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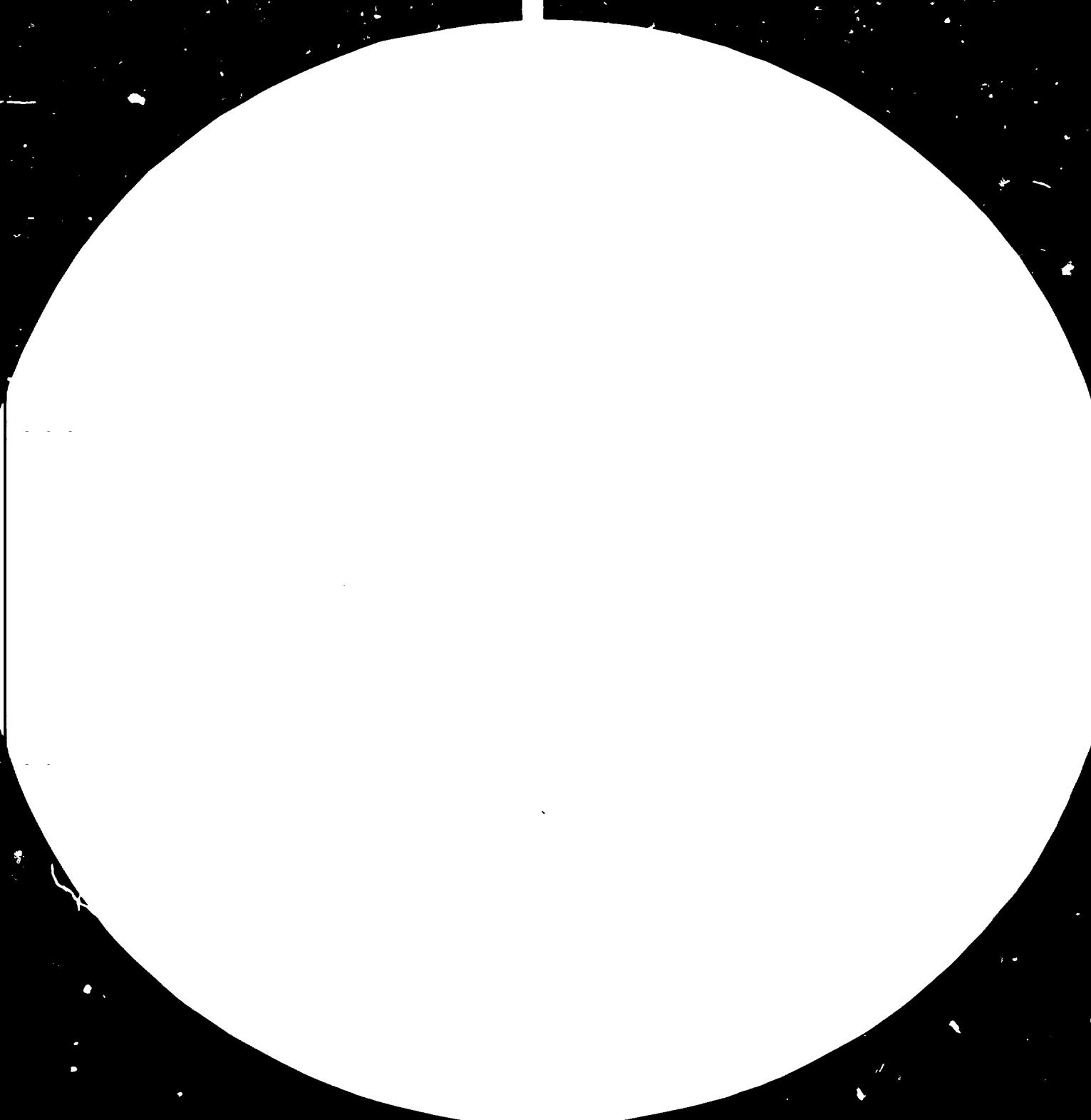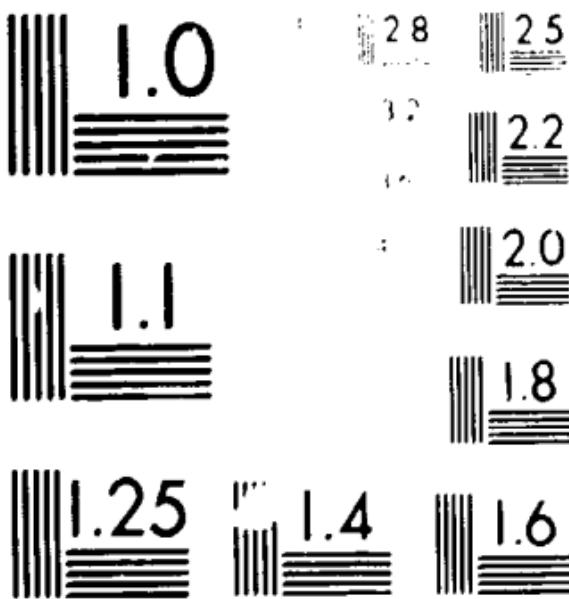
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UNITED NATIONS INDUSTRIAL
DEVELOPMENT ORGANIZATION

THE ANALYSIS AND LONG-TERM PROJECTION
OF INTERINDUSTRY STRUCTURES

TREND PROJECTIONS OF INPUT COEFFICIENTS
FOR THE UNITAD REGIONAL TABLES *

UNITAD Paper prepared for submission to the
ACC Technical Working Group Meeting
Geneva, 10–11 July 1980

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TREND PROJECTIONS OF INPUT COEFFICIENTS FOR THE UNITAD REGIONAL TABLES

The investigation of inter- country and interregional differences in the pattern of
the Leontief production functions of individual sectors and industries respectively
- which are given by the vectors of input output coefficients in the input- output
tables- was carried out in several stages.

In the first stage of investigation a set of standardized input- output tables, pre-
pared by the University of Bradford (England), was used as the main source of data.
These tables, which were made available to UNIDO, were aggregated into a 24 industry
classification and in the next step into the 8 sector SIMV classification. Tables for
30 countries were used for the investigation, the results of which were discussed
at the Expert Group Meeting on the Analysis and Projection of technological charac-
teristics in the UNITAD System of Models, which was held in Vienna from 22 to 24
October 1979.

The main findings of this study were that (i) the intercountry differences of a number
of input- coefficients are related to differences in economic level (measured by
per capita GDP), size (measured by number of population) and also by population
density; and (ii) also to " output mix" i.e. to different weights of the 24 industries
in the aggregated 8 SIMV sectors. The most important tables from the working document
presented to the Expert Group Meeting are reproduced at the end of the introductory
part of this document.

In the second stage of investigation a new set of input- output tables, prepared
in cooperation between UNIDO and the Economic University of Vienna, was used. The
scope of this analysis was narrower and more projection oriented. It concentrated
only on the relationsship between the values of the input coefficients and the
per capita GDP. In order to eliminate the impact of other factors than the level
of economic development on the values of the input coefficients, only semi- logaritmic
equations, relating the coefficient value to the log of the per capita GDP, were
used. This allows to use the regression equation for the estimate of change of
a given coefficient (for a given country or region of the SIMV Model) to a diffe-
rence or, respectively, change in the level of per capita GDP.

In the third stage of investigation, the same set of input- output tables was analy-
sed in Geneva by A. Duval by the main component analysis. The results of this investi-
gation were in broad sense consistent with the results of the two previous stages.
Differences in per capita GDP, population density, size of the country, output mix and
endowment of countries with ores and minerals codetermine the similarities or disimi-
larities between vectors of the 8 sectors of the SIMV input- output tables.

The purpose of this document is to link some results of the second and third stages of the investigation and to indicate, how these could be used for projections of input coefficients . This link was established for six SIMV sectors only, the results of the calculations for the energy and construction sectors are too weak for this specific purpose. The link is based on the findings about the impact of the differences in the per capita GDP on the values of the input coefficients. Other influences are not taken into consideration, it is assumed that these are either captured in the 1970 values of the input coefficients (which would then be the starting point of projections which will be carried out as projections of changes in the coefficients from the base 1970 values) or that other methods will be used for that purpose.

The main part of this document is divided into six sections according to the six SIMV sectors for which the analysis was carried out. The first page in each sections contains a brief summary of the results of the three stages of analysis as outlined above.

The second page of each section contains three tables. The first one (Table Ca) is the presentation of the input coefficients of the 8 sector SIMV input- output tables for 1970 for the following eight regions: 1. Tropical Africa; 2. Near East; 3. Asia 1 (Indian subcontinent); 4. Asia 2 (South- East Asia); 5. Latin America; 6. Western Europe; 7. Japan; 8. North America. These coefficient values are the starting point for any projection. The second table (Table Cb) contains the elements of the three most important eigenvectors which resulted from the main component analysis. In the third table (Table Cc) only the last column refers to the previous analysis. It contains the regression coefficients of the semi- logaritmic equations, which related the values of the input coefficients to the log per capita GDP. It is assumed, that the change in the log of per capita GDP is equal to unity. Translated into the rate of change over time, this means, that an average annual rate of GDP per capita growth would be 5.12 per cent over twenty years or 3.39 per cent over thirty years.

