00005	0.31075	0.00840	0.00537	0.02061	0.01563	0.09596	0.45951	0.54048
UNITED KINGDOM 1970	2023.5	0.00018	0.00027	0.26068	0.03033	0.01866	0.03194	0.01198	0.06244	0.42340	0.57652
NETHERLAND 1970	2226.6	0.00013	0.0	0.44025	0.03410	0.01506	0.01553	0.01119	0.02609	0.54235	0.45765
BELGIUM 1970	2457.1	0.00226	0.0	0.31290	0.01407	0.00477	0.01995	0.00646	0.04539	0.48059	0.51941
GERMANY F.R. 1970	2558.3	0.00092	0.00097	0.29854	0.03474	0.02053	0.01502	0.01226	0.06201	0.44499	0.55501
AUSTRALIA 1974/75	2688.6	0.00422	0.0	0.24230	0.01613	0.00957	0.02124	0.01530	0.05694	0.36573	0.63417
FRANCE 1970	2841.0	0.00091	0.00026	0.27350	0.01178	0.00919	0.01766	0.02168	0.06843	0.40342	0.59658
UNITED STATES 1967	4216.2	0.0	0.00071	0.31802	0.02082	0.00652	0.01038	0.02491	0.18181	0.56317	0.47683



Graph 1.5 Annex 1 Energy XY



PROGRAM TECHSRT - VERS.1.01

DATE = 07-07-80

VECTOR ... 10 COAL MINIG

PAGE 1 FRO4 1

COUNTRY: YEAR/RANK:	IRELAND 1969/ 1	ITALY 1970/ 2	INDIA 1968/ 3	AUSTRIA 1964/ 4	SPAIN 1970/ 5	GRMNY.FR 1970/ 6	KOREA 1970/ 7	IRAN 1973/ 8	JNTD.KGD 1970/ 9	FRANCE 1970/ 10	U.S.A/MEF 1967/ 11
AGRICULTURE	0.0	0.00952	0.0	0.03420	0.00080	0.00536	0.04710	0.0	0.0	0.01406	0.0
AGRO-FOOD	0.0	0.0	0.0	0.0	0.00357	0.00100	0.0	0.0	0.0	0.00084	0.0
ENERGY AND PETROLEUM PROD.	0.03571	0.05714	0.04463	0.05671	0.05649	0.08332	0.06028	0.03951	0.07633	0.21978	0.15661
BASIC PRODUCTS	0.0	0.03810	0.00498	0.02790	0.04239	0.03668	0.05592	0.05644	0.05866	0.03184	0.03610
LIGHT INDUSTRY	0.0	0.00952	0.00151	0.00540	0.05783	0.04374	0.01113	0.0	0.05171	0.03383	0.03898
CAPITAL GOODS	0.0	0.0	0.00037	0.00810	0.02213	0.02500	0.02340	0.02446	0.07619	0.07667	0.04370
CONSTRUCTION	0.0	0.0	0.0	0.01800	0.00161	0.02557	0.00283	0.0	0.04079	0.01406	0.00728
TRADE AND SERVICE	0.0	0.04762	0.13454	0.07741	0.06702	0.04427	0.07198	0.19565	0.04676	0.01971	0.13015
INTERMEDIATE INPUTS ALLOC.	0.10714	0.16095	0.18602	0.22772	0.25185	0.26494	0.27564	0.31606	0.35044	0.41348	0.41609
WAGES	0.53571	0.63810	0.0	0.63906	0.91084	0.38517	0.54485	0.0	0.59095	0.0	0.39170
CONSUMPTION OF FIXED CAPITAL	0.03571	0.13333	0.0	0.07381	0.10103	0.05256	0.11495	0.0	0.10382	0.0	0.0
TAXES LESS SUBSIDIES	0.21429	0.01905	0.02125	-0.01980	-0.33771	0.04447	0.00611	0.0	-0.00058	0.0	0.02185
OPERATING SURPLUS	0.10714	0.02857	0.0	0.07921	0.07398	0.25285	0.05844	0.0	-0.03462	0.0	0.0
VALUE ADDED	0.89286	0.82857	0.81398	0.77228	0.74818	0.73606	0.72435	0.68398	0.64961	0.58652	0.58391
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	NETHLANDS 1970/ 12	BELGIUM 1970/ 13	CHILE 1962/ 14
AGRICULTURE	0.00356	0.02532	0.00004
AGRO-FOOD	0.0	0.0	0.00045
ENERGY AND PETROLEUM PROD.	0.26174	0.12753	0.06149
BASIC PRODUCTS	0.02276	0.08702	0.03612
LIGHT INDUSTRY	0.04196	0.02256	0.06520
CAPITAL GOODS	0.05477	0.08149	0.00437
CONSTRUCTION	0.02205	0.00691	0.0
TRADE AND SERVICE	0.02418	0.08333	0.27398
INTERMEDIATE INPUTS ALLOC.	0.43243	0.43278	0.44166
WAGES	0.60171	0.87937	0.55079
CONSUMPTION OF FIXED CAPITAL	0.06117	0.09530	0.05278
TAXES LESS SUBSIDIES	-0.17283	-0.37017	0.01296
OPERATING SURPLUS	0.07824	-0.03729	-0.05820
VALUE ADDED	0.56757	0.56722	0.55832
GROSS OUTPUT	1.00000	1.00000	1.00000

## VECTOR .... 11 CRUDE PETROL AND NATURAL GAS

COUNTRY: YEAR/RANK:	IRAN 1973/	TUNISIA 1968/	SPAIN 1970/	INDIA 1968/	U.S.AMER 1967/	MEXICO 1970/	6
AGRICULTURE	0.0	0.0	0.0	0.0	0.0	0.0	
AGRC-FOOD	0.00121	0.0	0.0	0.0	0.0	0.0	
ENERGY AND PETROLEUM PROD.	0.0	0.00143	0.01515	0.01940	0.0 <sup>a</sup> .48	0.10838	
BASIC PRODUCTS	0.0	0.00718	0.01010	0.02456	0.02701	0.07262	
LIGHT INDUSTRY	0.0	0.01006	0.01515	0.02087	0.01082	0.01253	
CAPITAL GOODS	0.00461	0.00359	0.0	0.00491	0.03282	0.07381	
CONSTRUCTION	0.0	0.0	0.00505	0.0	0.03410	0.0	
TRADE AND SERVICE	0.00739	0.10770	0.10101	0.08644	0.23680	0.12090	
INTERMEDIATE INPUTS ALLOC.	0.01321	0.12996	0.14646	0.15619	0.38303	0.38824	
WAGES	0.0	0.05063	0.16667	0.0	0.06319	0.34253	
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.54040	0.0	0.0	0.0	
TAXES LESS SUBSIDIES	0.0	0.01253	0.00505	0.01989	0.05266	0.05086	
OPERATING SURPLUS	0.0	0.0	0.14141	0.0	0.0	0.0	
VALUE ADDED	0.98680	0.87004	0.85354	0.84381	0.61697	0.61176	
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	

## VECTORS .... 12 ELECTRICITY, GAS AND STEAM

COUNTRY:	YEAR/HANK:	PAKISTAN 1962/7	KENYA 1967/4	HANGLAND 1962/5	AUSTRIA 1964/4	PAKISTAN KOREA 1964/4	PAPUA NEW GUINEA 1970/7	SPAIN 1972/9	PHILIPP. 1969/11
AGRICULTURE		0.0	0.0	0.0	0.0	0.0	0.00001	0.00001	0.00217
AGRO-FOOD		0.0	0.0	0.0	0.0	0.00075	0.0	0.00011	0.00016
FISHERY AND PETROLEUM PROD.		0.04162	0.06736	0.12355	0.10694	0.21671	0.15945	0.27329	0.20516
BASIC PRODUCTS		0.0	0.00104	0.01662	0.00440	0.00423	0.01732	0.01154	0.21587
LIGHT INDUSTRY		0.00919	0.00040	0.00216	0.01145	0.00149	0.0	0.00454	0.04054
CAPITAL GOODS		0.01564	0.02577	0.00130	0.02004	0.01693	0.02069	0.01659	0.01662
CONSTRUCTION		0.0	0.00552	0.00361	0.6	0.0	0.01519	0.02111	0.00411
TRADE AND SERVICES		0.00892	0.05166	0.01253	0.07683	0.01731	0.0	0.00519	0.00293
INTERMEDIATE INPUTS ALLOC.		0.07541	0.15319	0.16945	0.22747	0.24137	0.27265	0.29063	0.12434
WAGES		0.21793	0.37294	0.0	0.17000	0.0	0.22127	0.0	0.29733
CONSUMPTION OF FIXED CAPITAL		0.0	0.0	0.0	0.03526	0.0	0.10144	0.0	0.16069
TAXES LESS SUBSIDIES		0.0	0.04H2R	0.0	0.00025	0.01434	0.01204	0.0	0.14561
OPERATING SURPLUSES		0.0	0.0	0.0	0.56459	0.0	0.31219	0.0	0.25459
VALUE ADDED		0.91606	0.84669	0.84015	0.77018	0.75868	0.72735	0.70937	0.67566
GROSS OUTPUT		1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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COUNTRY:  
YEAR/HANK:

INDONESIA 1968/12 1965/11

AGRICULTURE	0.0	0.0
AGRO-FOOD	0.0	0.0
FISHERY AND PETROLEUM PROD.	0.19616	0.30710
BASIC PRODUCTS	0.0	0.01150
LIGHT INDUSTRY	0.00499	0.0715
CAPITAL GOODS	0.00004	0.01192
CONSTRUCTION	0.0	0.00417
TRADE AND SERVICES	0.17163	0.01337
INTERMEDIATE INPUTS ALLOC.	0.43062	0.45760
WAGES	0.24579	0.12753
CONSUMPTION OF FIXED CAPITAL	0.0	0.00343
TAXES LESS SUBSIDIES	-0.00343	-0.00354
OPERATING SURPLUSES	0.0	0.34492
VALUE ADDED	0.56223	0.54231
GROSS OUTPUT	1.00000	1.00000

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V E C T O R . . . . 13 WATER SUPPLY  
 COUNTRY: BRAZIL 1970/1 1974/1  
 YF&HANK: -----

	BRAZIL 1970/1	AUSTRALIA 1968/2	TUNISIA 1968/3	SPAIN 1970/4	NEW ZEALAND 1965/5	IRAN 1971/5	KOREA RP 1970/7
AGRICULTURE	0.0	0.0	0.0	0.0	0.00022	0.0	0.00061
AGRO-FOOD	0.0	0.0	0.0	0.00119	0.0	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.0	0.07244	0.10466	0.17469	0.12560	0.38034	0.16479
BASIC PRODUCTS	0.10079	0.00543	0.0	0.00274	0.01065	0.010439	0.03127
LIGHT INDUSTRY	0.0	0.01640	0.00385	0.01094	0.02049	0.02621	0.01934
CAPITAL GOODS	0.0	0.04147	0.0	0.00780	0.02415	0.01615	0.04199
CONSTRUCTION	0.0	0.09236	0.0	0.00997	0.06763	0.0	0.11147
TRADE AND SERVICE	0.17409	0.04982	0.15169	0.07629	0.01746	0.04686	0.16025
INTERMEDIATE INPUTS ALLOC.	0.277418	0.33774	0.34240	0.14494	0.36715	0.50900	0.51191
WAGE'S	0.49052	0.41090	0.28192	0.26235	0.28502	0.0	0.12541
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.0	0.17425	0.16425	0.0	0.11217
TAXES LESS SUBSIDIES	0.0	0.02644	0.09769	0.01636	0.00966	0.0	0.00000
OPERATING SURPLUS	0.0	0.0	0.0	0.20310	0.17191	0.0	0.24144
VALUE ADDED	0.70616	0.66226	0.65971	0.65616	0.63285	0.49202	0.48110
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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VECTOR .... 14 PETROLEUM REFINERIES

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COUNTRY: YEAR/RANK:	IRAN 1973/ 1	GREECE 1970/ 2	SPAIN 1970/ 3	BRAZIL 1970/ 4	PHILIPP. 1969/ 5	KOREA RP 1970/ 6	MEXICO 1970/ 7	U.S.-AMEF 1967/ 8	INDIA 1968/ 9	COSTA RIC 1966/ 10	TUNISIA 1968/ 11
AGRICULTURE	0.0	0.00200	0.00002	0.0	0.00002	0.00006	0.0	0.0	0.0	0.0	0.0
AGRO-FOOD	0.0	0.00036	0.37306	0.00093	0.00001	0.0	0.00005	0.00117	0.0	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.03276	0.04080	0.02626	0.45161	0.03945	0.02053	0.51528	0.53390	0.57562	0.08038	0.54701
BASIC PRODUCTS	0.03831	0.23895	0.00453	0.06213	0.48404	0.46912	0.03502	0.04048	0.00143	0.66688	0.0
LIGHT INDUSTRY	0.0	0.00619	0.00625	0.00372	0.00890	0.00871	0.01329	0.00486	0.02967	0.0	0.01902
CAPITAL GOODS	0.00102	0.00221	0.00173	0.0	0.00266	0.00669	0.00942	0.00466	0.00366	0.0	0.00087
CONSTRUCTION	0.0	0.00003	0.00066	0.0	0.00925	0.00093	0.0	0.01398	0.00438	0.03505	0.0
TRADE AND SERVICE	0.01230	0.02846	0.02404	0.07794	0.06179	0.10203	0.10845	0.13352	0.13328	0.01041	0.29814
INTERMEDIATE INPUTS ALLOC.	0.08439	0.31900	0.43994	0.59632	0.60611	0.60806	0.68150	0.73460	0.74904	0.79273	0.86503
WAGES	0.0	0.01637	0.01471	0.08129	0.03068	0.03307	0.11295	0.08728	0.0	0.0	0.04160
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.02458	0.0	0.02753	0.04317	0.0	0.0	0.0	0.0	0.0
TAXES LESS SUBSIDIES	0.0	0.57037	0.49696	0.0	0.19046	0.23990	0.10622	0.11725	0.01863	0.0	0.00594
OPERATING SURPLUS	0.0	0.0	0.02382	0.0	0.14522	0.07580	0.0	0.0	0.0	0.0	0.0
VALUE ADDED	0.91562	0.68100	0.56006	0.40047	0.39389	0.39194	0.31850	0.26540	0.25096	0.20727	0.13413
GFCSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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## VECTOR .... 15 MISC.COAL AND PETROL.PRODUCTS

COUNTRY: YEAR/RANK:	IRAN 1973/	CHILE 1962/	SPAIN 1970/	INDIA 1968/	KOREA RP 1970/	RP 5
AGRICULTURE	0.0	0.00004	0.00045	0.00037	0.00007	
AGRO-FOOD	0.0	0.00035	0.49570	0.0	0.0	
ENERGY AND PETROLEUM PROD.	0.10286	0.00126	0.12413	0.46034	0.54556	
BASIC PRODUCTS	0.08571	0.15134	0.05060	0.03203	0.00443	
LIGHT INDUSTRY	0.05143	0.01123	0.00784	0.01583	0.00480	
CAPITAL GOODS	0.00857	0.00478	0.00211	0.00335	0.01043	
CONSTRUCTION	0.0	0.0	0.00189	0.01620	0.00026	
TRADE AND SERVICE	0.05143	0.37277	0.09540	0.27374	0.26664	
INTERMEDIATE INPUTS ALLOC.	0.29999	0.54176	0.77913	0.80186	0.83220	
WAGES	0.0	0.02902	0.04744	0.0	0.07678	
CONSUMPTION OF FIXED CAPITAL	0.0	0.01378	0.03582	0.0	0.01190	W6
TAXES LESS SUBSIDIES	0.0	0.18233	0.01440	0.04600	0.00859	
OPERATING SURPLUS	0.0	0.23312	0.12421	0.0	0.07052	
VALUE ADDED	0.70000	0.45825	0.22187	0.19814	0.16779	
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	

Sector 4 - BASIC PRODUCTS

The equations for the fourth sector are:

$$\begin{aligned} X_4 &= -0.3a_{34} + 0.9VA_4 & 53.4\% \\ Y_4 &= 0.9a_{34} + 0.3VA_4 & 38.4\% \\ && \hline && 91.8\% \end{aligned}$$

The next eigenvector has a contribution of only 3.2% and is therefore not worth including. The dominant component in X is value added, and in Y, the service coefficient.

There is not much correlation between value added and GDP per capita. Among the high-income countries, the Netherlands show 43%, and Japan 28%. Among the low-income countries, Zambia has 7% and Ivory Coast, 2%.

The same goes for the Trade and Services coefficient. Among the developing countries Zaire has 61% and Malaysia, 5%, and among the industrialized countries, Belgium has 7% and the U.K. has 16%.

The highest fluctuations of coefficients can be observed in diagonal elements (which are excluded from the principal component analysis)

Japan - 48.2%	Argentina - 13.4%
Singapore - 42.6%	Zimbabwe - 3.6%
Belgium - 41.7%	Zaire - 8.4%
Germany - 41.0%	Guatemala - 6.2%
Costa Rica - 40.6%	Tanzania - 4.9%
Malaysia - 40.5%	Zambia - 4.2%
Korea - 39.0%	Kenya - 4.2%
Austria - 35.5%	Papua New Guinea 1.6%

To a large extent this reflects the content of metal production (iron and steel). In the basic products sector, it is quite understandable that metal production requires a high input of ores.

Sub-sector 16 - Metal ore mining: The diagonal element is always small (2-13%) except for Mexico (31%) and the U.S.A. (21%). The value added coefficients range from 44% (U.S.A.) to 37% (India 1968).

Sub-sector 17 - Other Mining: Out of nine countries, six have a value added from 5% to 8%, and three are between 8% and 9%. Only Austria which has the lowest value added has a substantial quasi-diagonal element of 23%, the respective figures for U.S.A. are 6% and 14%, and for Australia 6% and 7%. Four countries have a service coefficient of at least 10%.

Sub-sector 18 - Iron and Steel: The distribution according to value added for 14 countries is: three from 1% to 3%; five from 3% to 4%; five from 4% to 42%; and 7% for Iran. The quasi diagonal element (input of ores) ranges from 66% South Korea to 2% India (leaving out 1% for Iron as dubious). Nine countries have a service coefficient of at least 10%.

Sub-sector 19 - Non-Ferrous Metals: Value added distribution - three from 1% to 3%; five from 3% to 4%; two from 4% to 5%. Quasi-diagonal element (input of ores): 61% (Spain) to 33% (India). Trade and Service coefficient of at least 10% - six out of ten.

Sub-sector 20 - Paper: Value added distribution - three from 22% to 35%; five from 35% to 50%; and five from 40% to 46%. Quasi diagonal element 50% to 19%. Trade and Service coefficient of at least 10% - 10 out of 13.

Sub-sector 21 - Chemicals: Value added distribution - three from 24-30%, five from 30-35%, nine from 35-40%, six from 40-45%, one from 45-50% and four from 50-70%. Quasi-diagonal element 39% (Australia) - 10% Papua New Guinea. Trade and Service Coefficient of at least 10% - 21 out of 27.

Unusual input coefficients: Agriculture - 47% Papua New Guinea  
20% Brazil

Sub-sector 22 - Pottery: Information on this sub-sector is available for only one country: Brazil (the Iran data appearing unreliable)

Basic Products	-	17
Trade and Services	-	12
Energy	-	4
Others	-	3
Intermediary	-	36
Value added	-	64

Sub-sector 23 - <u>Glass</u> : Value added	34%	-	1
	50% - 60%	-	6
	60% - 62%	-	3

Service coefficient of at least 10% - six out of ten. Quasi-diagonal element - 36% - 16%.