The link between the regression analysis and the main component analysis is then established as follows. Three (or two respectively) best results of the regression analysis- which are usually related to input coefficients the values of which are rather important- are selected. The regression coefficients of these input coefficients become elements of a column vector $[r]$. The three (or two) corresponding rows of the three (or two) eigenvectors $[x,y,z]$ become rows of a cuadratic matrix $[Q]$. The changes in the coordinates of the main component analysis(a column vector dC, the elements of which are the values dX, dY and dZ respectively), is then calculated as : $[dC] = [Q^{-1}][r]$. The eigenvectors x, y, z are then multiplied by scalars dX,dY and dZ and added row- wise. The result is then the first estimate

of a vector of change in input coefficients corresponding to unit change in the log
of the per capita GDP which is presented in the first column of the Table Cc. These
first estimates have generally two deficiencies: the estimated changes do not add
up to nul, and the values of the main diagonal coefficients are always assumed con-
stant. The results are therefore adjusted to add up to nul, in this adjustment
other regression coefficients (which can be found in the last column of Table Cc)
are considered. The adjusted vector of change and the corresponding values of the
change of the coordinates are presented in the second column of Table Cc.
In the next step a very week and tentative link between the results of the cross-
section analysis and the changes of coefficients in time is established. Its results
should be threfore used with caution and only a spectrum of alternative solutions.
The change in the vector of input coefficients is assumed to a change in time, and is
related to the rate of growth of per capita GDP. The vector of the unit change in
input coefficients and also the values of the changes in the coordinates(as pre-
sented in the second column of Table Cc) are then multiplied by the following values,
which correspond to the following average annual rates of growth of per capita GDP
over 20 or 30 years(i.e. from 1970 to 1990 or 2000 respectively):

Period:	Annual rate of growth of per capita GDP in per cent								
1970-	1	2	3	4	5	6	7	8	9
-1990	.1990	.3960	.5912	.7844	.9758	1.1654	1.3532	1.5392	1.7236
-2000	.2985	.5941	.8868	1.1766	1.4637	1.7481	2.0297	2.3088	2.5853

The resulting alternative incremental vectors of change (and changes in the coordinates)
are added- for each region separately-to the vector of input coefficients in the base
year 1970. The results are alternative projections of input coefficients for 1990 and
2000 respectively. The are presented , for each sector any by regions, in Tables on
pages 3- 10 of ech section of this document.
The results have to be interpreted with caution; it is well known that the application
of results of cross section analysis to projections of development in time is quite
problematic.In the final choice among the projected alternatives other analytical methods
should be used.
In all projections the interegional differences caused by other factors than differences
in GDP per capita are kept intact. The projected changes in input coefficients are re-
latively small and thus somehow " conservative".They are related to relative changes in
GDP per capita. They decrease in respect to absolute changes in GDP per capita and are
therefore more pronounced for the developing regions than for the developed ones.

Dependence of the input coefficients on GDP per head, population and density

	Agriculture	Agri-Food	Energy	Basic Products	Light Industry	Equipment Goods	Construction	Services
1. Agriculture		0.338 — 0.22 -0.097 d — 5% 0.588 r — 5%			0.081 — 0.19 -0.021 y — 5%			0.002 — 0.3? 0.004 d — 1%
2. Agri-Food Processing	0.007 — 0.37 0.033 y — 1% 0.036 d — 5%	0.157 — 0.16 -0.203 p — 10% -0.030 d — 10%		0.014 — 0.26 -0.003 y — 5% 0.033 d — 10%				0.005 — 0.1? 0.003 y — 10%
3. Energy							0.012 — 0.20 0.007 d — 5%	0.016 — 0.45 0.110 p — 1% 0.008 d — 5%
4. Basic Products	0.020 — 0.14 0.008 y — 5%			0.155 — 0.10 0.032 y — 10%	0.061 — 0.12 0.015 y — 10%	0.090 — 0.14 0.272 p — 5%	0.225 — 0.21 -0.029 y — 5%	0.005 — 0.20 0.003 y — 5% 0.025 p — 5%
5. Light Industry	0.005 — 0.19 0.005 y — 5%	0.023 — 0.15 0.013 d — 5%	0.010 — 0.30 0.008 d — 1% 0.044 p — 5%	0.027 — 0.11 0.069 p — 10%				0.012 — 0.24 0.058 p — 1% 0.004 y — 5%
6. Equipment Goods Ind.	0.006 — 0.16 0.006 y — 5%	0.006 — 0.12 0.005 d — 10%	0.005 — 0.28 0.004 y — 1% 0.005 d — 10%	0.014 — 0.14 0.008 d — 5%	0.007 — 0.13 0.003 y — 5%	0.076 — 0.13 0.021 y — 5%	0.015 — 0.26 0.009 y — 1%	0.007 — 0.52 0.128 p — 1% 0.003 y — 10%
7. Construction	0.000 — 0.27 0.005 y — 1%	0.002 — 0.10 0.001 y — 10%	0.002 — 0.22 0.010 y — 1%	0.007 — 0.24 0.069 p — 1%	0.000 — 0.48 0.051 p — 1% 0.002 y — 1%	0.000 — 0.33 0.003 y — 1%		0.009 — 0.19 0.006 y — 5%
8. Services	0.068 — 0.55 0.071 d — 1% -0.150 p — 10%	0.134 — 0.16 0.062 d — 5%	0.088 — 0.16 0.052 d — 5%	0.123 — 0.22 0.061 d — 1%	0.120 — 0.35 0.085 d — 1%			
Value Added	0.791 — 0.46 -0.107 d — 1% -0.059 y — 1%	0.280 — 0.12 0.046 d — 10%		0.571 — 0.16 -0.042 y — 5%				

Summary of the regression analysis of the input coefficients for the UNIDO industries

(Values of the determination coefficients R^2 and frequencies of explanatory variables)

SIMV	UNIDO	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	No.eq	y	p	d
1.	01-Agriculture	-	.27	-	-	-	.13	-	-	.16	-	-	-	.14	.31	-	-	-	-	-	-	-	-	-	.26	6	3	2	2
2.	02 Agri-food	.37	.16	-	-	.13	-	-	-	-	-	.91	-	-	-	-	-	.88	-	-	-	-	-	-	.13	6	3	3	2
3.	03 Coal mining	.15	-	.20	-	.10	.20	-	-	.67	.17	.15	.79	.22	-	-	.12	.46	.12	-	-	-	.09	.80	-	14	5	10	2
	04 Petroleum	-	-	-	-	.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-
	05 Petroleum p.	-	-	-	-	-	.26	.20	.07	.11	-	-	-	-	-	-	-	-	-	-	-	.10	-	.44	.38	7	4	-	5
	06 Electricity	.53	-	-	-	-	-	-	-	-	-	.37	.12	.31	-	-	-	-	-	-	-	.35	-	.16	.40	7	5	-	4
4.	07 Metal ore	-	-	-	-	-	-	.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
	08 C. mining	-	-	.10	-	-	-	-	-	-	-	.12	-	-	-	-	-	-	-	-	-	.12	-	-	-	3	3	-	-
	09 Paper	-	-	.19	-	.10	-	-	-	-	-	.28	-	.39	.16	.87	-	.40	-	.11	.42	.43	.30	.33	-	12	10	1	3
	10.Chemicals	.14	-	-	-	-	.64	-	-	.32	-	-	.10	-	-	-	.11	.12	.67	-	-	-	-	-	-	7	3	1	3
	11 Non metals	.26	.68	.89	.92	.56	-	.65	.49	-	.45	.10	.42	.40	.74	.79	.91	-	.71	.35	.78	-	-	.89	-	18	1	16	1
	12.Metals	-	-	-	-	-	-	.07	-	-	-	-	-	-	-	-	-	.11	-	-	.11	.16	-	.16	-	5	4	1	-
5.	13 Textiles	-	.12	-	-	-	-	-	-	-	-	.44	-	-	-	-	.10	-	.10	-	-	-	-	-	-	4	2	2	-
	14 Apparel	-	.64	.10	-	-	-	-	.26	-	-	-	-	.11	.27	-	.11	-	-	-	-	-	-	-	-	6	3	2	1
	15 Wood prod.	-	-	-	-	-	-	-	-	-	.12	.24	-	-	-	-	.47	-	-	-	-	-	-	-	-	3	1	1	1
	16 Printing	.31	-	.16	-	.12	.21	.07	.10	.10	-	.31	.21	.22	-	.37	.16	.15	.35	.28	.44	.25	.19	.52	.38	20	20	1	1
	17 Plast. rub.	-	.43	.64	.92	.63	-	.80	.76	-	.56	.65	.63	-	-	.19	-	-	.25	.16	.16	.54	-	.30	-	15	5	13	-
	18 Metal prod.	.17	.11	-	-	.57	-	-	-	.12	.67	.63	-	-	.35	-	-	.45	.13	.35	.24	.25	.13	.12	-	14	9	5	5
6.	19 Machinery	.18	.42	-	-	-	.10	-	-	.21	.29	.46	.25	-	-	-	.34	.63	.27	.11	-	.24	-	.25	.18	14	12	2	7
	20 Transp. eq.	-	-	-	-	-	-	-	-	.10	.11	-	.30	-	-	.10	.12	-	-	.21	-	-	.15	.12	-	8	6	-	2
7.	21 Construction	.27	.10	.17	-	-	.18	-	-	.20	.26	.70	-	.10	.24	-	.20	.89	-	.16	.50	-	-	.12	.11	15	15	2	-
8.	22 Trade	.49	.29	-	-	-	-	-	-	.17	.20	-	-	.17	.15	-	.12	.36	-	-	-	-	-	.10	-	9	5	1	7
	23 Transport	.19	-	.79	-	-	.12	.90	.57	.19	.26	.26	.22	.41	-	.27	.25	.74	.18	.11	.23	-	.12	.13	-	18	8	4	8
	24 Services	.18	-	-	-	-	-	-	.15	.12	.19	-	.56	-	.10	-	-	.36	-	-	-	-	-	-	-	7	1	-	6
Value added		.36	.13	-	.21	-	-	.41	-	-	-	.29	-	-	-	.17	-	.46	-	-	-	-	.30	-	.71	9	3	7	4
No. of equations		13	11	3	3	8	8	8	7	12	12	15	10	9	8	7	11	13	9	10	8	9	7	14	8	229			
Frequency of variables	y	11	6	8	-	4	5	6	2	7	8	6	6	6	2	4	7	8	5	7	5	5	6	10	6	140			
	p	7	5	3	3	4	1	4	4	2	3	9	3	2	3	3	3	8	3	2	2	2	1	3	1			75	
	d	4	8	-	-	1	3	1	1	4	5	4	3	2	3	1	1	4	3	1	2	3	-	2	3				62

Dependence of the input coefficients on the output mix.