Sub-sector 24 - Other Non-Metallic Mineral Products: Value added

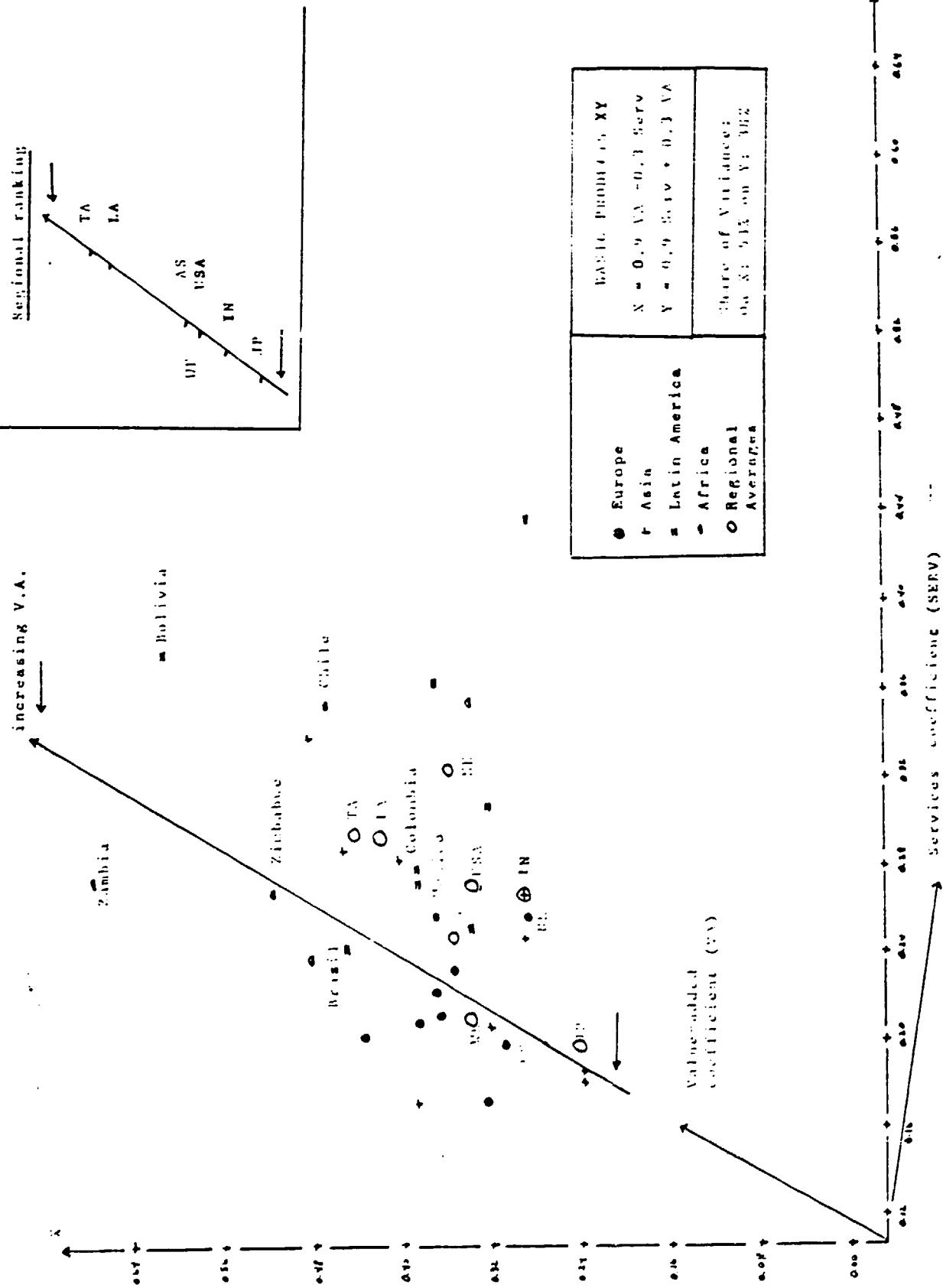
40% - 45%	-	2 countries
45% - 50%	-	4
50% - 55%	-	4
55% - 60%	-	2
60% - 65%	-	2

Service coefficient of at least 10% - 14 out of 14. Quasi-diagonal element 30% - 5%. Other coefficients:

Energy Korea - 12%; Iran - 12%; India - 12%;  
Greece - 11%; Philippines - 11%

INPUT COEFFICIENTS FOR SECTOR BASIC PRODUCTS

	GDP PER CAPITA	AGRICULT	AGRO-FOO	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTRUC	SERVICES	INTERM.	VALUE AD
INDONESIA 1971	51.5	0.02646	0.03979	0.06677	0.16504	0.03051	0.01140	0.00851	0.13563	0.48412	0.51588
INDIA 1959	77.1	0.01300	0.02734	0.06729	0.21436	0.03096	0.04115	0.00027	0.14478	0.51921	0.46078
BANGLADESH 1962	84.0	0.02753	0.01068	0.03401	0.15480	0.04468	0.00178	0.0	0.17200	0.44227	0.55773
INDIA 1968	87.5	0.03757	0.03553	0.07286	0.24510	0.03856	0.00800	0.03291	0.16595	0.64346	0.35654
CONGO 1967 (ZAIREF)	90.9	0.0	0.0	0.01381	0.06382	0.00705	0.03902	0.00971	0.61081	0.76422	0.21578
TANZANIA 1970	94.0	0.00284	0.0	0.05883	0.04886	0.02125	0.00710	0.01946	0.35452	0.51492	0.48505
PAKISTAN (WEST) 1962	104.1	0.01480	0.00161	0.05115	0.27911	0.03070	0.01619	0.0	0.16282	0.55646	0.44354
KENYA 1967	122.2	0.03307	0.00309	0.17980	0.04213	0.03810	0.04443	0.00403	0.23551	0.58016	0.41984
BOLIVIA 1971	169.7	0.01680	0.0	0.06944	0.0	0.05383	0.0	0.0	0.17081	0.30487	0.69513
IVORY COAST 1960	204.1	0.0	0.00066	0.02336	0.02434	0.00559	0.01645	0.00428	0.43454	0.50921	0.49079
KOREA 1970	229.3	0.00647	0.01067	0.07726	0.34985	0.01663	0.00647	0.00078	0.14756	0.65569	0.34431
SENEGAL 1969	236.0	0.01539	0.0	0.07272	0.15152	0.02693	0.03463	0.05148	0.32666	0.68449	0.31551
URUGUAY 1968	243.7	0.00946	0.00239	0.05016	0.12392	0.00744	0.00202	0.0	0.07562	0.47151	0.52849
ZIMBABWE 1965	249.4	0.0	0.01301	0.11042	0.09603	0.03887	0.09254	0.0	0.09004	0.44056	0.55944
ECUADOR 1963	265.8	0.00280	0.0	0.02595	0.0	0.21158	0.0	0.0	0.05788	0.29741	0.70259
PAPUA NEW GUINEA 197	272.5	0.0	0.00273	0.00241	0.01632	0.00194	0.00954	0.00154	0.26669	0.30117	0.69883 1
MALAYSIA 1965	310.4	0.07932	0.00023	0.05118	0.40530	0.00096	0.00031	0.0	0.04511	0.58241	0.41757
IVORY COAST 1972	314.3	0.01040	0.02635	0.02584	0.24222	0.01836	0.03213	0.00414	0.39349	0.75293	0.24707 0
COL 1968 1970	320.0	0.01516	0.01424	0.04202	0.26633	0.04931	0.02530	0.00140	0.14350	0.55726	0.44274
PERU 1965	368.8	0.00073	0.00109	0.05160	0.04249	0.01212	0.08374	0.03771	0.04317	0.27265	0.72735 1
GUATEMALA 1971	379.5	0.00045	0.02609	0.07388	0.06923	0.09685	0.00005	0.0	0.32423	0.59078	0.40922
BRASILIA 1970	393.3	0.01751	0.01525	0.05353	0.11362	0.00437	0.00047	0.0	0.08942	0.49457	0.50543
PERU 1968	399.3	0.00036	0.00391	0.04434	0.10865	0.03308	0.04631	0.0	0.12878	0.56543	0.43457
COSTA RICA 1966	426.2	0.00297	0.01404	0.01879	0.40586	0.02339	0.00110	0.00184	0.13286	0.60086	0.39914
CHILE 1962	595.0	0.01197	0.00160	0.06439	0.14851	0.01573	0.01719	0.0	0.19144	0.45083	0.54917
MEXICO 1970	613.4	0.00545	0.00723	0.03988	0.32202	0.03572	0.00446	0.0	0.13764	0.55240	0.44760
ARGENTINA 1963	728.2	0.00433	0.01638	0.04914	0.11387	0.01967	0.02629	0.0	0.22753	0.53922	0.46078
URUGUAY 1951	730.9	0.03674	0.02657	0.04516	0.27045	0.01658	0.03088	0.0	0.18880	0.59717	0.40283
TRINIDAD AND TOBAGO	733.6										
IRELAND 1962	1165.3	0.00326	0.00345	0.03679	0.29638	0.09373	0.03468	0.01014	0.05731	0.53586	0.44416
SINGAPORE 1973	1251.4	0.00013	0.01706	0.04146	0.42580	0.02873	0.01490	0.00167	0.09775	0.62878	0.37120
AFRICA 1964	1405.2	0.01137	0.00418	0.06299	0.15462	0.02308	0.02112	0.00045	0.11306	0.60125	0.39875
ITALY 1970	1572.3	0.00576	0.00964	0.09106	0.32857	0.01251	0.00506	0.04235	0.08488	0.57981	0.42017
JAPAN 1970	1713.1	0.01011	0.00251	0.06885	0.41141	0.02022	0.01452	0.00291	0.11540	0.71611	0.28389
UNITED KINGDOM 1970	2023.5	0.00270	0.00738	0.04000	0.32400	0.05511	0.02253	0.00288	0.15935	0.65396	0.34604
NETHERLAND 1970	2226.6	0.00321	0.00783	0.07009	0.34742	0.02750	0.00891	0.02709	0.07481	0.56685	0.43315
BELGIUM 1970	2457.1	0.00239	0.00364	0.07776	0.41680	0.02643	0.02039	0.03205	0.06073	0.64821	0.35179
GERMANY F.R. 1970	2558.7	0.00616	0.00585	0.06837	0.41041	0.03109	0.00608	0.02463	0.09383	0.65043	0.34957
AUSTRALIA 1974/75	2688.6	0.00114	0.00727	0.05042	0.34400	0.01727	0.01317	0.00795	0.13634	0.57959	0.40974
FRANCE 1970	2841.0	0.00305	0.00663	0.06903	0.32754	0.02437	0.01165	0.03898	0.09965	0.58170	0.41030
UNITED STATES 1967	4216.2	0.00047	0.00697	0.04943	0.11514	0.04450	0.02623	0.00726	0.15479	0.60480	0.39520



Graph 1.7 Basic Products XY  
Annex 1

PROGRAM TECHSRT - VERS.1.01

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VECTOR .... 16 METAL ORE MINING

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COUNTRY: YEAR/RANK:	INDIA 1968/ 1	SPAIN 1970/ 2	IRAN 1973/ 3	AUSTRIA 1964/ 4	TUNISIA 1968/ 5	AUSTRAL. 1974/ 6	CHILE 1962/ 7	KOREA RP 1970/ 8	PHILIPP. 1969/ 9	MEXICO 1970/ 10	U.S.AMER 1967/ 11
AGRICULTURE	0.0	0.00201	0.00211	0.00618	0.02879	0.00431	0.00075	0.00641	0.00868	0.00161	0.0
AGRD-FOOD	0.0	0.00731	0.0	0.0	0.0	0.0	0.0	0.0	0.00034	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.04147	0.06052	0.03121	0.05719	0.07066	0.03459	0.05930	0.06554	0.05102	0.03504	0.03959
BASIC PRODUCTS	0.01559	0.03413	0.05651	0.05873	0.06543	0.06329	0.08908	0.07342	0.13703	0.30869	0.20942
LIGHT INDUSTRY	0.03185	0.01190	0.0	0.00464	0.0	0.01010	0.02844	0.02249	0.01867	0.01037	0.02217
CAPITAL GOODS	0.00730	0.00832	0.01055	0.03864	0.00261	0.03380	0.03065	0.02255	0.02501	0.00386	0.05067
CONSTRUCTION	0.0	0.00072	0.0	0.01082	0.0	0.00614	0.0	0.00257	0.00092	0.0	0.01621
TRADE AND SERVICE	0.03451	0.06109	0.10753	0.08501	0.09160	0.11424	0.06881	0.09571	0.09784	0.10148	0.21774
INTERMEDIATE INPUTS ALLOC.	0.13072	0.18600	0.20791	0.26121	0.25909	0.26648	0.27704	0.28867	0.34052	0.46104	0.55780
WAGES	0.0	0.43439	0.0	0.60433	0.45682	0.21921	0.26588	0.27090	0.18310	0.16655	0.26722
CONSUMPTION OF FIXED CAPITAL	0.0	0.13395	0.0	0.06646	0.0	0.0	0.07339	0.08406	0.08118	0.0	0.0
TAXES LESS SUBSIDIES	0.03583	0.00588	0.0	0.01236	-0.01591	0.01440	-0.00407	0.00260	-0.02177	0.04819	0.04157
OPERATING SURPLUS	0.0	0.23978	0.0	0.05564	0.0	0.0	0.38776	0.35379	0.41697	0.0	0.0
VALUE ADDED	0.86928	0.81400	0.79211	0.73079	0.73636	0.73364	0.72296	0.71134	0.65948	0.53896	0.44220
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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PROGRAM TECHSRT - VERS.1.01

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VECTOR .... 17 OTHER MINING

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COUNTRY: YEAR/RANK:	TUNISIA 1968/	IRAN 1973/	SPAIN 1970/	INDIA 1968/	KOREA 1970/	RP 1974/	AUSTRAL. 1967/	U.S.AMER 1962/	CHILE 1964/	AUSTRIA 1964/
AGRICULTURE	0.0	0.00161	0.00313	0.0	0.00603	0.00169	0.0	0.00040	0.00233	
AGRO-FOOD	0.0	0.0	0.00205	0.0	0.0	0.0	0.0	0.00095	0.0	
ENERGY AND PETROLEUM PROD.	0.02586	0.01441	0.04563	0.05966	0.03937	0.05781	0.06321	0.01971	0.04192	
BASIC PRODUCTS	0.00402	0.02105	0.03287	0.01613	0.02918	0.06930	0.13774	0.02701	0.22590	
LIGHT INDUSTRY	0.00460	0.0	0.01505	0.05060	0.02905	0.02096	0.02233	0.02403	0.02049	
CAPITAL GOODS	0.00114	0.00535	0.00602	0.01160	0.01393	0.03719	0.03208	0.00639	0.01630	
CONSTRUCTION	0.0	0.0	0.00205	0.0	0.00331	0.01893	0.00818	0.0	0.01816	
TRADE AND SERVICE	0.04656	0.05394	0.05875	0.03977	0.08205	0.12677	0.13333	0.36603	0.14811	
INTERMEDIATE INPUTS ALLOC.	0.08219	0.09637	0.16554	0.17777	0.20291	0.33300	0.39686	0.44452	0.47322	
WAGES	0.17910	0.0	0.35068	0.0	0.39155	0.28161	0.28899	0.34354	0.27750	
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.10330	0.0	0.05213	0.0	0.0	0.12849	0.03680	
TAXES LESS SUBSIDIES	0.00660	0.0	0.00012	0.04552	0.00480	0.03381	0.02138	0.00117	0.02841	
OPERATING SURPLUS	0.0	0.0	0.34036	0.0	0.34861	0.0	0.0	0.08227	0.18398	
VALUE ADDED	0.91629	0.90363	0.83446	0.82223	0.79708	0.66667	0.60314	0.55547	0.52678	
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	

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VECTOR ... 18 IRON AND STEEL

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COUNTRY: YEAR/RANK:	IRAN 1973/ 1	AUSTRIA 1964/ 2	U.S. AMER 1967/ 3	INDIA 1968/ 4	CHILE 1962/ 5	COSTA RIC 1966/ 6	PHILIPP. 1969/ 7	AUSTFAL. 1974/ 8	BRAZIL 1970/ 9	PAP.N.GN 1972/ 10	MEXICO 1970/ 11
AGRICULTURE	0.0	0.00038	0.0	0.00077	0.00166	0.0	0.0	0.00058	0.02236	0.0	0.0
AGRO-FOOD	0.0	0.00111	0.00003	0.00005	0.0	0.0	0.0	0.00050	0.00013	0.00131	0.0
ENERGY AND PETROLEUM PROD.	0.00109	0.05821	0.05221	0.08567	0.11610	0.01208	0.04511	0.07548	0.08212	0.00793	0.06461
BASIC PRODUCTS	0.19229	0.39052	0.29931	0.23405	0.31300	0.49816	0.34922	0.41700	0.42823	0.30496	0.44287
LIGHT INDUSTRY	0.0	0.00553	0.02934	0.01372	0.00478	0.02069	0.09029	0.01107	0.00475	0.02144	0.04154
CAPITAL GOODS	0.00738	0.02471	0.04967	0.00600	0.00990	0.00309	0.00154	0.00931	0.00298	0.00746	0.00762
CONSTRUCTION	0.00121	0.00404	0.00960	0.07836	0.0	0.0	0.00265	0.00257	0.0	0.00202	0.0
TRADE AND SERVICE	0.01954	0.08790	0.15107	0.17891	0.15266	0.06525	0.12608	0.10589	0.11384	0.32356	0.13004
INTERMEDIATE INPUTS ALLOC.	0.22152	0.58473	0.59123	0.59752	0.59811	0.59527	0.61489	0.63140	0.65441	0.66967	0.6926P
WAGES	0.0	0.18461	0.30281	0.0	0.20329	0.0	0.14094	0.24569	0.08985	0.12231	0.11929
CONSUMPTION OF FIXED CAPITAL	0.0	0.02828	0.0	0.0	0.06997	0.0	0.03612	0.0	0.0	0.02177	0.0
TAXES LESS SUBSIDIES	0.0	0.02207	0.01181	0.10221	0.02311	0.0	0.01770	0.01806	0.0	0.01061	0.00856
OPERATING SURPLUS	0.0	0.18031	0.0	0.0	0.10551	0.0	0.18734	0.0	0.0	0.17667	0.0
VALUE ADDED	0.77849	0.41527	0.40877	0.40248	0.40188	0.40073	0.38511	0.36863	0.34428	0.31134	0.30732
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	TUNISIA 1968/ 12	SPAIN 1970/ 13	KOREA RP 1970/ 14
AGRICULTURE	0.0	0.00003	0.00032
AGRO-FOOD	0.0	0.00215	0.00014
ENERGY AND PETROLEUM PROD.	0.04514	0.08151	0.06011
BASIC PRODUCTS	0.62775	0.57476	0.65745
LIGHT INDUSTRY	0.00167	0.00267	0.00604
CAPITAL GOODS	0.00251	0.00600	0.00571
CONSTRUCTION	0.0	0.00194	0.00019
TRADE AND SERVICE	0.04680	0.11035	0.09714
INTERMEDIATE INPUTS ALLOC.	0.72387	0.77942	0.82710
WAGES	0.08166	0.11127	0.08432
CONSUMPTION OF FIXED CAPITAL	0.0	0.04049	0.02018
TAXES LESS SUBSIDIES	0.01038	0.00165	0.00619
OPERATING SURPLUS	0.0	0.06718	0.06221
VALUE ADDED	0.27405	0.22058	0.17290
GROSS OUTPUT	1.00000	1.00000	1.00000

PROGRAM TECHSRT - VERS.1.01

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VECTOR .... 19 NON-FERROUS METALS

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COUNTRY: YEAR/RANK:	TUNISIA 1963/ 1	AUSTRIA 1964/ 2	BRAZIL 1970/ 3	INDIA 1968/ 4	IRAN 1973/ 5	MEXICO 1970/ 6	U.S. AMER 1967/ 7	AUSTRIAL. 1974/ 8	KOREA RP 1970/ 9	SPAIN 1970/ 10
AGRICULTURE	0.0	0.00048	0.0	0.00352	0.0	0.0	0.0	0.00005	0.00028	0.00008
AGRO-FOOD	0.0	0.00595	0.0	0.0	0.0	0.0	0.00042	0.00049	0.00030	0.00088
ENERGY AND PETROLEUM PROD.	0.01561	0.08157	0.05220	0.08056	0.01149	0.02666	0.02590	0.04590	0.10759	0.02735
BASIC PRODUCTS	0.39550	0.36885	0.41104	0.33757	0.58671	0.50568	0.44663	0.53125	0.55913	0.61017
LIGHT INDUSTRY	0.0	0.00951	0.00245	0.01721	0.0	0.01839	0.03255	0.00795	0.00849	0.00288
CAPITAL GOODS	0.0	0.00951	0.0	0.00865	0.00233	0.00418	0.03697	0.01018	0.00358	0.00415
CONSTRUCTION	0.0	0.00048	0.0	0.03143	0.00073	0.0	0.00373	0.00359	0.00064	0.00148
TRADE AND SERVICE	0.02082	0.08847	0.13620	0.16790	0.05344	0.10392	0.15130	0.11560	0.09863	0.17975
INTERMEDIATE INPUTS ALLOC.	0.43192	0.56480	0.60188	0.64684	0.65471	0.65883	0.69750	0.71501	0.77864	0.82674
WAGES	0.13140	0.11653	0.11755	0.0	0.0	0.12934	0.18277	0.13362	0.10218	0.04563
CONSUMPTION OF FIXED CAPITAL	0.0	0.02021	0.0	0.0	0.0	0.0	0.0	0.0	0.02479	0.03903
TAXES LESS SUBSIDIES	-0.09859	0.01141	0.0	0.07880	0.0	0.01805	0.00820	0.01023	0.01868	0.00853
OPERATING SURPLUS	0.0	0.28704	0.0	0.0	0.0	0.0	0.0	0.0	0.07573	0.08007
VALUE ADDED	0.57277	0.43520	0.39185	0.35316	0.34529	0.34117	0.30249	0.28526	0.22138	0.17326
GRSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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PROGRAM TECHSRT - VERS.1.01

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S S T O F 1960 19 NON-FERROUS METALS

PROGRAM TECHSRT - VERS.1.01

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VECTOR .... 20 PAPER

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COUNTRY: YEAR/RANK#	BRAZIL 1970/ 1	POLITIPP. 1969/ 2	IRAN 1973/ 3	CHILE 1962/ 4	MEXICO 1970/ 5	AUSTRIA 1964/ 6	NEW ZLND 1965/ 7	U.S.AMER 1967/ 8	INDIA 1968/ 9	AUSTRAL. 1974/ 10	SPAIN 1970/ 11
AGRICULTURE	0.02456	0.0	0.0	0.11751	0.01196	0.09233	0.05220	0.0	0.06870	0.02347	0.04565
AGRO-FOOD	0.00926	0.00740	0.00940	0.00816	0.00874	0.00422	0.00317	0.00631	0.00807	0.00412	0.00796
ENERGY AND PETROLEUM PROD.	0.05837	0.04157	0.00352	0.00388	0.02969	0.04986	0.03457	0.02789	0.04022	0.07816	0.04401
BASIC PRODUCTS	0.33773	0.31019	0.48211	0.19888	0.37632	0.25716	0.27572	0.30585	0.20046	0.38473	0.42962
LIGHT INDUSTRY	0.01530	0.04102	0.00651	0.00179	0.05104	0.08857	0.04300	0.11500	0.05257	0.02516	0.02606
CAPITAL GOODS	0.0	0.00264	0.00149	0.07083	0.00335	0.01560	0.01771	0.01014	0.00656	0.00761	0.00151
CONSTRUCTION	0.0	0.00026	0.00028	0.0	0.0	0.00786	0.00337	0.00682	0.04438	0.01469	0.00058
TRADE AND SERVICE	0.08936	0.15776	0.06170	0.13888	0.11600	0.08670	0.16779	0.13513	0.14673	0.13232	0.10045
INTERMEDIATE INPUTS ALLOC.	0.53454	0.55085	0.56510	0.58791	0.59510	0.60230	0.60287	0.60713	0.60770	0.63424	0.55624
WAGES	0.15980	0.11651	0.0	0.12731	0.16310	0.18446	0.16863	0.25727	0.0	0.25401	0.15484
CONSUMPTION OF FIXED CAPITAL	0.0	0.04206	0.0	0.08158	0.0	0.04036	0.06155	0.0	0.0	0.0	0.05705
TAXES LESS SUBSIDIES	0.0	0.01940	0.0	0.04550	0.01780	0.02100	0.00590	0.01018	0.06175	0.01891	0.01372
OPERATING SURPLUS	0.0	0.26126	0.0	0.15070	0.0	0.14688	0.16105	0.0	0.0	0.0	0.11855
VALUE ADDED	0.46256	0.43915	0.43491	0.41208	0.40490	0.39770	0.39713	0.39287	0.39222	0.38565	0.34376
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK#	GREECE 1970/ 12	KOREA RP 1970/ 13
AGRICULTURE	0.01035	0.06523
AGRO-FOOD	0.00145	0.00581
ENERGY AND PETROLEUM PROD.	0.04049	0.04915
BASIC PRODUCTS	0.49931	0.46437
LIGHT INDUSTRY	0.00568	0.0 .74
CAPITAL GOODS	0.01944	0.00549
CONSTRUCTION	0.00078	0.00064
TRADE AND SERVICE	0.11801	0.12574
INTERMEDIATE INPUTS ALLOC.	0.69722	0.72826
WAGES	0.11103	0.12600
CONSUMPTION OF FIXED CAPITAL	0.0	0.01857
TAXES LESS SUBSIDIES	0.05160	0.02256
OPERATING SURPLUS	0.0	0.10458
VALUE ADDED	0.30278	0.27171
GROSS OUTPUT	1.00000	1.00000

## PROGRAM TECHSRT - VERS. 1.01

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## VECTOR ... 21 CHEMICALS

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COUNTRY:  
YEAR/RANK:

PROGRAM TECHSHT - VERS.1.01

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VECTOR .... 21 CHEMICALS

PAGE 2 FROM 2

COUNTRY:	COSTA RIC	AUSTRAL.	TUNISIA	NEW ZLND	PAP. N. GRN
YEAR/RANK:	1966/ 23	1974/ 24	1968/ 25	1965/ 26	1972/ 27
AGRICULTURE	0.00807	0.00254	0.01285	0.01041	0.46502
AGRO-FOOD	0.03821	0.03037	0.01525	0.02410	0.00700
ENERGY AND PETROLEUM PROD.	0.01813	0.04781	0.07628	0.21249	0.01174
BASIC PRODUCTS	0.36133	0.39436	0.36475	0.28423	0.10253
LIGHT INDUSTRY	0.03561	0.03043	0.03534	0.05038	0.01146
CAPITAL GOODS	0.0	0.00550	0.0	0.00021	0.00995
CONSTRUCTION	0.0	0.01104	0.0	0.00383	0.00119
TRADE AND SERVICE	0.21624	0.16851	0.20073	0.12177	0.14702
INTERMEDIATE INPUTS ALLOC.	0.67760	0.69055	0.70979	0.72125	0.75595
WAGES	0.0	0.21267	0.12216	0.10460	0.09325
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.0	0.04053	0.03108
TAXES LESS SUBSIDIES	0.0	0.01784	-0.01690	0.0	0.00877
OPERATING SURPLUS	0.0	0.0	0.0	0.13308	0.11102
VALUE ADDED	0.32240	0.30921	0.28827	0.27820	0.24413
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000

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VECTOR ... 22 POTTERY

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COUNTRY: YEAR/RANK:	IRAN 1973/ 1	BRAZIL 1970/ 2
AGRICULTURE	0.0	0.01310
AGRO-FOOD	0.0	0.00035
ENERGY AND PETROLEUM PROD.	0.00154	0.04391
BASIC PRODUCTS	0.04790	0.17104
LIGHT INDUSTRY	0.00463	0.00709
CAPITAL GOODS	0.0	0.0
CONSTRUCTION	0.00077	0.0
TRADE AND SERVICE	0.01545	0.12218
INTERMEDIATE INPUTS ALLOC.	0.07030	0.35767
WAGES	0.0	0.24339
CONSUMPTION OF FIXED CAPITAL	0.0	0.0
TAXES LESS SUBSIDIES	0.0	0.0
OPERATING SURPLUS	0.0	0.0
VALUE ADDED	0.92969	0.64003
GROSS OUTPUT	1.00000	1.00000

PROGRAM TECHSRT - VERS.1.01

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VECTOR .... 23 GLASS

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COUNTRY: YEAR/RANK:	BRAZIL 1970/ 1	AUSTRIA 1964/ 2	IRAN 1973/ 3	GREECE 1970/ 4	U.S.AMER 1967/ 5	SPAIN 1970/ 6	MEXICO 1970/ 7	AUSTRAL. 1974/ 8	TUNISIA 1968/ 9	COSTA RC 1966/ 10
AGRICULTURE	0.0	0.0	0.0	0.00201	0.0	0.00060	0.0	0.0	0.0	0.0
AGRO-FOOD	0.0	0.00368	0.0	0.00029	0.0	0.00390	0.0	0.0	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.07315	0.05202	0.04883	0.07043	0.03910	0.05899	0.03903	0.08745	0.08121	0.01680
BASIC PRODUCTS	0.23108	0.20389	0.20665	0.23766	0.19337	0.18735	0.23280	0.19677	0.0	0.32598
LIGHT INDUSTRY	0.00167	0.01209	0.0	0.02084	0.04450	0.01287	0.02173	0.01614	0.03249	0.00004
CAPITAL GOODS	0.0	0.00946	0.00781	0.00444	0.01241	0.01221	0.01269	0.03644	0.0	0.0
CONSTRUCTION	0.0	0.02365	0.00625	0.00621	0.00863	0.00588	0.0	0.01093	0.0	0.01202
TRADE AND SERVICE	0.06317	0.08460	0.12110	0.07466	0.13323	0.15520	0.13503	0.12546	0.35737	0.30592
INTERMEDIATE INPUTS ALLOC.	0.36906	0.38939	0.39065	0.41655	0.43123	0.43707	0.44127	0.47267	0.47107	0.66076
WAGES	0.22252	0.34157	0.0	0.22238	0.38134	0.27422	0.28251	0.37220	0.19835	0.0
CONSUMPTION OF FIXED CAPITAL	0.0	0.04992	0.0	0.0	0.0	0.05656	0.0	0.0	0.0	0.0
TAXES LESS SUBSIDIES	0.0	0.02102	0.0	0.02228	0.00850	0.00787	0.03839	0.03123	0.04132	0.0
OPERATING SURPLUS	0.0	0.19811	0.0	0.0	0.0	0.22427	0.0	0.0	0.0	0.0
VALUE ADDED	0.61601	0.61061	0.60934	0.58345	0.56877	0.56293	0.55873	0.52733	0.52066	0.33924
GRCESS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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PROGRAM TECHSHT - VERS.1.01

DATE = 07-08-80

## VECTOR .... 24 OTHER NON-METALLIC MIN.PROD.

PAGE 1 FROM 1

COUNTRY: YEAR/RANK:	BANGLISH 1962/ 1	COSTA RIC 1966/ 2	AUSTRIA 1964/ 3	CHILE 1962/ 4	PHILIPP. 1969/ 5	GHANA 1970/ 6	PAKISTAN 1962/ 7	PAP.N.GN 1972/ 8	NEW ZLND 1965/ 9	INDIA 1968/ 10	U.S.AMER 1967/ 11
AGRICULTURE	0.02920	0.0	0.00454	0.00758	0.00203	0.00340	0.0	0.0	0.0	0.02518	0.0
AGRO-FOOD	0.0	0.0	0.00079	0.0	0.00012	0.00050	0.0	0.0	0.0	0.00035	0.00055
ENERGY AND PETROLEUM PROD.	0.01965	0.03776	0.06909	0.09712	0.11367	0.10686	0.05284	0.01714	0.02246	0.11860	0.04774
BASIC PRODUCTS	0.05222	0.20587	0.19151	0.18165	0.8142	0.20401	0.25992	0.29761	0.25678	0.13201	0.25131
LIGHT INDUSTRY	0.01965	0.01893	0.01010	0.00606	0.03146	0.03221	0.03779	0.01298	0.03132	0.04595	0.04415
CAPITAL GOODS	0.00112	0.00202	0.03460	0.01511	0.00369	0.02663	0.01642	0.02077	0.02610	0.00856	0.02497
CONSTRUCTION	0.0	0.01077	0.00851	0.0	0.00401	0.00162	0.0	0.00519	0.00626	0.01649	0.00912
TRADE AND SERVICE	0.19147	0.10567	0.10529	0.14637	0.11767	0.10686	0.12671	0.16309	0.17954	0.18514	0.15916
INTERMEDIATE INPUTS ALLOC.	0.31331	0.38102	0.42671	0.45390	0.45407	0.48209	0.49367	0.51678	0.52505	0.53250	0.51700
WAGES	0.0	0.0	0.22680	0.16494	0.20609	0.17732	0.0	0.21980	0.24635	0.0	0.31153
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.07046	0.06975	0.08260	0.0	0.0	0.04143	0.06785	0.0	0.0
TAXES LESS SUBSIDIES	0.00445	0.	0.05174	0.04072	0.02915	0.05096	0.06361	0.00872	0.00522	0.04920	0.01152
OPERATING SURPLUS	0.0	0.0	0.22430	0.27068	0.22808	0.0	0.0	0.21326	0.15449	0.0	0.0
VALUE ADDED	0.68669	0.61898	0.57329	0.54609	0.54593	0.51791	0.50633	0.48321	0.47390	0.46750	0.46301
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	IRAN 1973/ 12	AUSTRAL. 1974/ 13	KOREA RP 1970/ 14
AGRICULTURE	0.01015	0.00025	0.00133
AGRO-FOOD	0.0	0.00033	0.00005
ENERGY AND PETROLEUM PROD.	0.11838	0.05842	0.12151
BASIC PRODUCTS	0.26392	0.27642	0.26810
LIGHT INDUSTRY	0.02614	0.00609	0.01833
CAPITAL GOODS	0.00905	0.01194	0.00814
CONSTRUCTION	0.00423	0.01646	0.00058
TRADE AND SERVICE	0.10760	0.20581	0.17709
INTERMEDIATE INPUTS ALLOC.	0.53952	0.57573	0.59512
WAGES	0.0	0.28096	0.14522
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.06620
TAXES LESS SUBSIDIES	0.0	0.02054	0.01210
OPERATING SURPLUS	0.0	0.0	0.16115
VALUE ADDED	0.46047	0.42378	0.40488
GROSS OUTPUT	1.00000	1.00000	1.00000

Sector 5 - LIGHT INDUSTRY

The equations for the fifth sector Light Industry are:

$$\begin{array}{ll} X_5 = 0.7a_{15} - 0.2a_{45} + 0.4a_{85} - 0.6VA_5 & 44.9\% \\ Y_5 = 0.5a_{15} - 0.1a_{45} + 0.8a_{85} & 33.2\% \\ Z_5 = 0.3a_{15} - 0.7a_{45} + 0.1a_{85} & 15.2\% \\ \hline & 93.0\% \end{array}$$

X has as a dominant component agriculture, and value added as a secondary component with negative effect.

Y has as a dominant component Trade and services, and as a secondary component, Agriculture.

Z the weakest eigenvector has as dominant component, basic products.

Input coefficients for agriculture of at least 10% are solely to be found in countries having a lower GDP per head than Colombia. An abnormally high value of 70% is found for Malaysia. On the other hand, the input coefficient for Basic Products at a value of at least 10% is not to be found in countries with a GDP per capita lower than Brazil's, but is found with all countries with a GDP per capita at least as great as Italy's. Seeing that agriculture is the dominant component of the most important eigenvectors and Basic Products is the dominant component of the least important eigenvector, this example illustrates the fact that Main Component analysis attaches equal weight to each country regardless of size or wealth.

Diagonal elements vary from 3% in Zaire to 51% in Singapore. By inspection of the appropriate sector coefficient table, it may be seen that high income countries have diagonal elements of 20% to 30%.

No strong income correlation stands out for the service input coefficient, nor is there one for value-added; but it appears that high income countries tend to have a value added coefficient of around 40%.

Turning now to disaggregate the sector, we begin with

Sub-sector 25 - Textiles: Distribution of value-added

23% to 30%	-	2 countries
30% to 35%	-	6

35% to 40%	-	4 countries
40% to 50%	-	5
60%	-	1

Quasi-diagonal 5% - 17%

Agriculture 22% Kenya, India

18% Pakistan, Korea

14% Bangladesh

13% Mexico

12% Greece

10% Brazil, Iran

Basic Products 20% Korea

12% Philippines

11% Spain, Mexico, Brazil

Trade and Services of at least 10% 12 out of 13 countries

Sub-sector 26 - Wearing Apparel: Distribution of Value-added - 15 countries

19% - 55%

19% - 30% - 4 countries

30% - 40% - 4

40% - 50% - 5

53% - 59% - 2

Quasi-diagonal elements 23% - 70%

Service coefficient of at least 10% 7 out of 15 countries

Sub-sector 27 - Fabricated Metal Products:

Distribution of Value added - 24 countries 25% - 55%

25% - - 1 countries

35% - 40% - 6

40% - 45% - 7

45% - 50% - 5

50% - 55% - 5

Quasi-diagonal elements 3% - 37%

Basic Products - 7% - 49%. Only two out of 24 have less than 20%.  
Trade and Services of at least 10% - 13 out of 24.

Sub-sector 28 - Other Manufacturing Industries:

Distribution of Value added - 14 countries 27% - 86%

27% - 40%	-	2 countries
40% - 50%	-	3
50% - 60%	-	3

86% - (Iran) should be disregarded.

Quasi-diagonal element 4% - 62%

Basic Products 4% - 36%

Capital Goods 1% - 27%

Trade and Services  
of at least 10% 6 out of 13

Sub-sector 29 - Leather:

Distribution of Value added - 15 countries 31% - 53% (Iran 2%)

31% - 35%	-	5 countries
35% - 40%	-	3
40% - 50%	-	3
50% - 53%	-	3

Agriculture - Tunisia - 22%, India - 25%, Bangladesh 26% (Iran 64%)

Agro-Food	-	U.S.A.	-	25%
		Greece	-	19%
		Philippines	-	20%
		Australia	-	18%
		Chile	-	25%
		New Zealand	-	21%
		Brazil	-	29%
		Austria	-	14%

Whether the raw materials input  
show up as agriculture or as  
agro-food, seems to depend on the  
individual countries classification  
especially as regards the treat-  
ment of by-products.

Basic Products	-	Brazil	-	12%
		U.S.A.		
		Austria	-	10%
		Spain		

Trade and Services at least 10% 7 out of 15 countries

Quasi-diagonal elements 32% - 7% (Iran 1%)

Sub-sector 30 - Footwear:

Distribution of Value added - 7 countries 36% - 53% (excluding Iran)

36% - 40%	-	2 countries
40% - 45%	-	3
45% - 53%	-	2

Quasi-diagonal element 40% - 32%

Trade and Service at least 10% 5 out of 7 countries

Sub-sector 31 - Wood and Wood Products:

Distribution of Value added - 12 countries 32% - 58% (excluding Iran)

32% - 40%	-	5 countries
40% - 50%	-	5
50% - 58%	-	2

Quasi-diagonal element 34% - 5%

Agriculture - Spain	-	36%
Phillipines	-	
Brazil	-	25%
Papua New Guinea-	-	22%
Austria	-	20%
India	-	17%
Greece	-	15%
New Zealand	-	15%
Tunisia	-	12%
Australia	-	11%

Trade and Services of at least 10% 8 out of 12 countries

Sub-sector 32 - Furniture:

Distribution of Value added - 11 countries 31% - 71%

30% - 40%	-	1 countries
40% - 50%	-	5
50% - 60%	-	2
60% - 71%	-	3

Quasi-diagonal element 39% - 3%

Basic Products	Chile	-	14%
	Brazil	-	13%

Philippines	-	11%
Australia	-	12%

Trade and Services of at least 10% - 6 out of 11 countries

Sub-sector 33 - Printing:

Distribution of Value added	- 12 countries	39% - 60%
39%	-	1 countries
46% - 50%	-	6
50% - 60%	-	4
60% - 65%	-	1

Quasi-diagonal element 2% - 13%

Basic Products 23% - 36%

Trade and Services of at least 10% 10 out of 12 countries

Sub-sector 34 - Rubber Products:

Distribution of Value added	- 14 countries	24% - 53%
24% - 30%	-	2 countries
30% - 40%	-	2
40% - 50%	-	6
50%	-	4

Quasi-diagonal element 27% - 7%

Agriculture	- Korea, Pakistan	- 15%	Kenya	- 25%	
Energy	- U.S.A.	-	14%	Tunisia	-
Basic Products	- U.S.A.	-	25%		
	Korea	-	23%		
	New Zealand	-	21%		
	Brazil	-	18%		
	Australia	-	17%		
	Philippines	-	15%		
	Chile	-	12%		
	Austria	-	11%		

Trade and Services, value of at least 10% 12 out of 14 countries.