	Agriculture	Agri-Food	Energy	Basic Products	Light Industry	Equipment Goods	Construction	Services
1. Agriculture	X	X		0.030 [0.21] 0.528 89 1%	0.002 [0.32] 0.200 813 1%		X	
2. Agri-Food Processing	X	X	0.000 [0.30] 0.008 84 1%	0.018 [0.15] -0.035 812 5%			X	-0.001 [0.14] 0.189 824 5%
3. Energy			0.108 [0.12] 0.352 83 10%	0.065 [0.49] 0.181 83 1% -0.030 86 5%	0.028 [0.26] -0.057 816 5% -0.022 814 10%	0.082 [0.29] -0.043 86 1% -0.059 819 5%	0.019 [0.14] -0.011 86 5%	0.047 [0.22] -0.048 824 1%
4. Basic Products	0.01. [0.19] 0.115 89 5%	-0.005 [0.27] 0.129 812 1% 0.062 87 5%	-0.006 [0.22] 0.071 86 1%	-0.019 [0.43] 0.643 812 1% 0.593 810 1% 0.283 87 5%	0.065 [0.41] 0.153 818 1% -0.159 811 1% 0.126 812 5%	-0.085 [0.32] 0.403 812 1% 0.321 810 1% 0.177 87 5%	0.192 [0.41] -0.598 89 1% 0.226 810 5%	-0.001 [0.54] 0.043 89 1% 0.014 823 1% 0.019 812 5%
5. Light Industry	0.001 [0.33] 0.066 818 1%	0.014 [0.14] 0.070 818 5%	-0.001 [0.41] 0.068 818 1% 0.014 85 5%	0.074 [0.47] -0.114 816 1% -0.073 88 1% -0.063 812 5%	0.278 [0.15] -0.511 815 5%	0.124 [0.??] -0.174 814 1% -0.176 816 10%	0.058 [0.28] 0.241 818 1%	0.028 [0.12] 0.042 818 5%
6. Equipment Goods Ind.			0.009 [0.15] 0.047 83 5%	0.007 [0.13] 0.045 811 5%				0.008 [0.32] 0.047 823 1%
7. Construction	X	X		-0.015 [0.23] 0.044 87 1% 0.074 810 1%			X	-0.002 [0.21] 0.038 824 5%
8. Services		0.179 [0.11] -0.175 823 10%	0.072 [0.22] -0.127 84 1% 0.139 822 10%	0.116 [0.11] 0.181 88 10%	0.099 [0.11] 0.287 817 10%	0.060 [0.19] 0.153 822 5%		
Value Added	X	X	0.667 [0.14] 0.184 84 5%	0.725 [0.44] -0.470 812 1% -0.462 810 1%	0.387 [0.17] 0.676 815 5%		X	

9

The Classification Key between the SIMV Sectors, UNIDO Standardized Tables Industries and the
1968 International Standard Industrial Classification of All Economic Activities (ISIC).

SIMV Sectors	UNIDO Industries	1968 ISIC
1. Agriculture	1. Agriculture	Div. 1. Agriculture etc.
2. Agri- Food Processing	2. Food Products	311/2 Food Manufacturing 313 Beverage Industries 314 Tobacco Manufactures
3. Energy	3. Coal Mining	210 Coal Mining
	4. Petroleum and Gas	220 Crude Petroleum and Nat. Gas
	5. Petroleum and Coal Prod.	353 Petroleum Refineries 354 Products of Petroleum and Coal
	6. Electricity,Gas and Water	410 Electricity, Gas and Steam 420 Water Works and Supply
4. Basic Products	7. Metal Ore Mining	230 Metal Ore Mining
	8. Other Mining	290 Other Mining
	9. Paper and Paper Products	341 Paper and Paper Products
	10. Chemicals	351 Industrial Chemicals 352 Other Chemical Products
	11. Non- Metalic Min. Products	361 Pottery, China, etc. 362 Glass and Glass Products 369 Other Non- Metallic Min. Prod.
	12. Metals	371 Iron and Steel 372 Non- Ferrous Metals
5. Light Industry	13. Textiles	321 Manufacture of Textiles
	14. Wearing Apparel	322 Wearing Apparel 323 Leather and Leather Products 324 Footwear
	15. Wood Products	331 Manufacture of Wood Products 332 Furniture and Fixtures
	16. Printing and Publishing	342 Printing and Publishing
	17. Plastic and Rubber Prod.	355 Rubber Products 356 Plastic Products 390 Other Industries
	18. Metal Products	381 Metal Products
6. Equipment Goods Industry	19. Machinery	382 Machinery 383 Electrical Machinery 385 Professional and Scientific
	20. Transport Equipment	384 Transport Equipment
7. Construction	21. Construction	Div.5. Construction
8. Services	22. Trade	Div. 6. Wholesale and Retail Trade
	23. Transport & Communication	Div. 7. Transport and Communication
	24. Other Services	Div. 8. Financing,Real Estate etc. Div. 9. Community and Private Serv.

REVIEW OF PAST RESULTS

Inputs from:	Regression analysis October 1970		February 1980
	y,p,d	industry composition	correlation coefficient [*]
agriculture			
agri-food	y,d		.637
energy			.242
basic products	y	paper	.593
light industry	y	metal prod.	.322
equipment	y		.390
construction	y		.617
services	d,p		. 46
value added	d,y		- .728

Factor analysis: Strong impact of the level of industrialization of agriculture, related to GDP per capita and reflected in the value added coefficient. Some influence of population density. Regions can be divided into four groups:

	poor	rich
extensive agric.	Latin Am. Trop. Afr.	North America
intensive agric.	Near East, Asia 1&2	Western Europe, Japan

Link between the factor analysis and the February 1980 regression coefficients established for the following coefficients: a_{21}, a_{81}, a_{v1}

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[*] See Table Oc, last column

Sector: Agriculture

Table Oa : Technology vectors by regions

Inputs from:	Tropical Africa	Near East	Asia 1	Asia 2	Latin America	Western Europe	Japan	North America
1								
2	.5151	.5642	.1189	.3253	.5373	.1116	.3973	.3489
3	.7163	.5662	.113c	.3.46	.136	.622c	.2172	.6216
4	.1741	.3252	.3215	.3319	.2616	.3551	.3322	.0756
5	.345	.3176	.3567	.6115	.2273	.3136	.2155	.3164
6	.129a	.3636	.3501	.1691	.36c	.3176	.6113	.0064
7	.1191	.316	.1342	.3951	.3603	.196	.343	.3035
8	.637c	.1571	.731c	.3605	.3613	.373a	.373c	.2465
VA	.3648	.7593	.9275	.8346	.6936	.6456	.7251	.5635
Coordi-nates:								
X	.7170	.6334	.7810	.6682	.5262	.5285	.5624	.3631
Y	.1277	.3817	-.1132	.3117	.3673	-.3471	-.3372	.1337
Z	-.2785	-.2886	-.2680	-.2661	-.2385	-.2376	-.2471	-.2121

Table Ob: Eigenvectors of the factor analysis

Inputs from:	x	y	z
1			
2	-.46.14	-.4267	-.5157
3	-.1376	-.3159	.3342
4	-.1623	-.1165	.4565
5	-.3117	.3114	.3163
6	-.1357	.3414	.1317
7	-.1147	-.1227	.1526
8	.3276	.3632	-.1356
VA	.6471	.364	.361

Table Oc: Incremental technology vectors and regression coefficients

(10^{-4})

Inputs from:	Incremental vector: calculated	corrected	b(log GDF/c)
1			
2	-4.3333	-4.3333	.
3	4.7706	4.7706	4.2879
4	6.3313	17.3451	13.5861
5	1.358a	1.358c	2.8308
6	7.1314	7.1314	3.5449
7	3.3134	3.3134	3.4253
8	16.6671	16.6671	9.6228
VA	-31.4323	-31.4323	-91.6240
Coordi-nates			
dX	-14.6161	-14.6317	
dY	-19.7136	-19.7139	
dZ	4.4563	4.763	

Projections of input coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1			2	3	4	5	6	7	8	9	y

Projections of input coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	y
							.0136	.0146	.0156
							.0448	.0449	.0450
							.0266	.0267	.0269
							.0075	.0076	.0076
							.0040	.0041	.0041
							.0019	.0020	.0020
							.1543	.1546	.1549
VA							.7469	.7452	.7435
Coordi-nates:									
X							.5890	.5870	.5850
Y							.0791	.0787	.0783
Z							-.2457	-.2457	-.2457
							.0172	.0187	.0202
							.0452	.0453	.0454
							.0272	.0275	.0278
							.0076	.0076	.0077
							.0042	.0043	.0044
							.0021	.0021	.0022
							.1553	.1558	.1562
VA							.7407	.7381	.7356
Coordi-nates:									
X							.5818	.5788	.5754
Y							.0777	.0772	.0746
Z							-.2456	-.2456	-.2455