Sub-sector 35 - Plastic Products:

Distribution of Value added - 7 countries 34% - 55%

34% - 35%	-	2
35% - 40%	-	1
40% - 50%	-	1
50% - 55%	-	2

Quasi-diagonal element 3% - 0%

Basic Products 40% - 27%

Trade and Services of at least 10% - 5 out of 7 countries

In conclusion, it should be noted that high input coefficients from Agriculture (dominant in vector  $X_5$ ) occur in the following sub-sectors only:

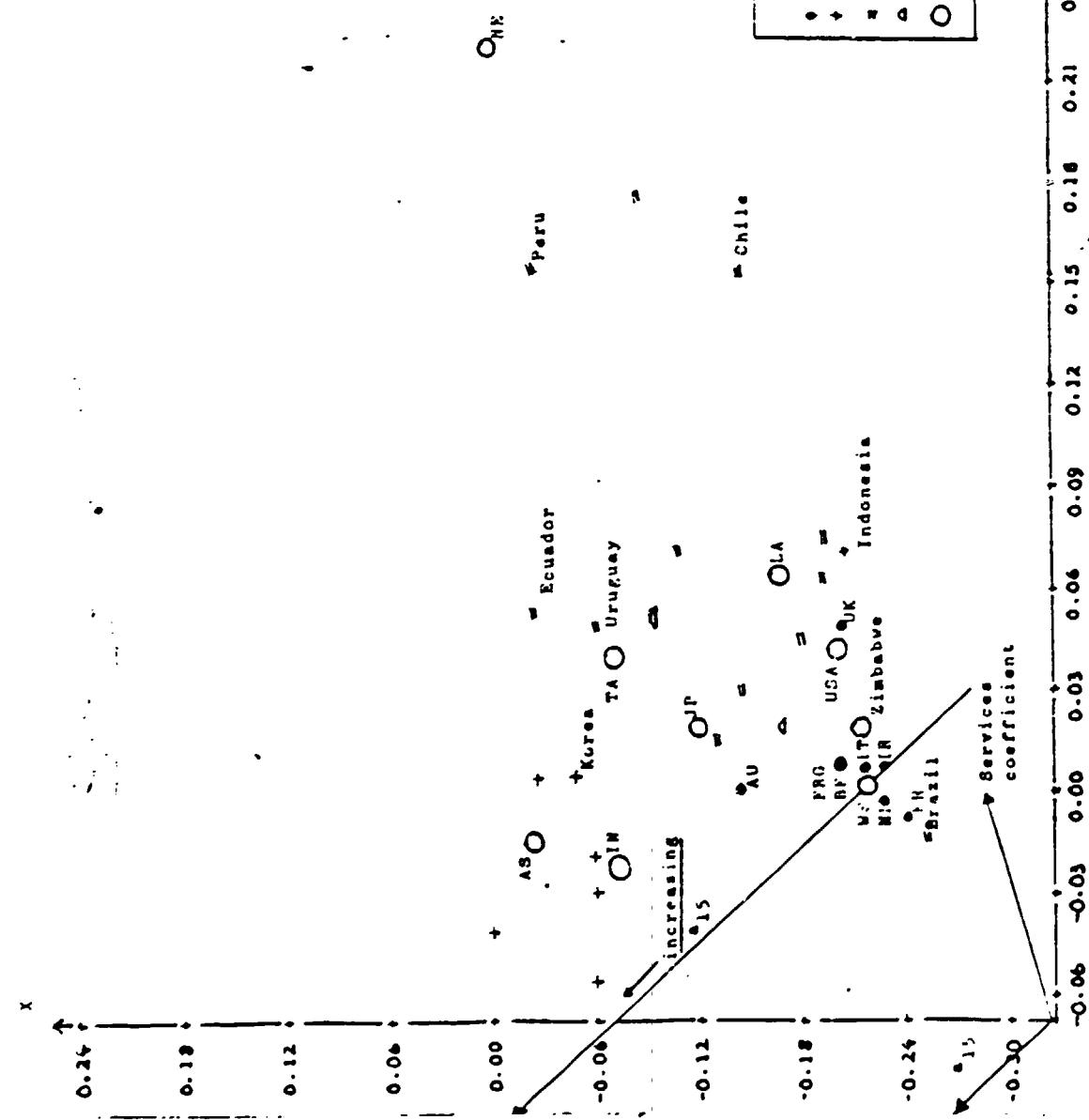
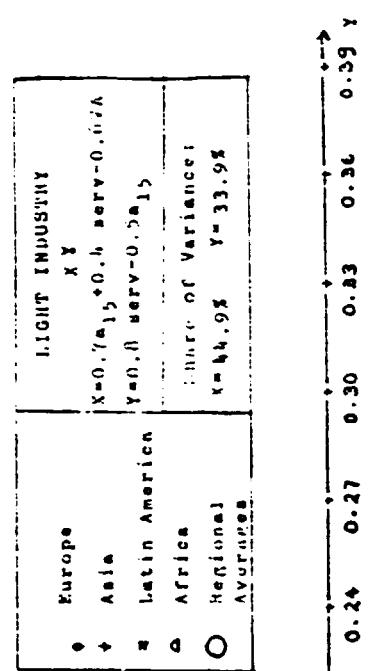
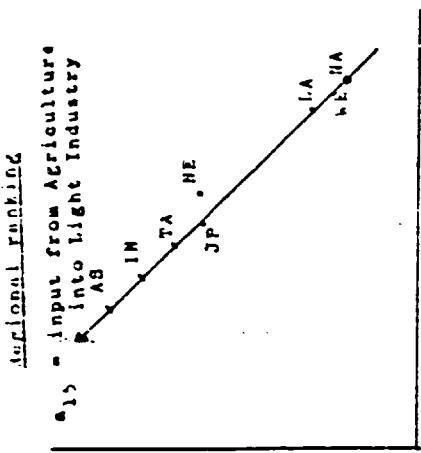
- Textiles - (most developing countries plus Greece)
- Leather - (some developing countries (competing with Agro-food Input))
- Wood and Wood Products - (all countries)
- Rubber Products - (some developing countries)

Input coefficients from Basic Products (which dominate  $Z_5$ ) higher than 2% occur in the following sub-sectors only:

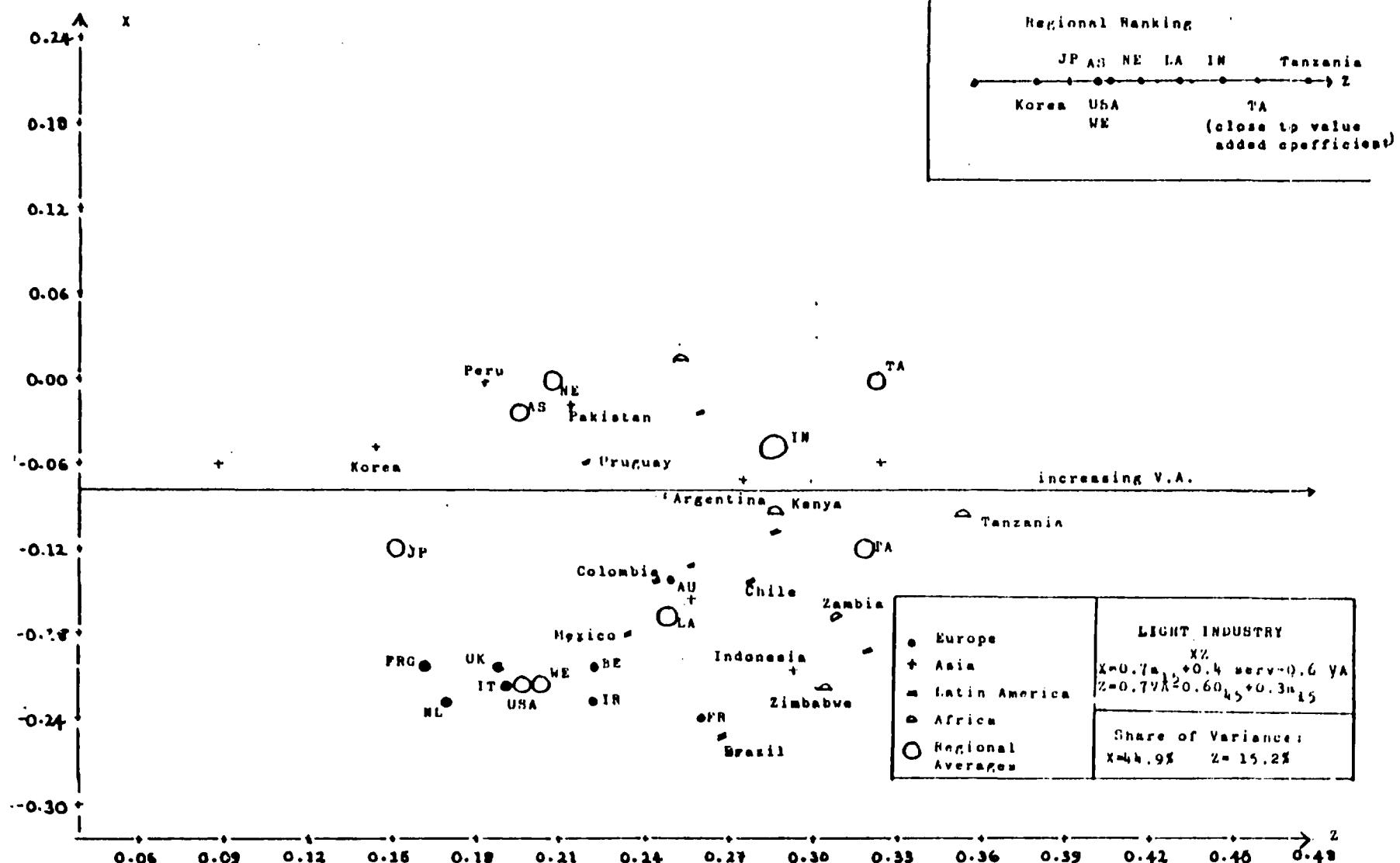
- Fabricated Metal Products
- Other Manufacturing Industries
- Printing
- Plastic Products

INPUT COEFFICIENTS FOR SECTOR LIGHT INDUSTRY

	GDP PER CAPITA	AGRICULT	AGRO-FOO	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTRUIC	SERVICEC	INTERM.	VALUE AD
INDONESIA 1971	61.5	0.02312	0.00313	0.02707	0.06271	0.27374	0.00999	0.00522	0.13654	0.54212	0.45781
INDIA 1959	77.1	0.20450	0.00081	0.01286	0.06080	0.15005	0.01016	0.01069	0.10296	0.57687	0.42312
BANGLADESH 1962	84.0	0.15517	0.00076	0.02536	0.05145	0.27105	0.00490	0.0	0.10619	0.62488	0.37510
INDIA 1968	87.5	0.16648	0.02044	0.02341	0.00283	0.16306	0.00558	0.00957	0.12255	0.60395	0.39603
CONGO 1957 (Zaire)	90.9	0.13053	0.0	0.01569	0.02696	0.02997	0.03085	0.00914	0.51950	0.77162	0.22801
TANZANIA 1970	94.0	0.10295	0.05971	0.02941	0.02644	0.08497	0.00208	0.00446	0.23592	0.54582	0.45411
PAKISTAN (WEST) 1962	109.1	0.15017	0.00003	0.02824	0.00507	0.24316	0.00805	0.0	0.13651	0.70124	0.29071
KENYA 1967	122.2	0.00023	0.01165	0.07798	0.00307	0.28295	0.04646	0.00450	0.13005	0.64490	0.35511
BOLIVIA 1971	169.7	0.01677	0.00320	0.02562	0.03457	0.30478	0.0	0.0	0.13440	0.53834	0.46161
IVORY COAST 1960	204.1	0.07807	0.00281	0.00962	0.02225	0.10252	0.01363	0.00241	0.54304	0.77513	0.22481
KOREA 1970	229.3	0.12770	0.00491	0.02152	0.16060	0.26001	0.00632	0.00062	0.1353	0.71521	0.28471
SENEGAL 1959	236.0	0.08767	0.0	0.02100	0.01949	0.17994	0.01142	0.00346	0.10601	0.43015	0.56981
TUNISIA 1968	243.7	0.05294	0.0	0.01233	0.00957	0.41654	0.0	0.0	0.08208	0.57346	0.42651
ZIMBABWE 1965	249.4	0.02084	0.00415	0.04960	0.04960	0.30691	0.02075	0.0	0.07450	0.53517	0.46466
ECUADOR 1967	265.8	0.14015	0.0	0.01426	0.04330	0.29236	0.0	0.0	0.18281	0.67289	0.32711
PAPUA NEW GUINEA 197	272.5	0.19483	0.02377	0.01432	0.01024	0.07498	0.00973	0.00204	0.25072	0.58063	0.41931
MALAYSIA 1965	310.4	0.70446	0.00026	0.01109	0.01681	0.03892	0.00151	0.0	0.04300	0.81606	0.18391
IVORY COAST 1972	314.3	0.10137	0.00232	0.01839	0.04168	0.10979	0.02182	0.00187	0.31187	0.68912	0.31081
COLUMBIA 1970	320.0	0.06002	0.04501	0.01867	0.07525	0.28782	0.01804	0.00137	0.10938	0.61557	0.30441
ZAMBIA 1965	368.8	0.00991	0.0	0.00991	0.04144	0.29279	0.04144	0.00090	0.14775	0.54414	0.45581
GUATEMALA 1971	379.5	0.06870	0.04210	0.04220	0.01501	0.29432	0.00660	0.0	0.15262	0.62555	0.37441
BRASILIA 1970	393.3	0.05504	0.00750	0.01721	0.16484	0.16061	0.00053	0.0	0.07879	0.48451	0.51511
PERU 1968	394.3	0.07584	0.00408	0.01459	0.11980	0.21409	0.00960	0.0	0.27447	0.71246	0.28751
COSTA RICA 1966	426.2	0.09521	0.00280	0.02328	0.01983	0.23744	0.00005	0.01351	0.12213	0.59429	0.40571
CHILE 1962	595.0	0.02151	0.01036	0.01460	0.06579	0.22932	0.00333	0.0	0.21553	0.58063	0.41951
MEXICO 1970	613.4	0.05342	0.00676	0.01386	0.14701	0.19910	0.00389	0.0	0.13893	0.56297	0.43701
ARGENTINA 1963	728.2	0.01768	0.01828	0.02124	0.04121	0.30010	0.00714	0.0	0.24946	0.65515	0.34481
URUGUAY 1961	730.9	0.04403	0.00897	0.01232	0.05202	0.35722	0.02251	0.0	0.14818	0.69526	0.30471
TRINIDAD AND TOBAGO	733.5	0.09257	0.0	0.09152	0.0	0.04402	0.0	0.01298	0.18430	0.42620	0.57381
IRELAND 1969	1165.3	0.02164	0.01492	0.02164	0.14299	0.27199	0.01022	0.00369	0.06947	0.55656	0.44341
SINGAPORE 1973	1251.6	0.03764	0.00613	0.01022	0.04771	0.50841	0.00701	0.00054	0.06167	0.76934	0.23081
AUSTRIA 1964	1405.2	0.08562	0.00917	0.01274	0.09688	0.28139	0.01048	0.00791	0.09492	0.59810	0.40191
ITALY 1970	1572.3	0.03078	0.01244	0.02105	0.16930	0.25537	0.00458	0.01244	0.07862	0.58458	0.41561
JAPAN 1970	1713.1	0.08627	0.00328	0.01534	0.19671	0.20756	0.00643	0.00257	0.13332	0.65149	0.34851
UNITED KINGDOM 1970	2023.5	0.01578	0.00495	0.03749	0.17952	0.19780	0.01983	0.00434	0.12250	0.58221	0.41771
NETHERLAND 1970	2226.6	0.01631	0.00675	0.01737	0.17474	0.26254	0.04861	0.01592	0.05170	0.59986	0.40011
BELGIUM 1970	2457.1	0.04219	0.00399	0.01926	0.14013	0.25840	0.01651	0.01002	0.08225	0.57276	0.42721
GERMANY F.R. 1970	2558.3	0.02306	0.00321	0.02114	0.18757	0.27051	0.01163	0.00713	0.08142	0.60646	0.39351
AUSTRALIA 1974/75	2688.6	0.02576	0.00361	0.01479	0.18519	0.22714	0.00849	0.00669	0.12668	0.59894	0.39761
FRANCE 1970	2841.0	0.04609	0.00506	0.01696	0.13558	0.21443	0.01752	0.01857	0.06723	0.51544	0.48451
UNITED STATES 1967	4216.2	0.01791	0.00582	0.01037	0.16607	0.25188	0.02369	0.00300	0.11262	0.59136	0.40886



Graph 1.0 Light Industry XY  
Annex 1



Graph 1.9 Annex 1 Light Industry XZ

PROGRAM TECHNIK - VERK5.1.01

DATE = 01-01-2011

PROGRAM TECHSRI - VERS.1.01

DATE = 07-03-80

## VECTOR \*\*\* 26. WEARING APPAREL

COUNTRY: YEAR/RANK:	INDIA 1964/ 1	AUSTRIA 1964/ 1	SPAIN 1970/ 1	MEXICO 1965/ 4	NEW ZLND 1965/ 5	BRAZIL 1970/ 6	PHILIPPI 1969/ 7	TUNISIA 1969/ 7	U.S.-AMER 1967/ 9	AUSTRAL. 1974/ 10	PAP.-N.GN 1972/ 11
<b>AGRICULTURE</b>											
AGRO-FOOD	0.00965	0.00671	0.01157	0.00062	0.0	0.00151	0.00269	0.0	0.00733	0.00149	0.0
ENERGY AND PETROLEUM PROD.	0.00978	0.01301	0.00564	0.00445	0.00448	0.00454	0.00014	0.0	0.00179	0.00105	0.01214
BASIC PRODUCTS	0.02328	0.02350	0.01452	0.01452	0.01951	0.02157	0.00510	0.00537	0.00195	0.02539	0.00243
LIGHT INDUSTRY	0.24965	0.36724	0.31627	0.31336	0.36195	0.46769	0.46862	0.55376	0.51912	0.45512	0.22696
CAPITAL GOODS	0.01694	0.01665	0.01319	0.00104	0.00448	0.0	0.0177	0.0	0.00173	0.00378	0.01963
CONSTRUCTION	0.00284	0.00258	0.01145	0.0	0.00293	0.0	0.0001	0.0	0.00111	0.00518	0.00485
TRADE AND SERVICE	0.07822	0.06426	0.04572	0.12464	0.17073	0.0H054	0.09261	0.06159	0.13462	0.4390	0.4390
<b>INTERMEDIATE INPUTS ALLOC.</b>											
WAGES	0.40920	0.47224	0.52A23	0.54743	0.56976	0.57590	0.58668	0.61500	0.62919	0.63733	0.64672
CONSUMPTION OF FIXED CAPITAL	0.0	0.16370	0.23922	0.13470	0.30049	0.14591	0.19447	0.23500	0.30227	0.29816	0.19715
TAXES LESS SUBSIDIES	0.0	0.01300	0.01967	0.0	0.01463	0.0	0.01165	0.0	0.0	0.0	0.01639
OPERATING SURPLUS	0.03657	0.03404	0.03000	0.01424	0.02439	0.0	0.01297	0.10000	0.000626	0.000966	0.00576
VALUE ADDED	0.0	0.31698	0.31698	0.0	0.09073	0.0	0.19023	0.0	0.0	0.0	0.07377
GROSS OUTPUT	0.59000	0.52776	0.47177	0.45257	0.43024	0.42262	0.41332	0.38250	0.37080	0.36227	0.30328
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	KENYA 1967/ 12	KOREA 1970/ 13	GRECE 1970/ 14	IRAN 1973/ 15
<b>AGRICULTURE</b>				
AGRO-FOOD	0.00691	0.00537	0.00030	0.0
ENERGY AND PETROLEUM PROD.	0.03679	0.0	0.00008	0.0
BASIC PRODUCTS	0.06462	0.01310	0.00438	0.00194
LIGHT INDUSTRY	0.00010	0.05966	0.00216	0.0
CAPITAL GOODS	0.46790	0.53217	0.61162	0.0
CONSTRUCTION	0.01097	0.00549	0.00091	0.00388
TRADE AND SERVICE	0.00165	0.0057	0.00643	0.00077
	0.11440	0.10930	0.1A744	0.0
<b>INTERMEDIATE INPUTS ALLOC.</b>				
WAGES	0.71143	0.72569	0.74760	0.80366
CONSUMPTION OF FIXED CAPITAL	0.16057	0.15265	0.07706	0.0
TAXES LESS SUBSIDIES	0.03793	0.01127	0.0	0.0
OPERATING SURPLUS	0.00342	0.00414	0.00657	0.0
VALUE ADDED	0.00616	0.10622	0.0	0.0
GROSS OUTPUT	0.28057	0.27429	0.25240	0.19435
	1.00000	1.00000	1.00000	1.00000

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## VECTOR .... 27 FABRICATED METAL PRODUCTS

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COUNTRY:  
YEAR/RANK:

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VECTOR .... 27 FABRICATED METAL PRODUCTS

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COUNTRY:	PAKISTAN	KOREA RP
YEAR/RANK:	1962/ 23	1970/ 24
-----	-----	-----
AGRICULTURE	0.00058	0.00012
AGRO-FOOD	0.0	0.00011
ENERGY AND PETROLEUM PROD.	0.06135	0.04130
BASIC PRODUCTS	0.26123	0.48585
LIGHT INDUSTRY	0.10801	0.05916
CAPITAL GOODS	0.00864	0.00063
CONSTRUCTION	0.0	0.00066
TRADE AND SERVICE	0.18088	0.15760
-----	-----	-----
INTERMEDIATE INPUTS ALLOC.	0.62068	0.75343
WAGES	0.0	0.13674
CONSUMPTION OF FIXED CAPITAL	0.0	0.01032
TAXES LFSS SUBSIDIES	0.01959	0.02056
OPERATING SURPLUS	0.0	0.07096
VALUE ADDED	0.37932	0.24657
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GROSS OUTPUT	1.00000	1.00000

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## VECTOR .... 28 OTHER MANUFAC. INDUSTRIES

COUNTRY: YEAR/RANK:	IRAN 1973/ 1	FRANCE 1970/ 2	GREECE 1970/ 3	IRELAND 1969/ 4	INDIA 1968/ 5	GRMNY,FR 1970/ 6	DENMARK 1970/ 7	UNTD.KGD 1970/ 8	NEW ZLND 1965/ 9	ITALY 1970/ 10	U.S.AMER 1967/ 11
AGRICULTURE	0.0	0.00147	0.04401	0.0	0.12862	0.00030	0.00210	0.00150	0.01195	0.02443	0.00141
AGRO-FOOD	0.0	0.0	0.00003	0.0	0.00148	0.00067	0.00210	0.00386	0.00171	0.01296	0.00224
ENERGY AND PETROLEUM PROD.	0.02982	0.01660	0.01443	0.02597	0.01249	0.01172	0.01049	0.07589	0.01365	0.01772	0.00930
BASIC PRODUCTS	0.04562	0.15098	0.00372	0.06061	0.16179	0.24046	0.26237	0.16304	0.23379	0.35970	0.14237
LIGHT INDUSTRY	0.07916	0.12686	0.21309	0.30303	0.06102	0.17753	0.11018	0.16079	0.11092	0.07311	0.23009
CAPITAL GOODS	0.00143	0.01926	0.00590	0.00866	0.00708	0.01506	0.00630	0.01833	0.02218	0.00209	0.03073
CONSTRUCTION	0.00036	0.00578	0.00100	0.0	0.01106	0.00146	0.00944	0.00129	0.00341	0.00432	0.00271
TRADE AND SERVICE	0.01868	0.10310	0.06440	0.03030	0.11954	0.05556	0.10598	0.09594	0.13652	0.06509	0.15308
INTERMEDIATE INPUTS ALLOC.	0.13507	0.42396	0.43140	0.43723	0.50307	0.50334	0.50997	0.52074	0.53242	0.55973	0.57193
WAGES	0.0	0.0	0.18974	0.34632	0.0	0.26011	0.35047	0.23519	0.26280	0.24918	0.30866
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.0	0.02597	0.0	0.04378	0.0	0.03623	0.04266	0.03128	0.0
TAXES LESS SUBSIDIES	0.0	0.0	0.06634	0.11255	0.03430	0.04663	0.00525	0.16722	0.00853	0.05704	0.00715
OPERATING SURPLUS	0.0	0.0	0.0	0.07792	0.0	0.14614	0.13431	0.04063	0.15188	0.10262	0.0
VALUE ADDED	0.86493	0.57604	0.56860	0.56277	0.49693	0.49666	0.49003	0.47926	0.46587	0.44027	0.42808
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