Projections of input coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	9
1						.0152	.0163	.0173	.0183
2						.0242	.0042	.0043	.0044
3						.0227	.0224	.0230	.0232
4						.0058	.0058	.0059	.0059
6						.0005	.0005	.0006	.0006
7						.0065	.0065	.0066	.0066
8						.0329	.0332	.0335	.0336
VA						.9119	.9102	.9085	.9066
Coordinates:									
X						.7685	.7665	.7646	.7626
Y						-.0215	-.0209	-.0212	-.0216
Z						-.2678	-.2678	-.2676	-.2671
1						.0184	.0199	.0214	.0229
2						.0044	.0046	.0047	.0046
3						.0233	.0235	.0238	.0241
5						.0059	.0059	.0059	.0060
6						.0006	.0007	.0008	.0009
7						.0066	.0067	.0067	.0066
8						.0338	.0342	.0347	.0351
VA						.9066	.9040	.9014	.8989
Coordinates:									
X						.7623	.7593	.7564	.7534
Y						-.0216	-.0222	-.0227	-.0233
Z						-.2677	-.2677	-.2676	-.2676

Projections of input coefficients for 1990 and 2000

Inputs from

Annual average rates of growth of GDP/c

	.	1	2	3	4	5	6	7	8	9
1										
2	.025?	.02?8	.0274	.0285	.0296	.0306	.0316	.0327	.0337	.0347
3	.0?A?	.0?A1	.0?A2	.00A3	.0?6A	.0065	.0066	.0066	.0067	.0068
4	.5?8	.0??	.0322	.0324	.0326	.0328	.0330	.0332	.0333	.0335
5	.01?5	.01?5	.0105	.0106	.0106	.0106	.0106	.0106	.0107	.0107
6	.0?81	.0?42	.0042	.0043	.0043	.0044	.0045	.0045	.0046	.0046
7	.00?1	.0?51	.0052	.0052	.0053	.0053	.0054	.0054	.0055	.0055
8	.0?0?5	.0?08	.0811	.0814	.0818	.0821	.0824	.0827	.0830	.0833
VA	.8342	.8344	.8326	.8308	.8290	.8273	.8255	.8238	.8221	.8204
Coordinates:										
X	.6882	.6821	.6801	.6780	.6759	.6739	.6718	.6698	.6679	.6659
Y	.0117	.0113	.0109	.0115	.0102	.0098	.0094	.0090	.0087	.0083
Z	-.2601	-.2601	-.2601	-.2600	-.2600	-.2600	-.2599	-.2599	-.2599	-.2599
1										
2	.025?	.02?9	.0285	.0301	.0317	.0333	.0348	.0363	.0378	.0393
3	.0?A?	.0?61	.0063	.0064	.0066	.0067	.0068	.0070	.0071	.0072
4	.031?8	.0??1	.0324	.0327	.0330	.0333	.0336	.0338	.0341	.0344
5	.01?5	.01?5	.0106	.0106	.0106	.0107	.0107	.0107	.0107	.0108
6	.0?81	.0?42	.0043	.0044	.0045	.0046	.0046	.0047	.0048	.0049
7	.0?51	.0?52	.0052	.0053	.0054	.0054	.0055	.0056	.0056	.0057
8	.0?05	.0?0?	.0815	.0819	.0824	.0828	.0833	.0837	.0842	.0846
VA	.8?4?	.8335	.8308	.8281	.8254	.8228	.8202	.8176	.8150	.8125
Coordinates										
X	.6882	.6841	.6779	.6748	.6717	.6687	.6656	.6626	.6597	.6567
Y	.0117	.0111	.0115	.0106	.0098	.0088	.0083	.0077	.0072	.0066
Z	-.2601	-.2601	-.2600	-.2600	-.2599	-.2599	-.2598	-.2598	-.2597	-.2597

Projections of input coefficients for 1990 and 2000

Inputs from

Annual average rates of growth of GDP/c

	.	1	2	3	4	5	6	7	8	9
1										
2	.0303	.0414	.0414	.0425	.0436	.0446	.0456	.0467	.0477	.0487
3	.0144	.0149	.0150	.0151	.0152	.0153	.0154	.0154	.0155	.0156
4	.0606	.0608	.0610	.0612	.0614	.0616	.0618	.0620	.0621	.0623
5	.0273	.0273	.0273	.0274	.0274	.0274	.0274	.0274	.0275	.0275
6	.0060	.0061	.0061	.0062	.0062	.0063	.0064	.0064	.0065	.0065
7	.0003	.0003	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007
8	.1613	.1616	.1619	.1622	.1626	.1629	.1632	.1635	.1638	.1641
VA	.6911	.6882	.6864	.6846	.6828	.6811	.6793	.6776	.6759	.6742
Coordinates:										
X	.5262	.5241	.5221	.5199	.5179	.5158	.5138	.5118	.5098	.5079
Y	.0673	.0669	.0665	.0661	.0657	.0653	.0650	.0646	.0642	.0639
Z	-.2305	-.2305	-.2305	-.2304	-.2304	-.2304	-.2303	-.2303	-.2303	-.2302
1										
2	.0393	.0409	.0425	.0441	.0457	.0473	.0488	.0503	.0518	.0533
3	.0144	.0149	.0151	.0152	.0154	.0155	.0156	.0158	.0159	.0160
4	.0606	.0609	.0612	.0615	.0618	.0621	.0624	.0626	.0629	.0632
5	.0273	.0273	.0274	.0274	.0274	.0275	.0275	.0275	.0275	.0276
6	.0060	.0061	.0062	.0063	.0064	.0065	.0065	.0066	.0067	.0068
7	.0003	.0004	.0005	.0005	.0006	.0006	.0007	.0008	.0008	.0009
8	.1613	.1618	.1623	.1627	.1632	.1636	.1641	.1645	.1650	.1654
VA	.6911	.6873	.6846	.6819	.6792	.6766	.6740	.6714	.6688	.6663
Coordinates										
X	.5262	.5231	.5199	.5168	.5137	.5106	.5076	.5046	.5016	.4987
Y	.0673	.0667	.0661	.0655	.0649	.0644	.0638	.0633	.0627	.0622
Z	-.2305	-.2305	-.2304	-.2304	-.2303	-.2303	-.2302	-.2302	-.2301	-.2301

Sector: Agriculture

Region: Western Europe

Projections of input coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	9
1	.1177	.1127	.1198	.1140	.1159	.1169	.1180	.1190	.1200
2	.0227	.0228	.0229	.0230	.0231	.0232	.0232	.0233	.0234
3	.0543	.0555	.0557	.0559	.0561	.0563	.0565	.0566	.0568
4	.0138	.0138	.0139	.0139	.0139	.0139	.0139	.0140	.0140
6	.0177	.0177	.0178	.0178	.0179	.0180	.0180	.0181	.0181
7	.0146	.0147	.0147	.0148	.0148	.0149	.0149	.0150	.0150
8	.0717	.0710	.0715	.0717	.0720	.0723	.0726	.0729	.0732
VA	.6592	.6919	.6806	.6878	.6861	.6843	.6826	.6809	.6792
Coordi-nates:									
X	.5269	.5283	.5222	.5262	.5181	.5161	.5141	.5121	.5104
Y	-.0475	-.0479	-.0483	-.0487	-.0491	-.0494	-.0498	-.0502	-.0505
Z	-.2372	-.2371	-.2371	-.2371	-.2370	-.2370	-.2370	-.2369	-.2369
1	.1124	.1134	.1154	.1170	.1186	.1201	.1216	.1231	.1246
2	.0227	.0229	.0230	.0232	.0233	.0234	.0236	.0237	.0238
3	.0564	.0557	.0568	.0563	.0566	.0569	.0571	.0574	.0477
4	.0139	.0139	.0139	.0139	.0140	.0140	.0140	.0140	.0141
6	.0179	.0178	.0179	.0180	.0181	.0181	.0182	.0183	.0184
7	.0146	.0147	.0148	.0149	.0149	.0150	.0151	.0151	.0152
8	.0723	.0718	.0718	.0723	.0727	.0732	.0736	.0741	.0745
VA	.6693	.6805	.6849	.6842	.6816	.6790	.6764	.6738	.6713
Coordi-nates									
X	.5205	.5223	.5191	.5140	.5129	.5099	.5069	.5039	.5010
Y	-.0472	-.0483	-.0480	-.0508	-.0510	-.0506	-.0511	-.0517	-.0522
Z	-.2372	-.2371	-.2371	-.2370	-.2370	-.2369	-.2369	-.2368	-.2368

Projections of input coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from		1	2	3	4	5	6	7	8	9
1		.0975	.0989	.0994	.1005	.1036	.1036	.1026	.1036	.1057	.1067
2		.0172	.0171	.0172	.0173	.0174	.0175	.0175	.0176	.0177	.0178
3		.0502	.0505	.0506	.0508	.0511	.0513	.0512	.0514	.0517	.0519
4		.0185	.0185	.0185	.0186	.0186	.0186	.0186	.0186	.0187	.0187
5											
6		.0111	.0112	.0112	.0113	.0113	.0113	.0114	.0115	.0116	.0116
7		.0043	.0043	.0044	.0044	.0045	.0045	.0045	.0046	.0047	.0047
8		.0732	.0735	.0738	.0741	.0745	.0748	.0748	.0754	.0757	.0760
VA		.7241	.7243	.7245	.7227	.7209	.7192	.7192	.7157	.7140	.7123
Coordi- nates:											
X		.5624	.5633	.5642	.5561	.5531	.5520	.5520	.5480	.5460	.5441
Y		-.0372	-.0376	-.0379	-.0383	-.0387	-.0391	-.0391	-.0396	-.0402	-.0405
Z		-.2471	-.2470	-.2470	-.2470	-.2469	-.2469	-.2469	-.2468	-.2468	-.2468
1		.0923	.0989	.1065	.1029	.1037	.1068	.1053	.1085	.1098	.1115
2		.0172	.0171	.0173	.0174	.0176	.0178	.0177	.0180	.0181	.0182
3		.0505	.0505	.0508	.0511	.0518	.0520	.0517	.0522	.0525	.0526
4		.0185	.0185	.0186	.0186	.0186	.0187	.0187	.0187	.0187	.0188
6		.0113	.0112	.0117	.0114	.0115	.0116	.0116	.0117	.0118	.0119
7		.0043	.0048	.0048	.0045	.0046	.0047	.0046	.0048	.0048	.0049
8		.0732	.0737	.0742	.0746	.0751	.0760	.0755	.0764	.0769	.0775
VA		.7241	.7244	.7227	.7200	.7173	.7121	.7147	.7095	.7069	.7044
Coordi- nates											
X		.5624	.5592	.5561	.5530	.5499	.5438	.5468	.5408	.5378	.5349
Y		-.0372	-.0377	-.0383	-.0389	-.0395	-.0406	-.0400	-.0412	-.0417	-.0422
Z		-.2471	-.2470	-.2470	-.2469	-.2469	-.2468	-.2468	-.2467	-.2467	-.2466

Projections of input coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	9
1			.0521	.0512	.0542	.0552	.0563	.0573	.0583
2			.0321	.0322	.0323	.0324	.0324	.0325	.0326
3			.0762	.0764	.0766	.0768	.0770	.0771	.0773
4			.0165	.0165	.0165	.0165	.0165	.0166	.0166
6			.0086	.0086	.0087	.0088	.0088	.0089	.0089
7			.0096	.0097	.0097	.0098	.0098	.0099	.0099
8			.2498	.2498	.2501	.2504	.2507	.2510	.2513
VA			.5561	.5513	.5516	.5498	.5481	.5464	.5447
Coordinates									
X			.3768	.3748	.3727	.3707	.3687	.3667	.3647
Y			.1296	.1292	.1286	.1284	.1481	.1277	.1473
Z			-.2120	-.2120	-.2119	-.2119	-.2119	-.2118	-.2118
1			.0597	.0593	.0589	.0584	.0599	.0614	.0629
2			.0322	.0324	.0325	.0326	.0328	.0329	.0330
3			.0765	.0768	.0771	.0774	.0776	.0774	.0782
4			.0165	.0165	.0166	.0166	.0166	.0166	.0167
6			.0097	.0088	.0089	.0089	.0090	.0091	.0092
7			.0107	.0109	.0099	.0099	.0100	.0100	.0101
8			.2409	.2514	.2518	.2513	.2517	.2522	.2526
VA			.5554	.5407	.5471	.5445	.5419	.5393	.5368
Coordinates									
X			.3777	.3776	.3675	.3645	.3615	.3585	.3556
Y			.1290	.1269	.1279	.1273	.1267	.1262	.1257
Z			-.2120	-.2119	-.2119	-.2118	-.2118	-.2117	-.2117

REVIEW OF PAST RESULTS

| Inputs from: | Regression analysis | | February 1980 |
| | October 1970 | | |
	y,p,d	industry composition	correlation coefficient [*]
agriculture	d,p		−.305
agri-food	p,d		.511
energy			.060
basic products		Metal ore, metals	.652
light industry	d	Metal products	.019
equipment	d		−.747
construction	p		.198
services	d	Transport	−.203
value added	d		.000

Factor analysis: Impact of the relation to agriculture, which is influenced by the
                    output mix.

Link between the factor analysis and the February 1980 regression coefficients
established for the following coefficients: a_{12}, a_{42}, a_{82}

[*] See Table 0c, last column

Sector: Agri-food

Table 0a : Technology vectors by regions

Inputs from:	Tropical Africa	Near East	Asia 1	Asia 2	Latin America	Western Europe	Japan	North America
1	.3069	.7775	.4492	.3736	.3606	.3816	.3272	.3153
2	.1512	.1452	.1242	.1.96	.1122	.1242	.1373	.1366
3	.061	.0357	.113.	.115c	.176	.184c	.0196	.0107
4	.63	.1293	.0175	.3349	.298	.1543	.0490	.0756
5	.1367	.0675	.105	.1196	.1359	.0219	.0192	.0450
6	.117	.1036	.037	.1076	.076	.1059	.0028	.0626
7	.0772	.076	.079	.117	.1011	.0063	.3012	.0021
8	.1364	.1590	.0621	.291	.1060	.0674	.1213	.1014
VA	.31...	.757	.2570	.3076	.2572	.3296	.2025	.2833
Coordinates:								
X	.2469	.7066	.3371	.2479	.1932	.2493	.1919	.1621
Y	.8337	.7796	.8373	.8377	.8071	.8811	.3987	.8036
Z	.1276	.1445	.1201	.2193	.1766	.0025	.0927	.1211

Table 0b: Eigenvectors of the factor analysis

Inputs from:	x	y	z
1	.0743	.7189	.3623
2	-.0117	.7342	-.043
4	-.0.2	.076	-.0172
5	-.0213	.7374	.325
6	-.073	.1263	.573
7	.72	.047	-.0.26.
8	-.0957	.3274	.4156
VA	-.1373	.5366	-.0376

Table 0c: Incremental technology vectors and regression coefficients

(10^{-4})

Inputs from:	Incremental vector: calculated	corrected	b(log GDP/c.
1	-28.6390	-28.6390	-24.6380
2		27.6217	25.9224
3	7.0317	.2574	.2606
4	9.6443	9.5617	9.5882
5	6.1505	.2931	.2931
6	-.0774	-.3774	- 7.3540
7	7.3403	7.6417	.7006
8	-11.7664	-11.7943	-10.7922
VA	28.2703		.0738
Coordinates			
dX	-17.6903	-16.6373	
dY	23.7457	-17.2474	
dZ	-122.7466	-16.4647	

Sector: Agri-food

Region: Tropical Africa

Projections of input coefficients for 20... and 20...

Annual average rates of growth of GDP/c

Inputs from						3	4	5	6	7	8	9
						.3978	.3976	.3975	.3976	.3966	.3976	.3957
						.1014	.1018	.1023	.1024	.1032	.1036	.1040
						.0090	.0090	.0090	.0090	.0090	.0090	.0090
						.0069	.0071	.0072	.0074	.0076	.0078	.0080
						.0347	.0347	.0347	.0347	.0347	.0347	.0347
						.0119	.0119	.0119	.0119	.0119	.0119	.0119
						.0034	.0034	.0035	.0035	.0036	.0036	.0037
						.1536	.1536	.1533	.1531	.1529	.1527	.1525
						.3000	.3000	.3000	.3000	.3000	.3000	.3000
Coordinates:												
X						.2469	.2466	.2465	.2439	.2436	.2433	.2430
Y						.4361	.4371	.4376	.4374	.4372	.4370	.4368
C						.1253	.1249	.1246	.1242	.1239	.1235	.1232
						.3977	.3976	.3975	.3966	.3969	.3942	.3935
						.1031	.1028	.1034	.1041	.1048	.1054	.1061
						.0090	.0090	.0090	.0090	.0091	.0091	.0091
						.0072	.0074	.0077	.0082	.0082	.0085	.0086
						.0347	.0347	.0347	.0348	.0348	.0346	.0346
						.0119	.0119	.0119	.0118	.0118	.0118	.0117
						.0035	.0035	.0036	.0037	.0038	.0039	.0039
						.1538	.1531	.1525	.1525	.1322	.1519	.1516
						.3000	.3000	.3000	.3000	.3000	.3000	.3000
Coordinates:												
X						.2469	.2469	.2435	.2436	.2425	.2420	.2416
Y						.4377	.4374	.4371	.4368	.4364	.4361	.4358
C						.1247	.1242	.1237	.1231	.1226	.1221	.1216

Projections of input coefficients for 1990 - 2000

Annual average rates of growth of output

	1	2	3	4	5	6	7	8	9
			.3744	.3746	.3741	.3746	.3742	.3737	.3735
			.1466	.1470	.1475	.1479	.1488	.1488	.1492
			.0357	.0357	.0357	.0357	.0357	.0357	.0357
			.0249	.0251	.0262	.0254	.0256	.0258	.0260
			.0215	.0215	.0215	.0215	.0215	.0215	.0216
			.0026	.0026	.0028	.0028	.0028	.0028	.0027
			.0018	.0019	.0019	.0019	.0020	.0020	.0021
			.1592	.1588	.1587	.1585	.1583	.1581	.1579
			.2310	.2310	.2310	.2310	.2310	.2310	.2310
			.2216	.2232	.2229	.2226	.2225	.2220	.2217
			.3760	.3777	.3775	.3773	.3771	.3769	.3767
			.1654	.1654	.1647	.1642	.1640	.1636	.1633
			.3723	.3760	.3729	.3732	.3725	.3718	.3711
			.1473	.1493	.1486	.1493	.1500	.1506	.1513
			.0357	.0357	.0357	.0357	.0558	.0556	.0556
			.0252	.0254	.0257	.0260	.0262	.0265	.0268
			.0215	.0215	.0215	.0216	.0216	.0216	.0216
			.0028	.0028	.0028	.0027	.0027	.0027	.0026
			.0019	.0019	.0020	.0021	.0022	.0023	.0023
			.1588	.1585	.1582	.1579	.1576	.1573	.1570
			.2310	.2310	.2310	.2310	.2310	.2310	.2310
			.2276	.2220	.2221	.2216	.2212	.2407	.2405
			.3776	.3773	.3771	.3767	.3763	.3760	.3757
			.1676	.1643	.1637	.1632	.1627	.1622	.1617