1  
9  
1

COUNTRY: YEAR/RANK:	KOREA RP 1970/ 12	NETHNLDS 1970/ 13	BELGIUM 1970/ 14
AGRICULTURE	0.07245	0.0	0.00305
AGRO-FOOD	0.00906	0.00147	0.0
ENERGY AND PETROLEUM PROD.	0.00979	0.01911	0.00419
BASIC PRODUCTS	0.26530	0.05395	0.04229
LIGHT INDUSTRY	0.07170	0.20893	0.61790
CAPITAL GOODS	0.00795	0.27366	0.00229
CONSTRUCTION	0.00052	0.00785	0.00419
TRADE AND SERVICE	0.14380	0.03629	0.01257
INTERMEDIATE INPUTS ALLOC.	0.58058	0.60127	0.72571
WAGES	0.16072	0.27121	0.17943
CONSUMPTION OF FIXED CAPITAL	0.00861	0.03104	0.00952
TAXES LESS SUBSIDIES	0.01480	-0.01471	0.01067
OPERATING SURPLUS	0.23529	0.10839	0.07467
VALUE ADDED	0.41942	0.39823	0.27429
GROSS OUTPUT	1.00000	1.00000	1.00000

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VECTOR ... 29 LEATHER

COUNTRY: YEAR/RANK:	PAKISTAN 1962/ 1	AUSTRIA 1964/ 2	PHILIPP. 1969/ 3	SPAIN 1970/ 4	BRAZIL 1970/ 5	TUNISIA 1968/ 6	AUSTRA. 1974/ 7	NEW ZLND 1965/ 8	INDIA 1968/ 9	CHILE 1962/ 10	KOREA RP 1970/ 11
AGRICULTURE	0.07560	0.00098	0.00022	0.000 7	0.01449	0.22162	0.02937	0.03125	0.24980	0.01490	0.00763
AGRO-FOOD	0.0	0.13773	0.20327	0.01120	0.29116	0.0	0.17990	0.20625	0.04792	0.25457	0.11907
ENERGY AND PETROLEUM PROD.	0.00945	0.01476	0.00784	0.00448	0.01581	0.01285	0.01285	0.01250	0.00282	0.01880	0.01133
BASIC PRODUCTS	0.04117	0.10084	0.07756	0.10481	0.12252	0.01607	0.07435	0.09375	0.04099	0.04018	0.07670
LIGHT INDUSTRY	0.27911	0.12100	0.12678	0.32305	0.06587	0.26338	0.20559	0.12500	0.15542	0.16007	0.29183
CAPITAL GOODS	0.00945	0.01623	0.00140	0.00172	0.0	0.0	0.00643	0.00625	0.00078	0.00188	0.00435
CONSTRUCTION	0.0	0.00935	0.00008	0.00069	0.0	0.0	0.00734	0.00625	0.00630	0.0	0.00452
TRADE AND SERVICE	0.05265	0.08608	0.07331	0.09395	0.04743	0.06102	0.09270	0.13750	0.12351	0.17000	0.13559
INTERMEDIATE INPUTS ALLOC.	0.46743	0.48697	0.49050	0.54008	0.55729	0.57494	0.60051	0.61875	0.62754	0.66039	0.67102
WAGES	0.0	0.14019	0.20430	0.20014	0.15495	0.18673	0.31646	0.23125	0.0	0.08991	0.19138
CONSUMPTION OF FIXED CAPITAL	0.0	0.01476	0.01649	0.01696	0.0	0.0	0.0	0.02500	0.0	0.02598	0.01261
TAXES LESS SUBSIDIES	0.01350	0.03296	0.01445	0.00207	0.0	0.04177	0.01989	0.01250	0.02040	0.04520	0.02082
OPERATING SURPLUS	0.0	0.32514	0.27426	0.23875	0.0	0.0	0.0	0.10625	0.0	0.17851	0.11416
VALUE ADDED	0.53257	0.51303	0.50950	0.45992	0.43880	0.42260	0.39241	0.37500	0.37246	0.33961	0.32897
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	BANGLDOSH 1962/ 12	U.S.AMER 1967/ 13	GREECE 1970/ 14	IRAN 1973/ 15
AGRICULTURE	0.26286	0.01485	0.00241	0.64116
AGRO-FOOD	0.01810	0.25339	0.19295	0.00026
ENERGY AND PETROLEUM PROD.	0.00762	0.01386	0.00791	0.00562
BASIC PRODUCTS	0.08476	0.10195	0.07029	0.01116
LIGHT INDUSTRY	0.12476	0.12966	0.28749	0.01149
CAPITAL GOODS	0.0	0.00396	0.00490	0.00103
CONSTRUCTION	0.0	0.00198	0.00071	0.00077
TRADE AND SERVICE	0.18381	0.16530	0.11904	0.06199
INTERMEDIATE INPUTS ALLOC.	0.68190	0.68494	0.68563	0.77348
WAGES	0.0	0.22896	0.10954	0.0
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.0	0.0
TAXES LESS SUBSIDIES	0.02857	0.00587	0.02634	0.0
OPERATING SURPLUS	0.0	0.0	0.0	0.0
VALUE ADDED	0.31810	0.31507	0.31437	0.22652
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000

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VECTOR .... 30 FOOTWEAR

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## VECTOR ... 31 WOOD AND WOOD PRODUCTS

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COUNTRY: YEAR/RANK:	IRAN 1973/ 1	INDIA 1968/ 2	TUNISIA 1968/ 3	BRAZIL 1970/ 4	GREECE 1970/ 5	AUSTRIA 1964/ 6	AUSTRAL. 1974/ 7	PAP.N.GN 1972/ 8	U.S.AMER 1967/ 9	NEW ZLND 1965/ 10	SPAIN 1970/ 11
AGRICULTURE	0.07861	0.16657	0.12243	0.24707	0.15175	0.20355	0.11124	0.22338	0.08863	0.14740	0.35849
AGRO-FOOD	0.0	0.00778	0.0	0.00117	0.00011	0.00167	0.0	0.02265	0.0	0.00289	0.00196
ENERGY AND PETROLEUM PROD.	0.00820	0.02855	0.00522	0.02428	0.01376	0.01105	0.01591	0.01196	0.01883	0.01445	0.01299
BASIC PRODUCTS	0.00339	0.04119	0.0	0.01958	0.02394	0.07118	0.05926	0.03313	0.03742	0.02818	0.00642
LIGHT INDUSTRY	0.10854	0.04713	0.12503	0.13077	0.23369	0.17201	0.26805	0.09193	0.12837	0.29119	0.12069
CAPITAL GOODS	0.00170	0.00411	0.0	0.0	0.00777	0.00944	0.00461	0.03837	0.00835	0.01445	0.00765
CONSTRUCTION	0.00594	0.00315	0.0	0.0	0.00152	0.00395	0.00056	0.00058	0.00512	0.00578	0.00167
TRADE AND SERVICE	0.11962	0.11768	0.16671	0.09044	0.08615	0.09032	0.12551	0.17676	0.11550	0.09465	0.11384
INTERMEDIATE INPUTS ALLOC.	0.32604	0.41616	0.41940	0.51331	0.51868	0.56317	0.59313	0.59876	0.60222	0.60332	0.62370
WAGES	0.0	0.0	0.28060	0.17885	0.11443	0.18339	0.27904	0.26223	0.25502	0.23988	0.19081
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.0	0.0	0.0	0.02712	0.0	0.05618	0.0	0.03035	0.03025
TAXES LESS SUBSIDIES	0.0	0.02680	0.02537	0.0	0.04595	0.04934	0.01444	0.00733	0.00914	0.00361	0.00892
OPERATING SURPLUS	0.0	0.0	0.0	0.0	0.0	0.17747	0.0	0.07556	0.0	0.12283	0.14630
VALUE ADDED	0.67395	0.58384	0.57910	0.48556	0.48132	0.43683	0.40689	0.40129	0.39778	0.39668	0.37630
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	PHILIPP. 1969/ 12	CHILE 1962/ 13
AGRICULTURE	0.45600	0.07220
AGRO-FOOD	0.00316	0.0
ENERGY AND PETROLEUM PROD.	0.03065	0.01663
BASIC PRODUCTS	0.03401	0.01063
LIGHT INDUSTRY	0.05070	0.33988
CAPITAL GOODS	0.00196	0.00137
CONSTRUCTION	0.0	0.0
TRADE AND SERVICE	0.14399	0.23497
INTERMEDIATE INPUTS ALLOC.	0.62847	0.67768
WAGES	0.13001	0.10478
CONSUMPTION OF FIXED CAPITAL	0.02488	0.02637
TAXES LESS SUBSIDIES	0.01944	0.03059
OPERATING SURPLUS	0.19720	0.10058
VALUE ADDED	0.37153	0.32232
GROSS OUTPUT	1.00000	1.00000

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## VECTOR ... 12 FURNITURE

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VECTOR .... 33 PRINTING

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COUNTRY: YEAR/RANK:	BRAZIL 1970/ 1	IRAN 1973/ 2	AUSTRIA 1964/ 3	NEW ZEALAND 1965/ 4	GREECE 1970/ 5	PHILIPP. 1969/ 6	U.S.AMER 1967/ 7	AUSTRALIA 1974/ 8	SPAIN 1970/ 9	CHILE 1962/ 10	INDIA 1968/ 11
AGRICULTURE	0.0	0.0	0.0	0.0	0.00068	0.0	0.0	0.0	0.00004	0.00003	0.00040
AGRO-FOOD	0.0	0.0	0.00020	0.0	0.00011	0.00030	0.0	0.0	0.01966	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.00926	0.01772	0.01135	0.00692	0.00766	0.01242	0.00733	0.00864	0.00686	0.01341	0.02976
BASIC PRODUCTS	0.21442	0.24090	0.23885	0.22134	0.30145	0.25207	0.17462	0.24504	0.30670	0.23440	0.37391
LIGHT INDUSTRY	0.02230	0.01368	0.05807	0.05040	0.04753	0.02711	0.13416	0.04336	0.03829	0.00302	0.01881
CAPITAL GOODS	0.0	0.00862	0.01354	0.02273	0.00658	0.00360	0.01072	0.00901	0.00142	0.00356	0.00356
CONSTRUCTION	0.0	0.00192	0.01115	0.00198	0.00081	0.00105	0.00357	0.00632	0.00039	0.0	0.01208
TRADE AND SERVICE	0.09434	0.06526	0.06091	0.13538	0.10812	0.17495	0.17227	0.19290	0.13352	0.26510	0.12947
INTERMEDIATE INPUTS ALLOC.	0.34032	0.16631	0.40406	0.44170	0.47292	0.47650	0.50267	0.50534	0.50688	0.51952	0.52800
WAGES	0.26918	0.0	0.28045	0.33696	0.22904	0.21225	0.37213	0.38652	0.24905	0.24754	0.0
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.03304	0.04545	0.0	0.03716	0.0	0.0	0.03576	0.03463	0.0
TAXES LESS SUBSIDIES	0.0	0.0	0.04260	0.02569	0.03856	0.04106	0.00733	0.01620	0.00004	0.00541	0.04377
OPERATING SURPLUS	0.0	0.0	0.23945	0.14921	0.0	0.23303	0.0	0.0	0.20826	0.19287	0.0
VALUE ADDED	0.65377	0.63169	0.59594	0.55731	0.52708	0.52350	0.49733	0.49466	0.49312	0.48048	0.47200
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	MEXICO 1970/ 12	KOREA RP 1970/ 13
AGRICULTURE	0.0	0.00010
AGRO-FOOD	0.00020	0.00022
ENERGY AND PETROLEUM PROD.	0.00019	0.02142
BASIC PRODUCTS	0.26279	0.36221
LIGHT INDUSTRY	0.12644	0.03939
CAPITAL GOODS	0.00204	0.00823
CONSTRUCTION	0.0	0.00097
TRADE AND SERVICE	0.13246	0.17982
INTERMEDIATE INPUTS ALLOC.	0.53243	0.61238
WAGES	0.24944	0.26524
CONSUMPTION OF FIXED CAPITAL	0.0	0.02242
TAXES LESS SUBSIDIES	0.01906	0.00409
OPERATING SURPLUS	0.0	0.09586
VALUE ADDED	0.46757	0.38761
GROSS OUTPUT	1.00000	1.00000

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## VECTOR ... 34 RUBBER PRODUCTS

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COUNTRY: YEAR/RANK:	BRAZIL 1970/ 1	AUSTRIA 1964/ 2	CHILE 1962/ 3	PHILIPP. 1969/ 4	NEW ZLND 1965/ 5	SPAIN 1970/ 6	U.S. AMER 1967/ 7	GREECE 1970/ 8	AUSTRAL. 1974/ 9	PAKISTAN 1962/ 10	TUNISIA 1968/ 11
AGRICULTURE	0.04939	0.04899	0.00725	0.07687	0.0	0.00012	0.0	0.00422	0.0	0.15447	0.0
AGRO-FOOD	0.0	0.00061	0.00006	0.00080	0.0	0.00636	0.00045	0.00006	0.0	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.02157	0.01031	0.00048	0.02574	0.01644	0.02210	0.01379	0.03243	0.02919	0.02846	0.14462
BASIC PRODUCTS	0.17940	0.10778	0.11561	0.15120	0.20548	0.12686	0.07869	0.08608	0.17143	0.08943	0.0
LIGHT INDUSTRY	0.15328	0.17177	0.12903	0.13476	0.16164	0.19270	0.31091	0.27183	0.21942	0.06504	0.0
CAPITAL GOODS	0.0	0.01439	0.01681	0.00337	0.01096	0.00400	0.01794	0.02230	0.01150	0.02439	0.0
CONSTRUCTION	0.0	0.01010	0.0	0.00183	0.0	0.00181	0.00377	0.00154	0.00702	0.0	0.0
TRADE AND SERVICE	0.05847	0.00145	0.1424	0.10034	0.12055	0.12803	0.12075	0.16285	0.15124	0.23577	0.46997
INTERMEDIATE INPUTS ALLOC.	0.46212	0.47061	0.49149	0.49990	0.52603	0.54503	0.54631	0.58131	0.58979	0.59756	0.61458
WAGES	0.12071	0.15891	0.10124	0.13314	0.24384	0.21531	0.29419	0.17751	0.35484	0.0	0.05028
CONSUMPTION OF FIXED CAPITAL	0.0	0.03092	0.05064	0.03879	0.04658	0.05037	0.0	0.0	0.0	0.0	0.0
TAXES LESS SUBSIDIES	0.0	0.03919	0.03587	0.02037	0.01096	0.00169	0.04186	0.06630	0.02019	0.09756	0.09939
OPERATING SURPLUS	0.0	0.30037	0.32076	0.30779	0.16986	0.14759	0.0	0.0	0.0	0.0	0.0
VALUE ADDED	0.53081	0.52939	0.50851	0.50010	0.47123	0.45497	0.45370	0.41869	0.40991	0.40244	0.37989
GRASS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	KENYA 1967/ 12	BANGLADESH 1962/ 13	KOREA RP 1970/ 14
AGRICULTURE	0.24614	0.0	0.14906
AGRO-FOOD	0.0	0.0	0.00003
ENERGY AND PETROLEUM PROD.	0.11123	0.04808	0.05058
BASIC PRODUCTS	0.0	0.06731	0.21346
LIGHT INDUSTRY	0.09269	0.42308	0.13420
CAPITAL GOODS	0.05201	0.0	0.00727
CONSTRUCTION	0.01545	0.0	0.00142
TRADE AND SERVICE	0.11740	0.19231	0.18049
INTERMEDIATE INPUTS ALLOC.	0.66941	0.73077	0.74551
WAGES	0.14212	0.0	0.14027
CONSUMPTION OF FIXED CAPITAL	0.04840	0.0	0.02119
TAXES LESS SUBSIDIES	0.00618	0.01923	0.00642
OPERATING SURPLUS	0.13398	0.0	0.07660
VALUE ADDED	0.33059	0.26923	0.24448
GRASS OUTPUT	1.00000	1.00000	1.00000

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VECTORS .... 35 PLASTIC PRODUCTS

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### Sector 6 - CAPITAL GOODS

The equations for the sixth sector Capital Goods are:

$$\begin{aligned} X_6 &= -0.2a_{46} + 0.95a_{36} - 0.2VA_6 & 46.5\% \\ Y_6 &= 0.2a_{46} + 0.1a_{56} + 0.3a_{86} + 0.3VA_6 & 37.0\% \\ Z_6 &= 0.96a_{46} + 0.2a_{36} - 0.2VA_6 & 10.3\% \\ && \hline & 93.8\% \end{aligned}$$

The leading component for X is Trade and Services. The leading component for Y is Value-added, and for Z is Basic Products.

When looking at the sectoral coefficients ranked by GDP per head no apparent correlation appears for any of the leading components. On the other hand, there is a strong diagonal element which appears to be positively correlated with GDP per capita. This makes economic sense: it takes capital to produce capital, and the roundaboutness will increase, the richer the society.

We now proceed to analyze the sub-sectors.

#### Sub-sector 36 - Motor Vehicles

Distribution of Value added - 17 Countries 22% - 56%

20%	-	30%	-	3
30%	-	35%	-	5
35%	-	40%	-	5
40%	-	50%	-	3
56%	-			1

Quasi-diagonal element 65% - 17%

Basic Products	-	Italy	-	20%
		Brazil	-	17%
		Denmark	-	16%
		F.R. G. Spain	-	13%
		France Netherlands	-	12%
		U.S.A.	-	11%

Light Industry	-	U.K.	-	22%
		France	-	19%
		Italy	-	18%
		F.R.G.	-	16%
		U.S.A.	-	13%
		Spain	-	12%
		Denmark	-	11%

Trade and Services of at least 10% - 4 out of 17 countries

Sub-sector 37 - Shipbuilding

Distribution of Value added: 4 countries 28% - 6%

Spain	-	28%
Papua New Guinea	-	51%
Australia	-	54%
Brazil	-	65%

Quasi-diagonal element

Spain	-	25%
Papua New Guinea	-	19%
Australia	-	13%
Brazil	-	13%

Trade and Services at least 10% - 1 out of 4 countries

Sub-sector 38 - Other Transport Equipment

Distribution of Value added : 6 countries 37% - 66%

Spain	-	37%
Austria	-	42%
India	-	43%
Brazil	-	61%
New Zealand	-	65%
Australia	-	66%

Basic Products -	Brazil	-	20%
	Austria	-	19%
	India	-	17%
	Spain	-	12%

Capital Goods -	Spain	-	32%
	Australia	-	20%
	Austria	-	19%
	New Zealand	-	13%
	India	-	12%

Trade and Services -	India	-	14%
	Austria	-	11%

Sub-sector 39 - Machinery, excluding Electric

Distribution of Value Added: 2 countries 34% - 58%

30%	-	40%	-	2
40%	-	45%	-	8
45%	-	50%	-	7
50%	-	55%	-	2
55%	-	58%	-	2

Quasi-diagonal element - 2% - 4%

Basic Products -	Korea	-	30%
	Iran	-	25%
	Philippines	-	24%
	Austria	-	21%
	India	-	20%
	Ireland	-	20%
	Spain	-	19%
	Italy	-	18%
	Brazil	-	17%
	Australia	-	16%
	Netherlands	-	16%
	Mexico	-	16%
	P.R.G.	-	15%
	U.K.	-	15%
	France	-	14%
	U.S.A.	-	14%
	Belgium	-	10%

Light Industry	-	Greece	-	27%
		Italy	-	19%
		Denmark	-	20%
		France	-	14%
		Belgium	-	14%
		F.R.G.	-	11%
		Netherlands	-	12%

Trade and Services at least 10% - 10 out of 21 countries

Sub-sector 40 - Electrical Machinery

Distribution of Value added - 16 countries 27% - 52%

25% - 30%	-	1
30% - 35%	-	1
35% - 40%	-	6
40% - 50%	-	5
50% - 55%	-	3

Basic Products less than 10%	-	3
10% - 20%	-	6
20% - 30%	-	5
30% - 40%	-	2

Capital Goods less than 10%	-	1
10% - 20%	-	10
20% - 30%	-	5

Trade and Services less than 10%	-	3
10% - 20%	-	10
20% - 30%	-	1
30% - 40%	-	2

Sub-sector 41 - Other Equipment

Distribution of Value added

Korea	-	30%
Spain	-	40%
Australia	-	48%
U.S.A.	-	50%
Austria	-	52%

Basic Products

Korea	-	17%
Spain	-	16%
Australia	-	12%
U.S.A.	-	11%
Austria	-	10%

Capital Goods

Korea	-	36%
Spain	-	23%
Australia	-	19%
U.S.A.	-	17%
Austria	-	14%

Trade and Services

Korea	-	13%
Spain	-	16%
Australia	-	15%
U.S.A.	-	13%
Austria	-	17%

The considerable variability of value added magnitudes in the Capital Goods sector, both with respect to countries and to sub-sectors, requires some comment. The unusually high value added for Ship-building and Other Transport may be looked at in the light of the non-representativeness of Australia, Papua New Guinea and Brazil as ship-builders. Australian ship-building can hardly survive with a subsidy nor is Papua New Guinea ship-building significant by world standards. Australian average value added in the Capital Goods sector is 39% which is consistent with its value added in the motor-vehicle industry and non-electrical. The V.A. figure of 66% for Other Transport is way above average, and may be due to some very costly services like aircraft maintenance. Brazil on the other hand with an average capital sector value added of 52% has a motor vehicle industry with below average value added and non-electrical machinery, ship-building and other transport industries with above average value added. Without closer acquaintance with the local conditions one could only guess at the causes for this divergence.