Projections of Input-Coefficients for 1990 and 2000

ANNUAL AVERAGE RATES OF GROWTH OF SHARE

	1	2	3	4	5	6	7	8	9
				.4677	.4672	.4667	.4663	.4656	.4654
				.1290	.1295	.1289	.1294	.1298	.1302
				.0135	.0134	.0135	.0130	.0130	.0130
				.0193	.0194	.0196	.0198	.0202	.0202
				.0195	.0195	.0195	.0195	.0195	.0196
				.0026	.0026	.0026	.0026	.0026	.0025
				.0081	.0082	.0082	.0083	.0083	.0084
				.0814	.0811	.0814	.0807	.0805	.0805
				.2600	.2600	.2600	.2600	.2600	.2600
A Coordinates:				.3358	.3355	.3352	.3344	.3346	.3343
				.4064	.4062	.4060	.4058	.4056	.4054
				.1227	.1223	.1226	.1216	.1213	.1209
				.4667	.4660	.4655	.4646	.4639	.4632
				.1290	.1296	.1300	.1310	.1316	.1321
				.0131	.0131	.0131	.0131	.0131	.0131
				.0196	.0199	.0202	.3234	.0207	.0210
				.0195	.0195	.0196	.0196	.0196	.0196
				.0026	.0026	.0025	.0025	.0025	.0024
				.0082	.0083	.0084	.0085	.0086	.0086
				.0809	.0806	.0803	.0800	.0797	.0794
Coordinates:				.2600	.2600	.2600	.2600	.2600	.2600
				.3552	.3547	.3542	.3538	.3533	.3328
				.4060	.4056	.4053	.4050	.4047	.4044
				.1219	.1214	.1204	.1204	.1196	.1193

Projections of Input Coefficients for 1990 and 2000

Inputs from

Annual average rates of growth of olive (?)

	1	2	3	4	5	6	7	8	9
	.3728	.3733	.3726	.3723	.3719	.3714	.3709	.3705	.3700	.3696
2	.1190	.1113	.1117	.1112	.1116	.1121	.1125	.1130	.1134	.1138
4	.0150	.0150	.0150	.0150	.0150	.0150	.0150	.0150	.0150	.0150
	.3382	.3371	.3373	.3375	.3377	.3378	.3380	.3392	.3384	.3386
	.0196	.0196	.0196	.0196	.0196	.0196	.0196	.0196	.0196	.0197
	.0036	.0036	.0036	.0037	.0037	.0037	.0037	.0037	.0037	.0036
8	.0007	.0008	.0009	.0009	.0009	.0010	.0010	.0011	.0011	.0012
	.1409	.1309	.1307	.1305	.1393	.1390	.1388	.1386	.1384	.1382
A Coordi- nates:	.3000	.3000	.3000	.3000	.3000	.3000	.3000	.3000	.3000	.3000
X	.2200	.2200	.2203	.2200	.2196	.2193	.2190	.2187	.2184	.2181
Y	.4317	.4315	.4313	.4311	.4319	.4306	.4304	.4302	.4300	.4298
Z	.1183	.1180	.1176	.1172	.1169	.1165	.1162	.1158	.1155	.1151
1	.3731	.3731	.3723	.3716	.3709	.3702	.3695	.3686	.3681	.3674
2	.1104	.1115	.1112	.1119	.1126	.1132	.1139	.1146	.1152	.1159
3										
4	.0150	.0150	.0150	.0150	.0150	.0150	.0150	.0151	.0151	.0151
	.3382	.3372	.3375	.3378	.3382	.3383	.3386	.3388	.3391	.3394
	.0196	.0196	.0196	.0196	.0196	.0196	.0197	.0197	.0197	.0197
6	.0036	.0036	.0037	.0037	.0037	.0037	.0036	.0036	.0036	.0035
2	.0007	.0008	.0009	.0010	.0011	.0011	.0012	.0013	.0014	.0014
8	.1409	.1308	.1305	.1301	.1388	.1385	.1382	.1379	.1376	.1373
VA Coordi- nates	.3000	.3000	.3000	.3000	.3000	.3000	.3000	.3000	.3000	.3000
X	.2200	.2200	.2200	.2195	.2190	.2185	.2180	.2176	.2171	.2166
Y	.4317	.4314	.4311	.4307	.4304	.4301	.4298	.4294	.4291	.4286
Z	.1183	.1178	.1172	.1167	.1161	.1156	.1151	.1146	.1140	.1135

Sector: Agri-food

Region: Latin America

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of share

								7	u	y
								.5573	.5568	.5564
								.1154	.1156	.1162
								.0176	.0176	.0176
								.0301	.0303	.0305
								.0359	.0359	.0360
								.0035	.0035	.0034
								.0015	.0015	.0016
								.1881	.1879	.1877
								.2500	.2500	.2500
								.1910	.1906	.1903
								.3946	.3984	.3982
								.1743	.1746	.1736
								.3556	.3549	.3542
								.1170	.1176	.1183
								.0179	.0179	.0179
								.0307	.0310	.0313
								.0360	.0366	.0360
								.0034	.0034	.0035
								.0017	.0018	.0018
								.1874	.1871	.1066
								.2500	.2500	.2500
								.1898	.1894	.1089
								.3978	.3975	.3972
								.1731	.1725	.1720

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Sector: Agri-food

Region: Western Europe

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of 1970/C

	1	2	3	4	5	6	7	8	9
		.3802	.3707	.3703	.3788	.3783	.3779	.3774	.3770
		.1251	.1256	.1263	.1265	.1269	.1274	.1276	.1282
		.0140	.0140	.0140	.0140	.0140	.0140	.0140	.0140
		.0349	.0349	.0351	.0352	.0354	.0356	.0358	.0360
		.0219	.0219	.0219	.0219	.0219	.0219	.0219	.0220
		.0059	.0058	.0056	.0056	.0058	.0058	.0056	.0057
		.0061	.0062	.0062	.0063	.0063	.0064	.0064	.0065
		.0826	.0826	.0826	.0823	.0822	.0819	.0817	.0815
		.3286	.3286	.3286	.3286	.3286	.3286	.3286	.3286
		.2497	.2494	.2481	.2477	.2474	.2471	.2468	.2465
		.4406	.4474	.4402	.4402	.4398	.4196	.4393	.4391
		.0618	.0614	.0611	.0607	.0604	.0600	.0597	.0593
		.3797	.3790	.3785	.3776	.3769	.3762	.3755	.3748
		.1256	.1263	.1270	.1276	.1283	.1290	.1296	.1303
		.0140	.0140	.0140	.0145	.0142	.0141	.0141	.0141
		.0349	.0352	.0354	.0357	.0360	.0362	.0365	.0368
		.0219	.0219	.0219	.0219	.0220	.0220	.0220	.0220
		.0056	.0058	.0058	.0056	.0057	.0057	.0057	.0056
		.0062	.0063	.0064	.0064	.0065	.0066	.0067	.0067
		.0826	.0824	.0821	.0818	.0815	.0812	.0609	.0806
		.3286	.3286	.3286	.3286	.3286	.3286	.3286	.3286
		.2493	.2474	.2476	.2469	.2464	.2460	.2455	.2450
		.4404	.4381	.4329	.4394	.4391	.4388	.4385	.4382
		.0611	.0603		.0596	.0593	.0598	.0582	.0577

Sector: Agri-food

Region: Japan

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of 1975/0

Inputs from	1	2	3	4	5	6	7	8	y
			.3250	.3243	.3246	.3243	.3239	.3234	.3236
			.1394	.1391	.1398	.1405	.1407	.1409	.1413
			.0098	.0408	.0108	.0098	.0098	.0098	.0098
			.0499	.0428	.0499	.0501	.0503	.0505	.0507
			.0192	.0192	.0192	.0192	.0192	.0192	.0193
Cold- rates:			.0027	.0027	.0027	.0027	.0027	.0027	.0026
			.0015	.0014	.0015	.0016	.0016	.0016	.0017
			.1211	.1203	.1203	.1198	.1196	.1194	.1192
			.2820	.2820	.2820	.2821	.2820	.2820	.2820
			.1914	.1901	.1896	.1894	.1891	.1888	.1885
			.3940	.3938	.3936	.3934	.3932	.3929	.3927
			.0916	.0913	.0909	.0906	.0902	.0899	.0895
			.3260	.3243	.3236	.3229	.3222	.3215	.3208
			.1398	.1401	.1407	.1414	.1421	.1427	.1434
			.0098	.0098	.0098	.0098	.0099	.0099	.0099
			.0499	.0501	.0504	.0507	.0509	.0512	.0515
			.0192	.0192	.0192	.0193	.0193	.0193	.0193
Coordi- nates			.0027	.0015	.0027	.0026	.0026	.0026	.0025
			.0015	.0015	.0016	.0017	.0018	.0014	.0014
			.1211	.1198	.1195	.1192	.1189	.1186	.1183
			.2820	.2820	.2820	.2820	.2820	.2820	.2820
Coordi- nates			.1894	.1894	.1889	.1885	.1880	.1875	.1671
			.3977	.3946	.3935	.3927	.3924	.3921	.3918
			.0911	.0916	.0916	.0895	.0890	.0884	.0879

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	9
		.3183	.3138	.3134	.3129	.3124	.3120	.3115	.3111
		.1075	.1090	.1084	.1089	.1093	.1098	.1102	.1106
		.0107	.0107	.0107	.0107	.0107	.0107	.0107	.0107
		.0762	.0744	.0766	.0767	.0769	.0771	.0773	.0775
		.0451	.0450	.0451	.0450	.0450	.0450	.0450	.0451
		.0028	.0027	.0027	.0027	.0027	.0027	.0027	.0026
		.0022	.0023	.0023	.0024	.0024	.0025	.0025	.0026
		.1610	.1608	.1606	.1603	.1601	.1599	.1597	.1595
A Coordinates:		.2900	.2800	.2900	.2800	.2800	.2800	.2800	.2800
X Y		.1614	.1611	.1607	.1604	.1601	.1598	.1595	.1592
		.4031	.4029	.4027	.4025	.4023	.4020	.4018	.4016
		.1209	.1204	.1197	.1193	.1190	.1186	.1183	.1179
		.3127	.3133	.3124	.3117	.3110	.3103	.3096	.3084
		.1117	.1107	.1117	.1102	.1107	.1114	.1120	.1127
		.0107	.0107	.0107	.0107	.0107	.0108	.0108	.0108
		.0748	.0747	.0769	.0772	.0775	.0777	.0780	.0783
		.0451	.0451	.0451	.0451	.0451	.0451	.0451	.0451
		.0027	.0027	.0027	.0027	.0026	.0026	.0026	.0025
		.0023	.0024	.0024	.0025	.0026	.0027	.0028	.0028
		.1607	.1604	.1601	.1598	.1595	.1592	.1589	.1586
Coordinates:		.2800	.2800	.2800	.2800	.2800	.2800	.2800	.2800
X Y		.1611	.1606	.1601	.1596	.1591	.1587	.1582	.1577
		.4029	.4026	.4022	.4019	.4016	.4013	.4010	.4007
		.1202	.1195	.1191	.1184	.1179	.1174	.1168	.1163

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REVIEW OF FAST RESULTS

Inputs from:	Regression analysis October 1970		February 1980
	y,p,d	industry composition	correlation coefficient*)
agriculture		paper	-.387
agri-food	y,d	metals	-.282
energy		coal, electricity	-.374
basic products	y	metal ore, metals, chemicals	.523
light industry	p	oth. mining, metals apparel	.068
equipment	d	non- metals	-.039
construction	p	metal ore, chemicals	.187
services	d	oth. mining	-.570
value added	y	chemicals, metals	-.290

Factor analysis: Impact of the degree of processing of basic products, which is related to GDP per capita and influenced by resource availability.

Link between the factor analysis and the February 1980 regression coefficients established for the following coefficients: a_{34}, a_{v4}

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*) See Table 0c, last column

Sector: Basic products

Table 9a : Technology vectors by regions

Inputs from:	Tropical Africa	Near East	Asia 1	Asia 2	Latin America	Western Europe	Japan	North America
1	.0113	.0035	.0634	.0186	.0662	.0090	.0101	.0003
2	.0120	.0085	.0537	.0089	.0076	.0059	.0028	.0034
3	.0654	.0527	.0811	.0536	.0411	.0674	.0620	.0423
4	.2000	.2699	.2001	.3494	.2726	.3561	.4746	.3300
5	.0276	.0244	.0448	.0206	.0300	.0324	.0203	.0372
6	.0099	.0068	.0093	.0076	.0096	.0129	.0137	.0203
7	.0177	.0025	.0397	.0010		.0300	.0015	.0044
8	.1457	.1912	.1975	.1328	.1535	.1087	.1306	.1567
9	.5190	.4400	.3100	.4676	.4788	.3771	.2638	.4050
Coord‑nates:								
X	.4405	.3598	.2366	.3470	.4086	.3267	.2307	.3386
Y	.2948	.3167	.2801	.2510	.2935	.2182	.2103	.2739
Z	-.0311	-.0221	-.0093	-.0259	-.0182	-.0189	-.0189	-.0074

Table 9b: Eigenvectors of the factor analysis

Inputs from:	x	y	z
1	.0013	-.0150	-.1056
2	-.0056	.0007	.0137
3	.0131	-.0376	-.2424
4			
5	.9888	.0008	.9436
6	.0156	.0256	-.1539
7	-.0060	-.0053	-.0973
8	-.3107	.9490	.0169
9	.9461	.3117	-.0775

Table 9c: Incremental technology vectors and regression coefficients

(10^{-4})

Inputs from:	Incremental vector: calculated	corrected	b(log GDP/c)
1	-5.3331	-5.3331	- 5.3331
2	.7845	.7845	- 2.4909
3	-12.2253	1.8808	- 1.8808
4		58.6031	58.6031
5	51.1957	.5692	.2892
6	-9.5094	.7219	- .7219
7	-5.1285	-5.1285	2.5853
8	-28.2270	-28.2270	-28.2267
VA	-23.8709	-23.8709	-23.8709
Coordinates			
dX	-9.5573	-13.7069	
dY	-33.8595	-34.1706	
dZ	55.1816	2.4143	

Sector: Basic Products

Region: Tropical Africa

Projections of input coefficients for 1980 and 2000

Annual average rates of growth of GDP/c

Input from	0	1	2	3	4	5	6	7	8	9
1	.0113	.0112	.0111	.0110	.0109	.0108	.0107	.0106	.0105	.0104
2	.0120	.0120	.0120	.0120	.0121	.0121	.0121	.0121	.0121	.0121
3	.0654	.0654	.0655	.0655	.0655	.0656	.0656	.0657	.0657	.0657
4	.2000	.2012	.2023	.2035	.2046	.2057	.2068	.2079	.2090	.2101
	.0276	.0276	.0276	.0276	.0276	.0277	.0277	.0277	.0277	.0277
GC	.0099	.0099	.0099	.0099	.0100	.0100	.0100	.0100	.0100	.0100
	.0177	.0176	.0175	.0174	.0173	.0172	.0171	.0170	.0169	.0168
	.1457	.1451	.1446	.1440	.1435	.1429	.1424	.1419	.1414	.1408
VA	.5100	.5095	.5091	.5086	.5081	.5077	.5072	.5068	.5063	.5059
Coordinates										
X, Y, C	.4405	.4403	.4400	.4397	.4395	.4392	.4389	.4387	.4384	.4382
	.2948	.2941	.2934	.2928	.2921	.2915	.2908	.2902	.2695	.2689
	-.0311	-.0311	-.0310	-.0310	-.0309	-.0309	-.0308	-.0308	-.0308	-.0307
1	.0113	.0111	.0110	.0108	.0107	.0105	.0104	.0102	.0101	.0099
2	.0120	.0120	.0120	.0121	.0121	.0121	.0121	.0122	.0122	.0122
3	.0654	.0655	.0655	.0656	.0656	.0657	.0657	.0658	.0658	.0659
4	.2000	.2017	.2035	.2052	.2069	.2086	.2102	.2119	.2135	.2152
	.0276	.0276	.0276	.0277	.0277	.0277	.0277	.0277	.0277	.0277
GC 8	.0099	.0099	.0099	.0100	.0100	.0100	.0100	.0100	.0101	.0101
	.0177	.0175	.0174	.0172	.0171	.0169	.0168	.0167	.0165	.0164
	.1457	.1446	.1440	.1432	.1424	.1416	.1408	.1400	.1392	.1384
VA	.5100	.5093	.5086	.5079	.5072	.5065	.5058	.5052	.5045	.5038
Coordinates										
X, Y, C	.4405	.4401	.4397	.4393	.4389	.4385	.4381	.4377	.4374	.4370
	.2948	.2938	.2928	.2918	.2908	.2898	.2688	.2679	.2669	.2660
	-.0311	-.0311	-.0310	-.0309	-.0308	-.0308	-.0307	-.0306	-.0306	-.0305

Projections of Input Coefficients for 1990 and 2000

Inputs from	Annual average rates of growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
1	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027	.0026
2	.0085	.0085	.0085	.0085	.0086	.0086	.0086	.0086	.0086	.0086
3	.0527	.0527	.0528	.0528	.0528	.0529	.0529	.0530	.0530	.0530
4	.2699	.2711	.2722	.2734	.2745	.2756	.2767	.2778	.2789	.2800
5	.0244	.0244	.0244	.0244	.0244	.0245	.0245	.0245	.0245	.0245
6	.0068	.0068	.0068	.0068	.0069	.0069	.0069	.0069	.0069	.0069
7	.0025	.0024	.0023	.0022	.0021	.0020	.0019	.0018	.0017	.0016
8	.1912	.1906	.1901	.1895	.1890	.1884	.1879	.1874	.1869	.1863
A	.4400	.4395	.4391	.4386	.4381	.4377	.4372	.4368	.4363	.4359
Coordinates:										
X	.3598	.3595	.3592	.3590	.3587	.3584	.3582	.3579	.3577	.3574
Y	.3167	.3161	.3154	.3147	.3141	.3134	.3128	.3121	.3115	.3109
Z	-.0221	-.0221	-.0220	-.0220	-.0220	-.0219	-.0219	-.0218	-.0218	-.0217
1	.0035	.0033	.0032	.0030	.0029	.0027	.0026	.0024	.0023	.0021
2	.0085	.0085	.0085	.0086	.0086	.0086	.0086	.0087	.0087	.0087
3	.0527	.0528	.0528	.0529	.0529	.0530	.0530	.0531	.0531	.0532
4	.2699	.2716	.2734	.2751	.2768	.2785	.2801	.2818	.2834	.2851
5	.0244	.0244	.0244	.0245	.0245	.0245	.0245	.0245	.0245	.0245
6	.0068	.0068	.0068	.0069	.0069	.0069	.0069	.0069	.0070	.0070
7	.0025	.0023	.0022	.0020	.0019	.0017	.0016	.0015	.0013	.0012
8	.1912	.1904	.1895	.1887	.1879	.1871	.1863	.1855	.1847	.1839
A	.4400	.4393	.4386	.4379	.4372	.4365	.4358	.4352	.4345	.4338
Coordinates										
X	.3598	.3594	.3589	.3585	.3582	.3578	.3574	.3570	.3566	.3562
Y	.3167	.3157	.3147	.3137	.3127	.3117	.3108	.3098	.3089	.3079
Z	-.0221	-.0221	-.0220	-.0219	-.0219	-.0218	-.0217	-.0216	-.0216	-.0215

Sector: Basic Products

Region: Near East

Sector: Basic Products

Region: Asia ?