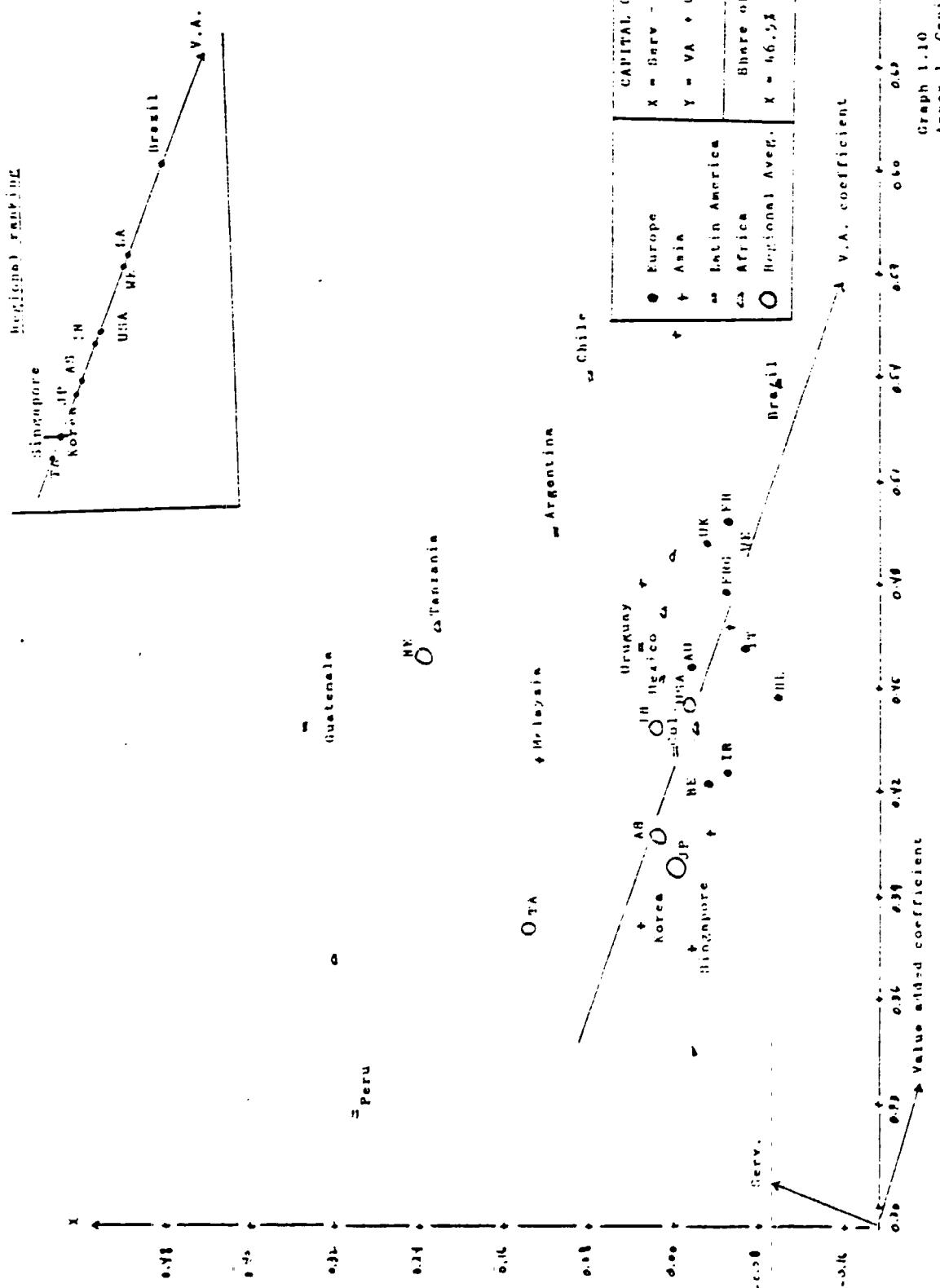
The fact that Austria's figures for Other Transport, Non-electrical Machinery and Other Equipment all have above average value added, may be due to either the unrepresentativeness of the subsectors available or to the out-of-dateness of the average value added figure for the Capital Goods sector which goes back to the year 1964.

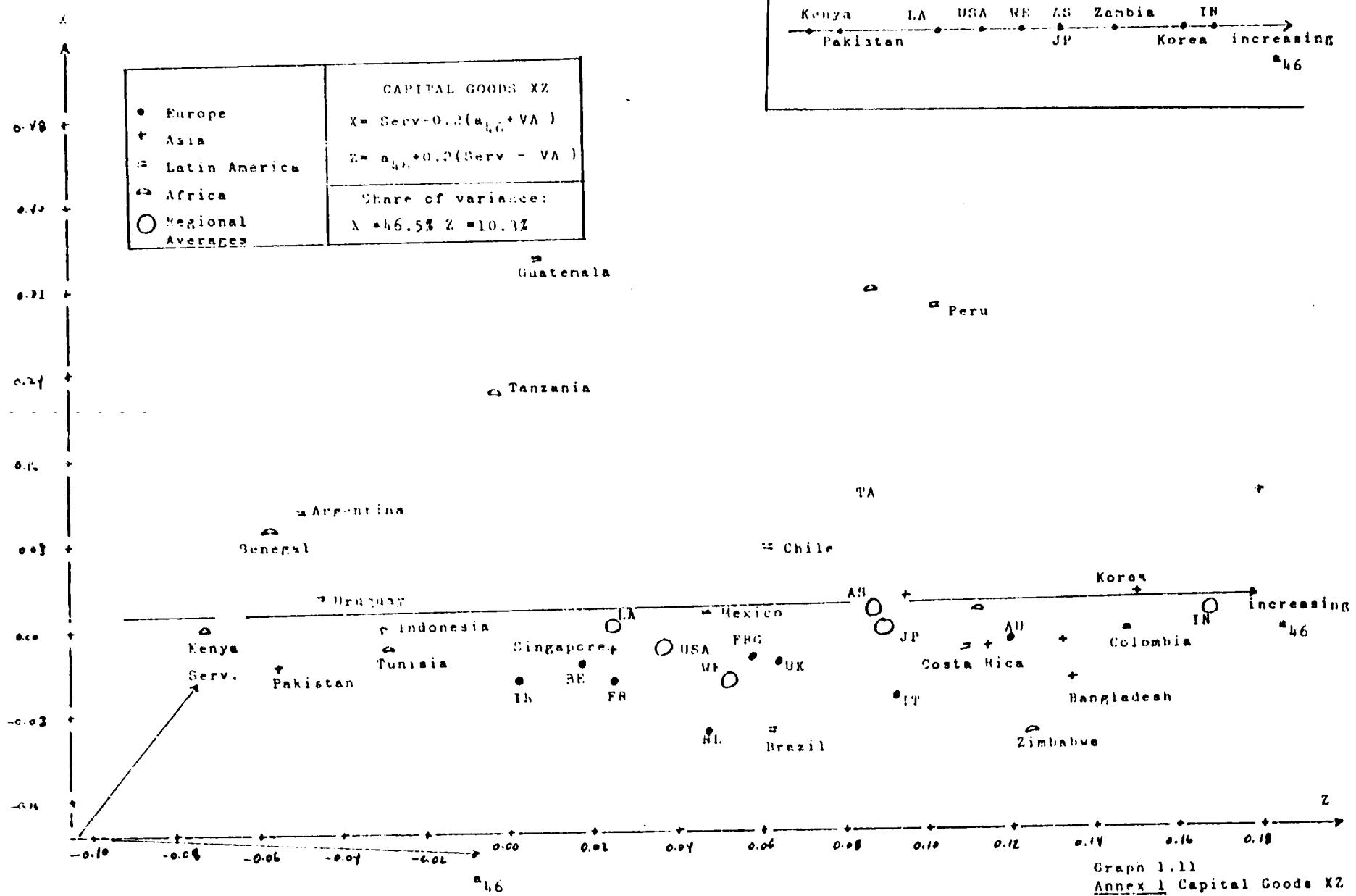
The variability within subsectors is likely to be due not only to differences in national conditions but also to differences in activities and in product mix.

Because most of the divergences are in the last resort based on empirical facts, a call for an explanation is really a call for greater disaggregation, possibly supplemented by first-hand local knowledge.

INPUT COEFFICIENTS FOR SECTOR CAPITAL GOODS (EQUIPMENT)

	GDP PER CAPITA	AGRICULT	AGRO-FOO	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTRUC	SERVICES	INTERM.	VALUE AD
INDONESIA 1971	61.5	0.0	0.00003	0.03200	0.06093	0.08934	0.14996	0.00298	0.14238	0.47763	0.52277
INDIA 1969	77.1	0.02794	0.00030	0.02473	0.16260	0.01790	0.16868	0.0	0.16610	0.56832	0.43168
BANGLADESH 1952	84.0	0.11257	0.0	0.02802	0.21308	0.05254	0.08231	0.0	0.08757	0.57618	0.42382
INDIA 1969	87.9	0.00334	0.00936	0.02212	0.22755	0.05700	0.13087	0.01904	0.15681	0.62609	0.37391
CONGO 1967 (ZAIPE)	90.0	0.0	0.0	0.01685	0.01935	0.00786	0.09979	0.00980	0.58062	0.73428	0.26572
TANZANIA 1970	94.0	0.00405	0.0	0.07068	0.02767	0.02356	0.14040	0.00416	0.31111	0.60580	0.39420
PAKISTAN (WEST) 1962	109.1	0.00126	0.0	0.02901	0.02830	0.21936	0.26578	0.0	0.07656	0.62228	0.37772
KENYA 1967	122.2	0.00252	0.00123	0.01279	0.00667	0.01424	0.33756	0.00289	0.11479	0.51769	0.49231
BOLIVIA 1971	169.7										
IVORY COAST 1960	204.1	0.00225	0.00664	0.00037	0.06959	0.01107	0.13195	0.00190	0.55969	0.79241	0.20759
KOREA 1970	229.1	0.00043	0.00010	0.02118	0.20220	0.04968	0.25763	0.00055	0.14601	0.67757	0.32243
SENEGAL 1959	236.0	0.02000	0.0	0.01600	0.0	0.00400	0.30000	0.00400	0.20000	0.54760	0.45200
TUNISIA 1968	243.7	0.0	0.0	0.00920	0.04670	0.00497	0.41391	0.0	0.09768	0.56954	0.43046
ZIMBABWE 1965	249.4	0.0	0.0	0.00788	0.20418	0.02625	0.33605	0.0	0.03649	0.61145	0.38855
EQUADOR 1963	265.8										
PAPUA NEW GUINEA 197	272.5	0.0	0.00584	0.02350	0.02622	0.00805	0.01116	0.01493	0.36637	0.45608	0.54392
MALAYSIA 1965	310.4	0.0	0.00037	0.04434	0.21804	0.02561	0.10590	0.0	0.26531	0.65951	0.34043
IVORY COAST 1972	314.3	0.0	0.0	0.01312	0.00071	0.01766	0.20483	0.00205	0.41922	0.73759	0.26241
COLOMBIA 1970	320.0	0.0	0.0	0.00847	0.21456	0.02403	0.24118	0.0	0.12880	0.61705	0.38295
ZAMBIA 1955	364.1	0.00042	0.0	0.02462	0.17989	0.00327	0.21014	0.00082	0.15127	0.57482	0.42518
GUATEMALA 1971	379.5	0.00085	0.00055	0.01634	0.01947	0.18780	0.00972	0.0	0.45171	0.68650	0.31350
HONDURAS 1970	393.3	0.00032	0.00005	0.01106	0.16563	0.06420	0.18239	0.0	0.05530	0.48295	0.51705
PERU 1968	399.3	0.0	0.00074	0.01699	0.09421	0.04246	0.23432	0.0	0.39477	0.78349	0.21651
COSTA RICA 1966	426.2	0.0	0.00009	0.00968	0.16715	0.03797	0.38164	0.00464	0.09078	0.69195	0.30804
CHILE 1962	595.0	0.00052	0.00000	0.02010	0.14246	0.05290	0.08372	0.0	0.22968	0.51947	0.44052
MEXICO 1970	613.4	0.00008	0.00002	0.00961	0.11594	0.03656	0.20096	0.0	0.14169	0.58485	0.41515
ARGENTINA 1953	728.2	0.00019	0.0	0.01466	0.01432	0.10845	0.18759	0.0	0.22494	0.55416	0.44584
URUGUAY 1961	730.9	0.0	0.00102	0.01344	0.02686	0.02265	0.35571	0.0	0.13385	0.55351	0.44647
TRINIDAD AND TOBAGO	733.6										
IRELAND 1969	1165.3	0.0	0.0	0.01179	0.08415	0.04820	0.38179	0.00092	0.05619	0.58678	0.41322
SINGAPORE 1973	1251.6	0.00021	0.00931	0.00965	0.09060	0.04936	0.40910	0.00106	0.07793	0.64723	0.35276
AUSTRIA 1956	1405.2	0.00043	0.00046	0.01693	0.19183	0.03216	0.21556	0.00079	0.12081	0.58793	0.41202
ITALY 1970	1572.3	0.00001	0.0	0.02197	0.18387	0.15366	0.13416	0.00024	0.08199	0.58493	0.41510
JAPAN 1970	1713.1	0.00034	0.0	0.01100	0.15263	0.05290	0.30392	0.00206	0.11987	0.64352	0.35648
UNITED KINGDOM 1970	2021.5	0.0	0.00030	0.02114	0.15614	0.12751	0.13505	0.00392	0.10363	0.55080	0.44920
NETHERLAND 1970	2226.6	0.0	0.00006	0.01141	0.1924	0.07690	0.29277	0.01471	0.03777	0.57287	0.42713
BELGIUM 1970	2457.1	0.00008	0.00003	0.01013	0.09610	0.07169	0.34473	0.00241	0.07400	0.59917	0.40061
GERMANY F.R. 1970	2558.3	0.00008	0.00063	0.01946	0.14684	0.11377	0.18312	0.00611	0.09152	0.56154	0.43846
AUSTRALIA 1974/75	2608.6	0.00043	0.00028	0.01205	0.14523	0.06859	0.28653	0.00293	0.09451	0.61454	0.38547
FRANCE 1970	2841.0	0.0	0.00001	0.01337	0.11986	0.14055	0.16531	0.00860	0.08836	0.53605	0.46395
UNITED STATES 1967	4216.2	0.00005	0.00225	0.00855	0.11263	0.08007	0.27313	0.00292	0.10899	0.58859	0.41142





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## VECTIOR .... 36 MOTOR VEHICLES

COUNTRY: YEAR/RANK:	PAP-N.GN 1969/ 1	PHILLIPP 1970/ 2	SPAIN 1970/ 3	UNIT-KG 1970/ 4	FRANCE 1970/ 5	TUNISIA 1969/ 6	NETILANDS 1970/ 7	ITALY 1970/ 7	GERMNY-FR 1970/ 8	MEXICO 1970/ 9	NEW ZLND 1965/ 11
<b>AGRICULTURE</b>											
AGRO-FOOD	0.0	0.0	0.00037	0.0	0.0	0.0	0.0	0.0	0.00017	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.00161	0.0	0.00012	0.0	0.0	0.0	0.0	0.0	0.00052	0.0	0.0005
BASIC PRODUCTS	0.01100	0.00140	0.01148	0.02524	0.01523	0.02454	0.00115	0.01517	0.02467	0.00769	0.00262
LIGHT INDUSTRY	0.03259	0.01352	0.16845	0.15402	0.12290	0.02454	0.12131	0.19729	0.13179	0.04003	0.03054
CAPITAL GOODS	0.01538	0.02578	0.07637	0.21598	0.19394	0.02454	0.09103	0.18326	0.15523	0.02470	0.05148
CONSTRUCTION	0.17010	0.36028	0.25642	0.09299	0.19102	0.0	0.37539	0.17712	0.24164	0.41196	0.55373
TRADE AND SERVICES	0.00523	0.00190	0.0	0.00218	0.000882	0.0	0.00311	0.00561	0.00132	0.0	0.0
	0.20718	0.11962	0.06178	0.00550	0.07802	0.56445	0.04425	0.06949	0.09183	0.13215	0.04276
<b>INTERMEDIATE INPUTS ALLOC.</b>											
WAGE'S	0.44310	0.52851	0.56500	0.57493	0.60996	0.63448	0.64216	0.64901	0.65676	0.68586	0.68586
CONSUMPTION OF FIXED CAPITAL	0.30757	0.18601	0.1543	0.20751	0.0	0.12044	0.14226	0.23045	0.14050	0.09599	0.09599
TAXES LESS SUBSIDIES	0.02430	0.03737	0.0	0.06197	0.0	0.0	0.02193	0.03913	0.02246	0.0	0.00611
OPERATING SURPLUS	0.02359	0.04137	0.0	0.11223	0.0	0.08434	0.08476	0.06676	0.0667	0.02076	0.12653
VALUE ADDED	0.20142	0.21667	0.0	-0.04664	0.0	0.0	0.06599	0.00749	0.09049	0.0	0.00551
GROSS OUTPUT	0.55689	0.47149	0.43128	0.42507	0.39004	0.36145	0.35714	0.35158	0.35099	0.34324	0.31414
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	IRELAND 1969/ 12	AUSTRIAL 1974/ 13	U.S.A. 1967/ 14	GERMANY 1970/ 15	DENMARK 1970/ 16	SPAIN 1970/ 17	BELGIUM 1970/ 17
<b>AGRICULTURE</b>							
AGRO-FOOD	0.0	0.0	0.0	0.0	0.0	0.00002	0.0
ENERGY AND PETROLEUM PROD.	0.00012	0.01457	0.00659	0.00984	0.00A06	0.00694	0.0
BASIC PRODUCTS	0.02437	0.09478	0.10543	0.16621	0.12817	0.03356	0.0
LIGHT INDUSTRY	0.05443	0.06527	0.12922	0.10574	0.11605	0.02775	0.0
CAPITAL GOODS	0.54265	0.44218	0.35818	0.36285	0.41167	0.65341	0.0
CONSTRUCTION	0.000H1	0.00293	0.00243	0.00361	0.00120	0.00078	0.0
TRADE AND SERVICE	0.05443	0.06186	0.06701	0.07503	0.07228	0.05635	0.0
	0.60643	0.60751	0.60947	0.71833	0.74547	0.77945	0.0
WAGE'S	0.14516	0.24883	0.19512	0.26630	0.14718	0.14944	0.0
CONSUMPTION OF FIXED CAPITAL	0.00731	0.0	0.0	0.0	0.04511	0.02743	0.0
TAXES LESS SUBSIDIES	0.08936	0.01238	0.04626	0.03669	0.02128	0.01142	0.0
OPERATING SURPLUS	0.06093	0.0	0.0	0.02091	0.04096	0.03646	0.0
VALUE ADDED	0.31357	0.31249	0.31053	0.28167	0.25453	0.22115	0.0
GROSS INPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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VECTOR .... 37 SHIPBUILDING

COUNTRY: YEAR/RANK:	BRAZIL 1970/	AUSTRAL. 1974/	PAP.N.GN 1972/	SPAIN 1970/
	1	2	3	4
AGRICULTURE	0.00127	0.0	0.0	0.00006
AGRO-FOOD	0.0	0.0	0.01579	0.00736
ENERGY AND PETROLEUM PROD.	0.00638	0.00704	0.01948	0.01655
BASIC PRODUCTS	0.07016	0.08878	0.04158	0.27611
LIGHT INDUSTRY	0.01531	0.13333	0.04316	0.10078
CAPITAL GOODS	0.17989	0.13367	0.18740	0.25282
CONSTRUCTION	0.0	0.00134	0.01842	0.00061
TRADE AND SERVICE	0.07145	0.09548	0.16161	0.07046
INTERMEDIATE INPUTS ALLOC.	0.34446	0.45963	0.48744	0.72476
WAGES	0.16925	0.48744	0.32781	0.29702
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.02558	0.03974
TAXES LESS SUBSIDIES	0.0	0.01474	0.01042	-0.11407
OPERATING SURPLUS	0.0	0.0	0.14874	0.05255
VALUE ADDED	0.64601	0.54070	0.51255	0.27524
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000

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VECTOR .... 38 OTHER TRANSPORT EQUIPMENT

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COUNTRY:	AUSTRAL. 1974/	NEW ZLND 1965/	BRAZIL 1970/	INDIA 1968/	AUSTRIA 1964/	SPAIN 1970/	6
YEAR/RANK:	1	2	3	4	5		
AGRICULTURE	0.0	0.0	0.0	0.00356	0.0	0.00015	
AGRO-FOOD	0.0	0.0	0.0	0.00005	0.0	0.00949	
ENERGY AND PETROLEUM PROD.	0.00714	0.01165	0.01345	0.01931	0.01802	0.01317	
BASIC PRODUCTS	0.05213	0.04503	0.20319	0.17854	0.18849	0.12206	
LIGHT INDUSTRY	0.04093	0.05435	0.04342	0.07186	0.04813	0.08593	
CAPITAL GOODS	0.20274	0.12966	0.06176	0.12251	0.20326	0.32042	
CONSTRUCTION	0.00193	0.00699	0.0	0.01847	0.01361	0.00113	
TRADE AND SERVICE	0.03244	0.09317	0.04980	0.14806	0.10834	0.06979	
INTERMEDIATE INPUTS ALLOC.	0.13713	0.34239	0.37252	0.56236	0.58485	0.62665	
WAGES	0.57193	0.49379	0.19711	0.0	0.22474	0.26918	
CONSUMPTION OF FIXED CAPITAL	0.0	0.03183	0.0	0.0	0.02435	0.04658	
TAXES LESS SUBSIDIES	0.00348	0.00699	0.0	0.07817	0.03682	0.01173	
OPERATING SURPLUS	0.0	0.12422	0.0	0.0	0.12924	0.04586	
VALUE ADDED	0.66287	0.65683	0.61483	0.43764	0.41515	0.37335	
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	

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## VECTOR .... BY MACHINERY EXCL. ELECTRIC

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COUNTRY: YEAR/RANK:	IRAN 1970/ 1	IRAN 1973/ 2	AUSTRIA 1964/ 3	GREECE 1970/ 4	MEXICO 1970/ 5	PHILIPP. 1969/ 6	GERMANY-FR 1970/ 7	NETHERLANDS 1970/ 8	IRELAND 1969/ 9	FRANCE 1970/ 9	INDIA 1954/ 11
AGRICULTURE	0.00049	0.0	0.00038	0.00119	0.0	0.0	0.00005	0.0	0.0	0.0	0.00403
AGRO-FOOD	0.0	0.0	0.00031	0.00017	0.0	0.0	0.00060	0.0	0.0	0.0	0.00032
ENERGY AND PETROLEUM PROD.	0.011389	0.01242	0.01073	0.01195	0.01150	0.02298	0.01891	0.01283	0.02507	0.01244	0.02672
BASIC PRODUCTS	0.16509	0.25010	0.20601	0.06726	0.15778	0.24195	0.14752	0.16365	0.19777	0.13761	0.20595
LIGHT INDUSTRY	0.04614	0.06378	0.02046	0.26337	0.07456	0.07063	0.10698	0.11593	0.05014	0.14316	0.04237
CAPITAL GOODS	0.08696	0.06217	0.16241	0.11144	0.15948	0.04666	0.15024	0.15650	0.20056	0.15023	0.10973
CONSTRUCTION	0.0	0.00083	0.00781	0.00112	0.0	0.00366	0.00753	0.02016	0.00279	0.00665	0.02057
TRADE AND SERVICE	0.06375	0.06223	0.08718	0.09466	0.13910	0.11548	0.07932	0.04281	0.04735	0.07793	0.14013
INTERMEDIATE INPUTS ALLOC.	0.41633	0.44012	0.49858	0.49917	0.50243	0.50335	0.51113	0.51206	0.52368	0.52925	0.54981
WAGES	0.24243	0.0	0.21221	0.20629	0.26413	0.21492	0.32929	0.35624	0.32312	0.0	0.0
CONSUMPTION OF FIXED CAPITAL	0.0	0.0	0.02574	0.0	0.0	0.04499	0.05662	0.02834	0.02786	0.0	0.0
TAXES LESS SUBSIDIES	0.0	0.0	0.02290	0.09421	0.02489	0.01009	0.02615	-0.01283	0.01114	0.0	0.00061
OPERATING SURPLUS	0.0	0.0	0.22049	0.0	0.0	0.21364	0.07682	0.11637	0.11142	0.0	0.0
VALUE ADDED	0.57526	0.55988	0.50142	0.50083	0.49757	0.49665	0.48887	0.48803	0.47632	0.47075	0.45019
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	SPAIN 1970/ 12	BELGIUM 1970/ 13	NETH. 1965/ 14	U.S.;AMER 1967/ 15	UNID. 1970/ 16	DENMARK 1970/ 17	CHILE 1962/ 18	ITALY 1970/ 19	AUSTRALIA 1974/ 20	KOREA RP 1970/ 21
AGRICULTURE	0.01504	0.0	0.0	0.0	0.0	0.0	0.00134	0.0	0.00066	0.00249
AGRO-FOOD	0.00260	0.00068	0.0	0.00013	0.0	0.00075	0.0	0.0	0.0	0.00011
ENERGY AND PETROLEUM PROD.	0.01951	0.01272	0.00752	0.01001	0.01964	0.00740	0.01402	0.02884	0.00957	0.03022
BASIC PRODUCTS	0.19263	0.10455	0.14511	0.13499	0.14772	0.11266	0.13658	0.18305	0.15557	0.30840
LIGHT INDUSTRY	0.07509	0.13275	0.08647	0.06231	0.12715	0.19637	0.05264	0.18721	0.04214	0.05151
CAPITAL GOODS	0.20485	0.05743	0.10120	0.24663	0.13419	0.14056	0.13071	0.09535	0.21335	0.11161
CONSTRUCTION	0.00139	0.00373	0.0301	0.00304	0.02051	0.00570	0.0	0.01184	0.00268	0.01056
TRADE AND SERVICE	0.06594	0.09348	0.12932	0.11147	0.12436	0.11171	0.24459	0.08644	0.13255	0.15420
INTERMEDIATE INPUTS ALLOC.	0.55204	0.55272	0.56015	0.56559	0.57577	0.57801	0.59203	0.60588	0.65909	0.65909
WAGES	0.29499	0.30336	0.28195	0.31216	0.33729	0.34048	0.31209	0.35459	0.19451	0.19451
CONSUMPTION OF FIXED CAPITAL	0.04058	0.04904	0.03158	0.0	0.02338	0.0	0.02962	0.03388	0.0	0.02950
TAXES LESS SUBSIDIES	-0.00331	-0.00246	0.01674	0.00726	0.00454	-0.02205	0.05019	0.00410	0.01206	0.03771
OPERATING SURPLUS	0.12571	0.09941	0.10902	0.0	0.05903	0.10306	0.16449	0.05267	0.0	0.0H419
VALUE ADDED	0.44796	0.44728	0.43910	0.43440	0.42423	0.42199	0.41798	0.40722	0.39412	0.34091
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

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## VECTOR .... 40 ELECTRICAL MACHINERY

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COUNTRY: YEAR/RANK:	PAP-N.GN 1972/ 1	AUSTRIA 1964/ 2	BRAZIL 1970/ 3	PHILIPP. 1969/ 4	CHILE 1962/ 5	U.S.AMER 1967/ 6	MEXICO 1970/ 7	IRAN 1973/ 8	TUNISIA 1968/ 9	NEW ZLND 1965/ 10	AUSTRAL. 1974/ 11
AGRICULTURE	0.0	0.00015	0.0	0.00029	0.00003	0.0	0.0	0.0	0.0	0.0	0.0
AGRO-FOOD	0.0	0.00000	0.0	0.0	0.00001	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY AND PETROLEUM PROD.	0.01416	0.00961	0.01025	0.01853	0.01402	0.00898	0.01115	0.01002	0.02052	0.01066	0.01236
BASIC PRODUCTS	0.00613	0.16868	0.21529	0.15185	0.10915	0.10929	0.13568	0.35307	0.06157	0.17299	0.22774
LIGHT INDUSTRY	0.01369	0.03269	0.06171	0.05457	0.05478	0.07068	0.04883	0.01028	0.0	0.12204	0.05968
CAPITAL GOODS	0.20577	0.17148	0.12204	0.16681	0.03531	0.24312	0.19506	0.11585	0.18477	0.17299	0.19224
CONSTRUCTION	0.00661	0.00674	0.0	0.00138	0.0	0.00304	0.0	0.00091	0.0	0.00118	0.00309
TRADE AND SERVICE	0.22701	0.08219	0.06289	0.13306	0.31957	0.11351	0.15823	0.07870	0.32848	0.13033	0.12253
INTERMEDIATE INPUTS ALLOC.											
WAGES	0.47377	0.47480	0.47218	0.52649	0.53287	0.54862	0.54895	0.56963	0.59535	0.61256	0.61781
CONSUMPTION OF FIXED CAPITAL	0.35258	0.21856	0.17393	0.17346	0.11588	0.34716	0.20378	0.0	0.20000	0.22749	0.31508
TAXES LESS SUBSIDIES	0.01954	0.02157	0.0	0.03053	0.01913	0.0	0.0	0.0	0.0	0.02725	0.0
OPERATING SURPLUS	0.02043	0.02581	0.0	0.01407	0.05977	0.00640	0.02131	0.0	0.08372	0.02607	0.01379
VALUE ADDED	0.13410	0.25927	0.0	0.25545	0.27235	0.0	0.0	0.0	0.0	0.10782	0.0
GROSS OUTPUT	0.52664	0.52520	0.52069	0.47351	0.46713	0.45138	0.45105	0.43037	0.39535	0.38863	0.30219
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

COUNTRY: YEAR/RANK:	INDIA 1968/ 12	SPAIN 1970/ 13	GREECE 1970/ 14	KOREA RP 1970/ 15	COSTA RC 1966/ 16
AGRICULTURE	0.00116	0.00003	0.00072	0.00008	0.0
AGRO-FOOD	0.00025	0.00146	0.00006	0.00018	0.0
ENERGY AND PETROLEUM PROD.	0.01455	0.01034	0.01977	0.02257	0.00754
BASIC PRODUCTS	0.29571	0.35489	0.03623	0.24716	0.22211
LIGHT INDUSTRY	0.03204	0.03541	0.25271	0.03843	0.05863
CAPITAL GOODS	0.12891	0.12522	0.21967	0.22678	0.28363
CONSTRUCTION	0.01232	0.00191	0.00060	0.00035	0.00879
TRADE AND SERVICE	0.14224	0.11041	0.11636	0.13067	0.15067
INTERMEDIATE INPUTS ALLOC.	0.62716	0.64167	0.64611	0.67423	0.77138
WAGES	0.0	0.23027	0.13221	0.12777	0.0
CONSUMPTION OF FIXED CAPITAL	0.0	0.01126	0.0	0.02507	0.0
TAXES LESS SUBSIDIES	0.04548	0.03740	0.06941	0.06087	0.0
OPERATING SURPLUS	0.0	0.05870	0.0	0.11206	0.0
VALUE ADDED	0.37284	0.35833	0.35389	0.32576	0.26862
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000

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VECTOR .... 41 OTHER EQUIPMENT

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COUNTRY:	AUSTRIA 1964/	U.S.-AMER 1967/	AUSTRAL. 1974/	SPAIN 1970/	KOREA RP 1970/	5
YEAR/RANK:						
AGRICULTURE	0.00383	0.00035	0.01825	0.00012	0.00030	
AGRO-FOOD	0.0	0.00122	0.01217	0.00395	0.00001	
ENERGY AND PETROLEUM PROD.	0.01258	0.00638	0.01438	0.00729	0.01508	
BASIC PRODUCTS	0.10339	0.11063	0.12445	0.16331	0.16616	
LIGHT INDUSTRY	0.02845	0.07804	0.00664	0.04410	0.02552	
CAPITAL GOODS	0.14114	0.17318	0.18971	0.22557	0.35904	
CONSTRUCTION	0.01641	0.00357	0.00664	0.00185	0.00040	
TRADE AND SERVICE	0.17013	0.12772	0.14934	0.15738	0.13017	
INTERMEDIATE INPUTS ALLOC.	0.48140	0.50160	0.51991	0.60358	0.69669	
WAGES	0.27298	0.31718	0.37998	0.30093	0.16223	
CONSUMPTION OF FIXED CAPITAL	0.02571	0.0	0.0	0.02545	0.01258	
TAXES LESS SUBSIDIES	0.02079	0.00648	0.01217	0.00161	0.00601	00
OPERATING SURPLUS	0.19912	0.0	0.0	0.06844	0.12249	
VALUE ADDED	0.51860	0.49840	0.48009	0.39642	0.30331	
GROSS OUTPUT	1.00000	1.00000	1.00000	1.00000	1.00000	

Sector 7 - CONSTRUCTION

The equations for the seventh sector Construction are:

$$\begin{aligned} X_7 &= 0.7a_{47} - 0.3a_{57} - 0.6a_{37} + 0.2VA_7 & 36.9\% \\ Y_7 &= 0.5a_{47} + 0.2a_{57} - 0.4a_{87} + 0.8VA_7 & 28.3\% \\ Z_7 &= -0.1a_{17} + 0.2a_{47} + 0.9a_{57} - 0.2a_{67} & 17.0\% \\ && \hline & 82.2\% \end{aligned}$$

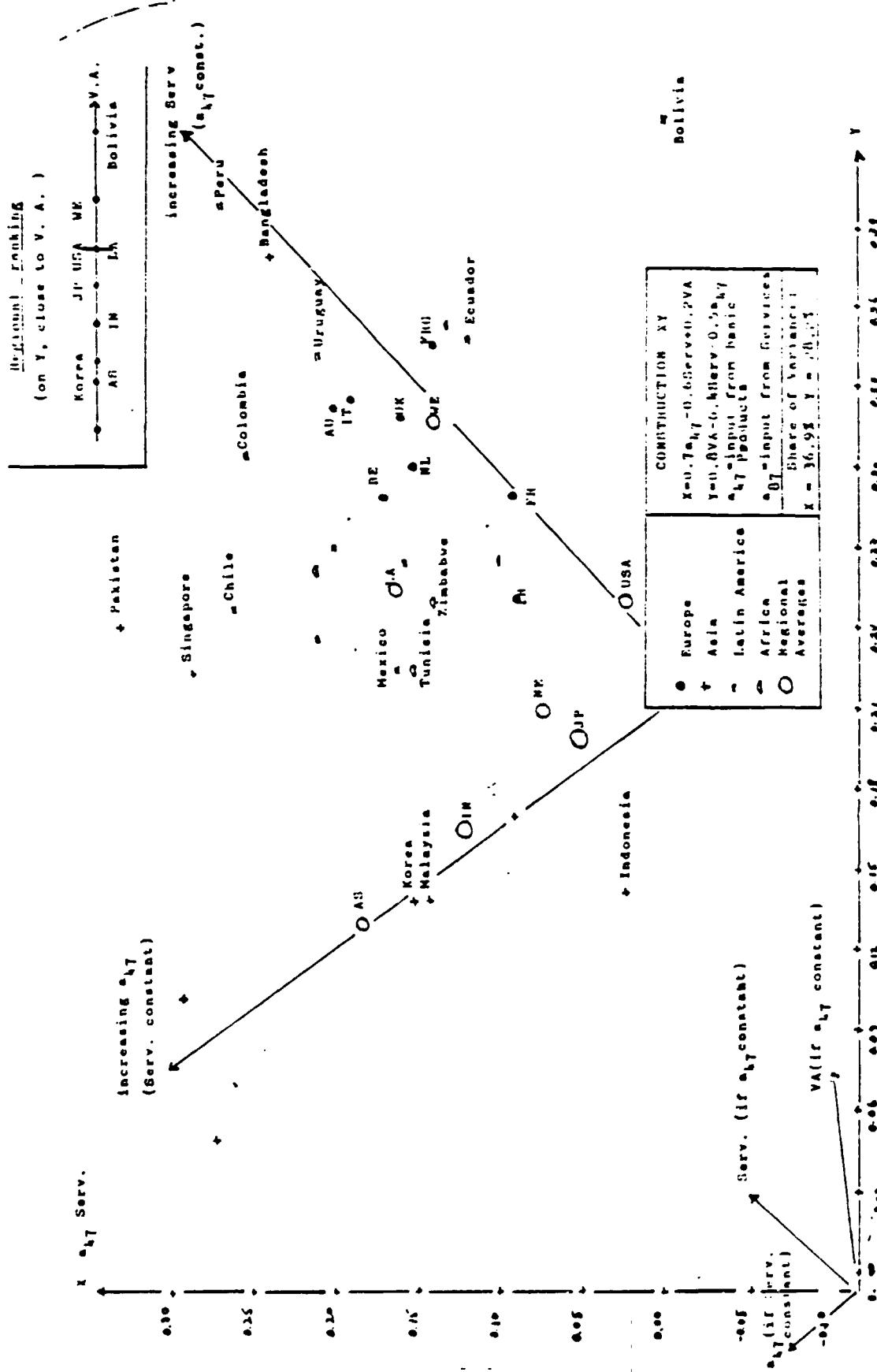
The leading component of X is Basic Products with a secondary component of Services. The leading component of Y is Value added with a secondary component of Basic Products. The leading component of Z is Light Industry.

From an inspection of the GDP ranked sectoral output coefficients, it is evident that with the exception of Value added, the leading components have neither large values nor obvious correlations with GDP, implying much diversity in the industry across countries. The inter-industry ties of the Construction sector could hardly be expected to be strong when value added coefficients are high.

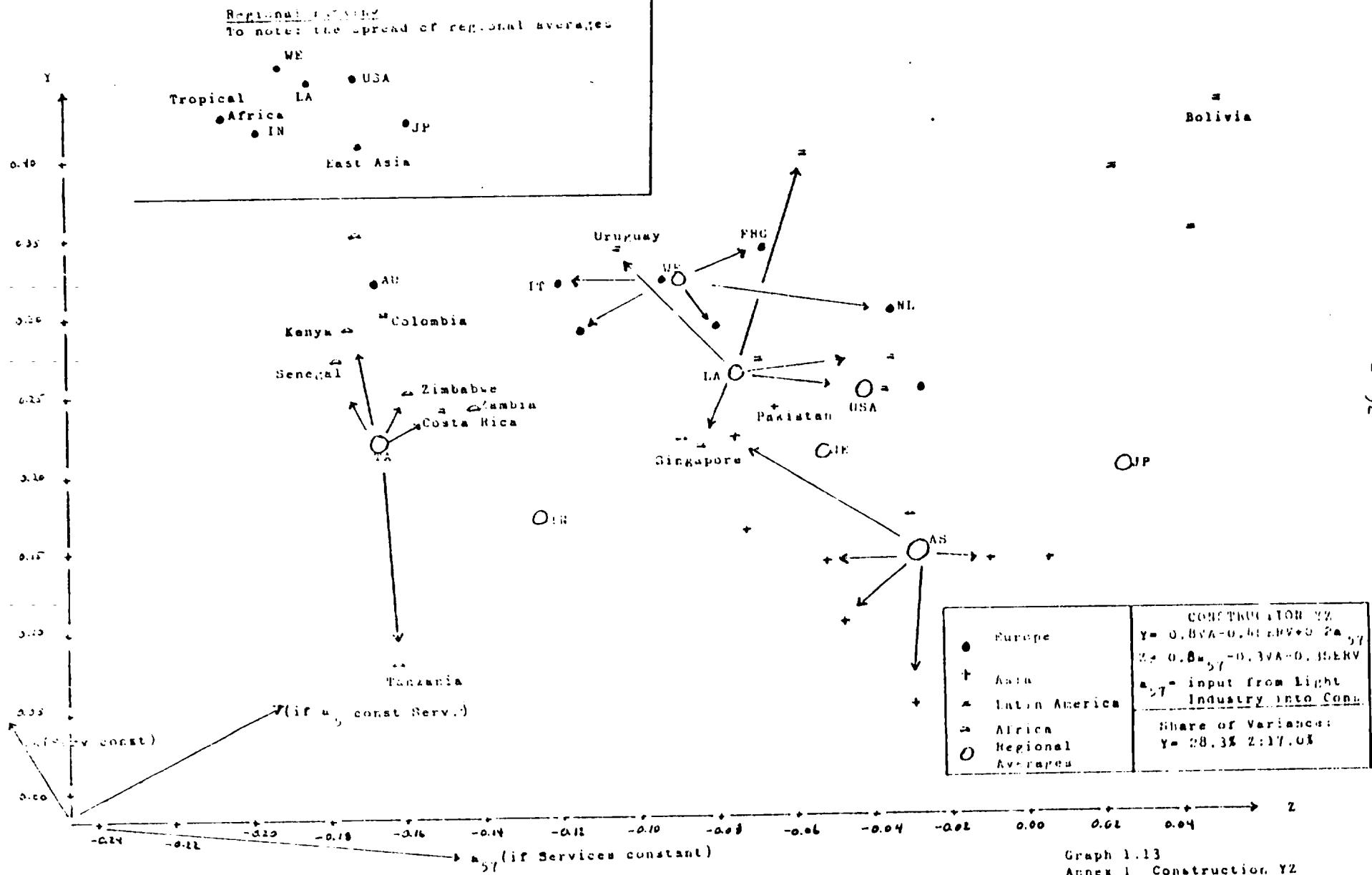
No disaggregation into sub-sectors of the Construction sector was possible.

INPUT COEFFICIENTS FOR SECTOR CONSTRUCTION

	GDP PER CAPITA	AGRICULT	AGRO-FOO	ENERGY	BASIC PR	LIGHT IN	CAPITAL	CONSTRUC	SERVICE	INTERV.	VALUE AD
INDONESIA 1971	61.5	0.00217	0.00000	0.00051	0.19493	0.19515	0.01383	0.00143	0.22606	0.64208	0.35792
INDIA 1959	77.1	0.11918	0.0	0.01092	0.17668	0.04658	0.00397	0.00541	0.15394	0.59678	0.40322
BANGLADESH 1962	84.0	0.11086	0.0	0.00249	0.20619	0.04589	0.01269	0.0	0.00498	0.38309	0.61691
INDIA 1964	87.5	0.04713	0.00803	0.00384	0.24836	0.10155	0.0	0.0	0.16972	0.57462	0.42138
CONGO 1967 (AFIRE)	90.4	0.00020	0.00015	0.01420	0.12487	0.04507	0.11139	0.01845	0.10098	0.43541	0.56459
TANZANIA 1970	94.0	0.13727	0.0	0.00648	0.12210	0.05701	0.01186	0.00036	0.32802	0.66313	0.33687
PAKISTAN (WEST) 1962	109.1	0.03418	0.0	0.01279	0.35530	0.06693	0.01640	0.0	0.00164	0.48716	0.51284
KENYA 1967	122.2	0.01245	0.0	0.04266	0.09580	0.04792	0.19343	0.0	0.12921	0.52147	0.47853
BOLIVIA 1971	169.7	0.00037	0.0	0.02924	0.03944	0.28342	0.0	0.0	0.09346	0.44634	0.55366
IVORY COAST 1960	204.1	0.00530	0.01564	0.07478	0.25540	0.09096	0.07281	0.07240	0.04018	0.62746	0.37254
KOREA 1970	229.3	0.01820	0.00002	0.01550	0.25673	0.11194	0.06443	0.00105	0.15145	0.61933	0.38067
SENEGAL 1959	236.0	0.0	0.0	0.00940	0.12796	0.02108	0.10864	0.11803	0.13683	0.52199	0.47801
TUNISIA 1968	243.7	0.0	0.0	0.01157	0.20544	0.08186	0.08444	0.07669	0.10057	0.56056	0.43944
ZIMBABWE 1965	249.4	0.0	0.0	0.05870	0.17671	0.03416	0.12733	0.0	0.12391	0.52143	0.47826
ECUADOR 1963	265.8	0.0	0.0	0.0	0.16963	0.23890	0.0	0.0	0.06750	0.47602	0.52398
PAPUA NEW GUINEA 197	272.5	0.0	0.01454	0.00757	0.13041	0.12562	0.00805	0.0	0.20863	0.49481	0.50519
MALAYSIA 1965	310.4	0.02330	0.0	0.03505	0.24875	0.13957	0.10135	0.0	0.10580	0.65394	0.34607
IVORY COAST 1972	314.3	0.0	0.0	0.03173	0.22793	0.06826	0.12638	0.00334	0.05695	0.51459	0.48541
COLUMBIA 1970	320.0	0.0	0.00068	0.00679	0.27694	0.01787	0.00815	0.0	0.09206	0.40250	0.59750
ZAMBIA 1965	368.8	0.0	0.0	0.02178	0.20440	0.04667	0.14505	0.0	0.10531	0.52322	0.47678
GUATEMALA 1971	379.5	0.01381	0.00000	0.00933	0.09101	0.01751	0.00124	0.0	0.38053	0.51551	0.48447
BRASILIA 1970	391.3	0.00085	0.0	0.02098	0.22396	0.11426	0.01457	0.0	0.11249	0.49530	0.50470
PERU 1968	399.3	0.0	0.0	0.0	0.24899	0.12133	0.00036	0.0	0.0	0.37068	0.62932
COSTA RICA 1966	426.2	0.00000	0.0	0.00368	0.26738	0.02132	0.02743	0.04847	0.11637	0.48466	0.51534
CHILE 1962	595.0	0.00008	0.0	0.01365	0.30685	0.11417	0.01459	0.0	0.04996	0.49930	0.50070
MEXICO 1970	613.4	0.0	0.0	0.02093	0.25246	0.09294	0.01507	0.0	0.17749	0.51890	0.48110
ARGENTINA 1963	728.2	0.0	0.0	0.03225	0.25418	0.12937	0.01732	0.0	0.06625	0.49937	0.50063
URUGUAY 1961	730.9	0.0	0.0	0.01647	0.17641	0.08693	0.17786	0.0	0.01123	0.46889	0.53111
TRINIDAD AND TOBAGO	733.6	0.00608	0.0	0.06407	0.0	0.26563	0.0	0.0	0.15402	0.48980	0.51020
IRELAND 1969	1165.3	0.0	0.0	0.02044	0.14975	0.15304	0.08076	0.07038	0.10000	0.57444	0.42556
SINGAPORE 1973	1251.6	0.00044	0.01659	0.00686	0.32391	0.06733	0.05347	0.00863	0.04115	0.51840	0.48160
AUSTRIA 1964	1405.2	0.00160	0.0	0.01113	0.21302	0.02870	0.03508	0.02475	0.10118	0.41548	0.58452
ITALY 1970	1572.3	0.00041	0.0	0.01199	0.20224	0.07471	0.07419	0.00742	0.07329	0.44425	0.55575
JAPAN 1970	1713.1	0.00146	0.0	0.02092	0.17188	0.21098	0.06573	0.00138	0.14974	0.62210	0.37790
UNITED KINGDOM 1970	2023.5	0.0	0.0	0.03447	0.17514	0.10296	0.08588	0.0	0.07625	0.47470	0.52530
NETHERLANDS 1970	2226.6	0.00049	0.00013	0.02202	0.18310	0.15107	0.07758	0.00372	0.06089	0.50749	0.49251
BELGIUM 1970	2457.1	0.0	0.00014	0.01446	0.21469	0.10639	0.05541	0.00346	0.08792	0.48246	0.51754
GERMANY F.R. 1970	2558.3	0.00017	0.00052	0.01015	0.16599	0.13469	0.05360	0.00724	0.08031	0.45267	0.54733
AUSTRALIA 1974/75	2688.6	0.0	0.0	0.01512	0.15933	0.15230	0.08253	0.0	0.13673	0.54597	0.45404
FRANCE 1970	2841.0	0.0	0.0	0.02073	0.14546	0.09832	0.08313	0.00609	0.14367	0.49740	0.50260
UNITED STATES 1967	4216.2	0.00255	0.01283	0.02032	0.12233	0.17286	0.04515	0.00029	0.18196	0.55830	0.44170



Graph 1.12  
Annex 1 Construction XY



Sector 8 - SERVICES

The equations for the eighth sector Services are:

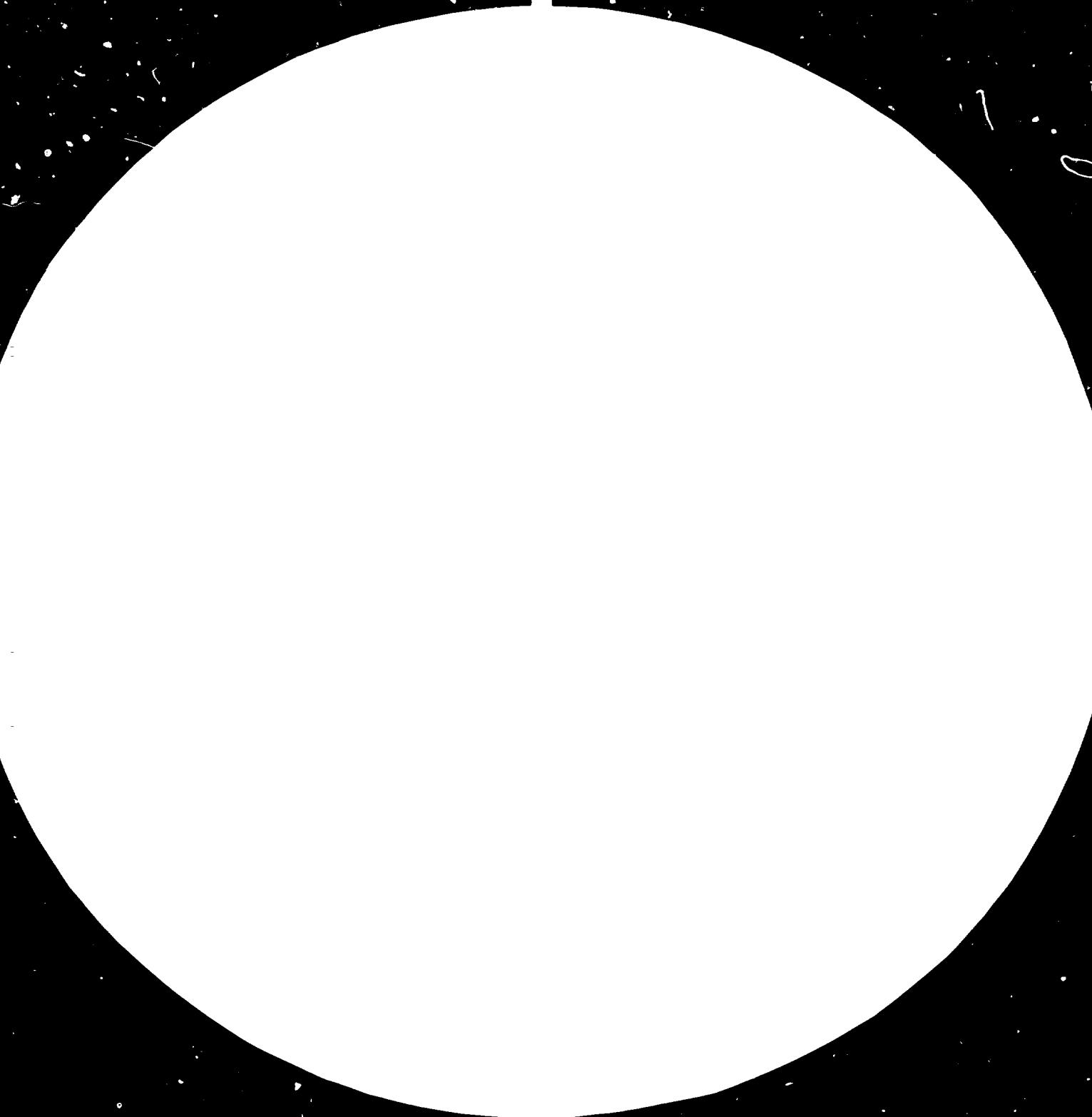
$$\begin{array}{ll} x_3 = -0.2a_{78} + 1.0VA_8 & 79.7\% \\ y_3 = -0.2a_{38} - 0.4a_{58} + 0.9a_{78} + 0.1VA_3 & 8.4\% \\ \hline & 88.1\% \end{array}$$

The leading component of X is Value added and that of Y is Construction.

The equation of Y, which indicates a strong tie with Construction, occurs for a vector which contributes only a twelfth of total variance.

The comments made on sector 7 apply to a large extent to this sector as well.







1.0



1.1



1.25



2.8



3.2



3.6



4.0



2.5



2.2



2.0



1.8



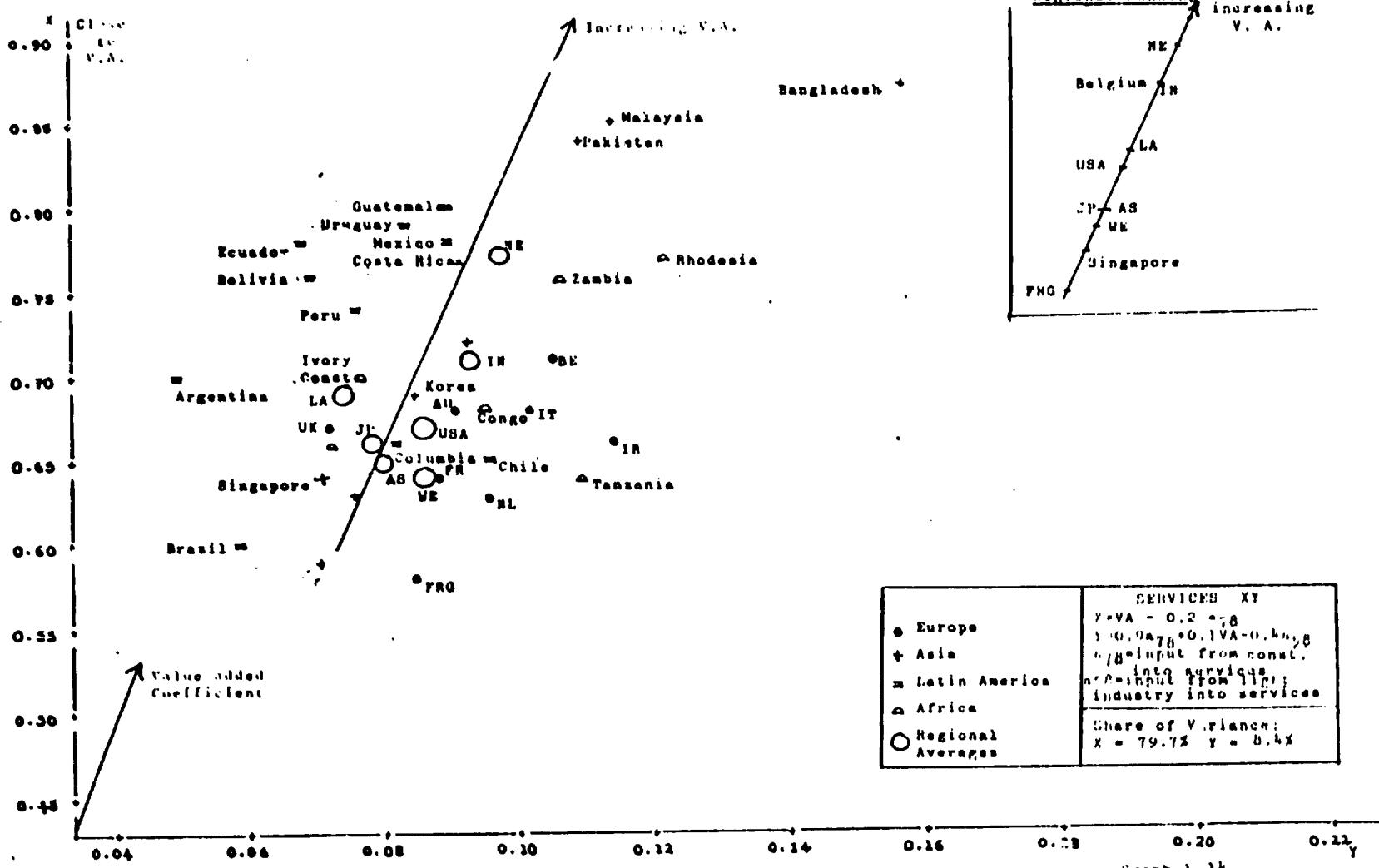
1.6

### MICROSCOPIC RESOLUTION TEST CHART

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## INPUT COEFFICIENTS FOR SECTION

	SERVICE & TRADE	AGRICULTURE	INDUSTRY	MINING	CAPITAL	INTERM.	SERVICE AD.
GNP PER CAPITA	AVERAGE-FNU	EFFICIENCY	INASIC PR.	LIGHT IN	CAPITAL	CONSTRUC.	SERVICE AD.
1961	61.5	0.04041	0.00637	0.04114	0.01120	0.00995	0.72115
INDIA 1960	77.1	0.01454	0.01205	0.01783	0.00925	0.00792	1.61979
HANGARDESH 1962	84.0	0.01147	0.01163	0.00759	0.0158	0.02518	0.69597
INDIA 1968	87.5	0.01178	0.01062	0.01515	0.02345	0.01467	0.74283
CHINA 1967 CHINA	91.0	0.01045	0.01173	0.01569	0.02040	0.01299	0.69989
TANZANIA 1970	94.0	0.01219	0.01020	0.00937	0.02706	0.01449	0.66621
PACIFIC INVEST 1962	109.1	0.01044	0.01260	0.01680	0.02494	0.01449	0.14223
KENYA 1967	122.2	0.01112	0.01258	0.01613	0.02671	0.01545	0.15799
MOLOVIA 1971	144.7	0.01165	0.00432	0.01550	0.00631	0.01196	0.1948
INDIA COAST 1966	204.1	0.01066	0.01049	0.01606	0.01112	0.01612	0.20330
KOREA 1970	229.7	0.01449	0.02558	0.01965	0.02636	0.01692	0.20759
SPAIN 1960	236.0	0.01067	0.01358	0.01345	0.00505	0.01454	0.22542
THAILAND 1968	243.7	0.01161	0.01324	0.01142	0.00646	0.01265	0.15910
PAKISTAN 1965	244.4	0.01165	0.01129	0.01194	0.00295	0.01177	0.17428
ECUADOR 1961	265.5	0.01129	0.01147	0.01427	0.00594	0.0113	0.1970
PAPUA NEW GUINEA 1977	272.5	0.01129	0.01129	0.01646	0.00694	0.0113	0.17122
MALAYSIA 1965	310.4	0.01010	0.01382	0.01266	0.00959	0.01642	0.14795
INDIA COAST 1972	314.3	0.01111	0.01070	0.01701	0.00679	0.01878	0.14090
COLOMBIA 1970	320.0	0.01117	0.01074	0.02066	0.01494	0.01177	0.17944
ZAMBIA 1965	366.4	0.01169	0.01169	0.01801	0.01904	0.01904	0.20269
GUATEMALA 1971	379.5	0.01005	0.00990	0.01271	0.01683	0.01683	0.15205
NEPAL 1970	383.1	0.01120	0.01037	0.02395	0.01566	0.01153	0.11123
PERU 1969	390.3	0.01117	0.00954	0.02649	0.01494	0.01055	0.12734
COSTA RICA 1966	426.2	0.01032	0.00005	0.01560	0.03170	0.01140	0.17912
CHILE 1962	595.0	0.01036	0.01137	0.02646	0.01261	0.02546	0.22721
PALESTINE 1970	613.4	0.01050	0.01047	0.01271	0.02481	0.01630	0.14573
CHILI 1963	724.2	0.01061	0.01662	0.01566	0.01521	0.01595	0.14677
URUGUAY 1961	730.9	0.01067	0.01327	0.01452	0.02650	0.01361	0.17264
TRINIDAD AND TOBAGO	731.6	0.01046	0.01021	0.01642	0.01460	0.01135	0.14947
LAOS AND LAO PDR	1165.3	0.01076	0.01019	0.01164	0.01215	0.01271	0.1777
SINGAPORE 1971	1251.6	0.01177	0.01408	0.01942	0.01766	0.01537	0.1532
AUSTRALIA 1964	1405.2	0.01212	0.01327	0.01452	0.01363	0.01594	0.15394
ITALY 1970	1572.3	0.01037	0.02099	0.01664	0.02477	0.01721	0.1702
JAPAN 1970	1713.1	0.01070	0.02010	0.02463	0.02036	0.02154	0.1750
UNITED KINGDOM 1970	2024.5	0.01118	0.01071	0.01363	0.04459	0.02004	0.1755
NETHERLAND 1970	2226.6	0.01162	0.01172	0.03254	0.01210	0.01439	0.14136
BELGIUM 1970	2457.1	0.01056	0.02792	0.01583	0.01176	0.01401	0.17070
GERMANY F.R. 1970	2554.3	0.01042	0.03419	0.01396	0.04294	0.02715	0.16930
AUSTRALIA 1964/75	2688.6	0.01054	0.01172	0.02397	0.01609	0.03516	0.1752
FRANCE 1970	2841.0	0.01079	0.02458	0.02424	0.01846	0.02390	0.14550
UNITED STATES 1967	4216.7	0.01050	0.01166	0.01904	0.03279	0.01752	0.19116



	SERVICES XY
Y=VA = 0.2 + 0.8	$y = 0.9478 + 0.1VA - 0.4478$
X=0.9478 + 0.1VA - 0.4478	6/8 input from const. into services 6/8 input from ind. industry into services
Share of Variance:	
X = 79.7% Y = 8.4%	

Graph 1.14  
Annex 1 Services XY