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0638	.0633	.0632	.0631	.0630	.0629	.0628	.0627	.0626	.0625
2	.0537	.0537	.0537	.0537	.0538	.0538	.0538	.0538	.0538	.0538
3	.0811	.0811	.0812	.0812	.0812	.0813	.0813	.0814	.0814	.0814
4	.2071	.2013	.2024	.2036	.2047	.2058	.2069	.2080	.2091	.2102
5	.0448	.0448	.0448	.0448	.0448	.0449	.0449	.0449	.0449	.0449
6	.0093	.0093	.0093	.0093	.0094	.0094	.0094	.0094	.0094	.0094
7	.0397	.0396	.0395	.0394	.0393	.0392	.0391	.0390	.0389	.0388
8	.1975	.1969	.1964	.1958	.1953	.1947	.1942	.1937	.1932	.1926
9	.3100	.3095	.3091	.3086	.3081	.3077	.3072	.3068	.3063	.3059
Coordinates: X	.2366	.2364	.2361	.2358	.2356	.2353	.2350	.2348	.2345	.2343
Y	.2801	.2795	.2788	.2781	.2775	.2768	.2762	.2755	.2748	.2743
Z	-.0093	-.0093	-.0092	-.0092	-.0091	-.0091	-.0090	-.0090	-.0089	-.0089
1	.0638	.0632	.0631	.0629	.0628	.0626	.0625	.0623	.0622	.0420
2	.0537	.0537	.0537	.0538	.0538	.0538	.0538	.0539	.0539	.0539
3	.0811	.0812	.0812	.0813	.0813	.0814	.0814	.0815	.0815	.0816
4	.2001	.2018	.2036	.2053	.2070	.2087	.2103	.2120	.2136	.2153
5	.0448	.0448	.0448	.0449	.0449	.0449	.0449	.0449	.0449	.0449
6	.0093	.0093	.0093	.0094	.0094	.0094	.0094	.0094	.0095	.0095
7	.0397	.0395	.0394	.0392	.0391	.0389	.0388	.0387	.0385	.0384
8	.1975	.1967	.1958	.1950	.1942	.1934	.1926	.1918	.1910	.1902
9	.3100	.3093	.3086	.3079	.3072	.3065	.3058	.3052	.3045	.3038
Coordinates: X	.2364	.2362	.2358	.2358	.2350	.2346	.2342	.2339	.2335	.2331
Y	.2801	.2791	.2781	.2771	.2761	.2751	.2742	.2732	.2723	.2713
Z	-.0093	-.0092	-.0092	-.0091	-.0090	-.0090	-.0089	-.0088	-.0088	-.0087

Projections of Input Coefficients for 1990 and 2000

Inputs from

	Annual average rates of growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
1	.0180	.0179	.0178	.0177	.0176	.0175	.0174	.0173	.0172	.0171
2	.0089	.0089	.0069	.0089	.0090	.0090	.0090	.0090	.0090	.0090
3	.0536	.0536	.0537	.0537	.0537	.0538	.0538	.0539	.0539	.0539
4	.3494	.3506	.3517	.3529	.3540	.3551	.3562	.3573	.3584	.3595
5	.0206	.0206	.0206	.0206	.0206	.0207	.0207	.0207	.0207	.0207
6	.0076	.0076	.0076	.0076	.0077	.0077	.0077	.0077	.0077	.0077
7	.0010	.0009	.0008	.0007	.0006	.0005	.0004	.0003	.0002	.0001
8	.1328	.1322	.1317	.1311	.1306	.1300	.1295	.1290	.1285	.1279
VA	.4076	.4071	.4067	.4062	.4057	.4053	.4048	.4044	.4039	.4035
Coordinates:										
Y	.3470	.3467	.3464	.3462	.3459	.3456	.3454	.3451	.3449	.3446
Y	.2510	.2503	.2497	.2490	.2483	.2477	.2470	.2464	.2457	.2451
Z	-.0259	-.0259	-.0258	-.0258	-.0257	-.0257	-.0256	-.0256	-.0256	-.0255
1	.0180	.0178	.0177	.0175	.0174	.0172	.0171	.0169	.0168	.0166
2	.0089	.0089	.0089	.0090	.0090	.0090	.0090	.0091	.0091	.0091
3	.0536	.0537	.0537	.0538	.0538	.0539	.0539	.0540	.0540	.0541
4	.3494	.3511	.3529	.3546	.3563	.3580	.3596	.3613	.3629	.3646
5	.0206	.0206	.0206	.0207	.0207	.0207	.0207	.0207	.0207	.0207
6	.0076	.0076	.0076	.0077	.0077	.0077	.0077	.0077	.0078	.0078
7	.0010	.0008	.0007	.0005	.0004	.0002	.0001	-.0000	-.0002	-.0003
8	.1328	.1320	.1311	.1303	.1295	.1287	.1279	.1271	.1263	.1255
VA	.4076	.4069	.4062	.4055	.4048	.4041	.4034	.4028	.4021	.4014
Coordinates										
Y	.3470	.3466	.3462	.3458	.3454	.3450	.3446	.3442	.3438	.3434
Y	.2510	.2500	.2490	.2480	.2470	.2460	.2450	.2441	.2431	.2422
Z	-.0259	-.0259	-.0258	-.0257	-.0256	-.0256	-.0255	-.0254	-.0254	-.0253

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/a

Inputs from	0	1	2	3	4	5	6	7	8	9
	.0062	.0061	.0060	.0059	.0058	.0057	.0056	.0055	.0054	.0053
	.0076	.0076	.0076	.0076	.0077	.0077	.0077	.0077	.0077	.0077
	.0411	.0411	.0412	.0412	.0412	.0413	.0413	.0414	.0414	.0414
	.2726	.2738	.2749	.2761	.2772	.2783	.2794	.2805	.2816	.2827
	.0300	.0300	.0300	.0300	.0300	.0301	.0301	.0301	.0301	.0301
	.0096	.0096	.0096	.0096	.0097	.0097	.0097	.0097	.0097	.0097
	-.0001	-.0001	-.0002	-.0003	-.0004	-.0005	-.0006	-.0007	-.0008	-.0009
	.1535	.1529	.1524	.1518	.1513	.1507	.1502	.1497	.1492	.1486
	.4788	.4783	.4779	.4774	.4769	.4765	.4760	.4756	.4751	.4747
Coordinates: x,y,z	.4086	.4083	.4081	.4078	.4075	.4073	.4070	.4067	.4065	.4062
	.2935	.2929	.2922	.2915	.2909	.2902	.2896	.2889	.2883	.2877
	-.0182	-.0181	-.0181	-.0180	-.0180	-.0179	-.0179	-.0178	-.0178	-.0178
	.0062	.0060	.0059	.0057	.0056	.0054	.0053	.0051	.0050	.0048
	.0076	.0076	.0076	.0077	.0077	.0077	.0077	.0078	.0078	.0078
	.0411	.0412	.0412	.0413	.0413	.0414	.0414	.0415	.0415	.0416
	.2726	.2743	.2761	.2778	.2795	.2812	.2828	.2845	.2861	.2878
	.0300	.0300	.0300	.0301	.0301	.0301	.0301	.0301	.0301	.0301
	.0096	.0096	.0096	.0097	.0097	.0097	.0097	.0097	.0098	.0098
	-.0002	-.0002	-.0003	-.0005	-.0006	-.0008	-.0009	-.0010	-.0012	-.0013
	.1535	.1527	.1518	.1510	.1502	.1494	.1486	.1478	.1470	.1462
	.4788	.4781	.4774	.4767	.4760	.4753	.4746	.4740	.4733	.4726
Coordinates: x,y,z	.4086	.4082	.4078	.4074	.4070	.4066	.4062	.4058	.4054	.4051
	.2935	.2925	.2915	.2905	.2895	.2885	.2876	.2866	.2857	.2847
	-.0182	-.0181	-.0180	-.0180	-.0179	-.0178	-.0178	-.0177	-.0176	-.0175

Sector: Basic Products

Region: Western Europe

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0090	.0090	.0088	.0087	.0086	.0085	.0084	.0083	.0082	.0081
2	.0659	.0059	.0059	.0059	.0060	.0060	.0060	.0060	.0060	.0060
3	.0674	.0674	.0675	.0675	.0675	.0676	.0676	.0677	.0677	.0677
4	.3561	.3573	.3584	.3596	.3607	.3618	.3629	.3640	.3651	.3662
5	.0324	.0324	.0324	.0324	.0324	.0325	.0325	.0325	.0325	.0325
1	.0129	.0129	.0129	.0129	.0130	.0130	.0130	.0130	.0130	.0130
2	.0300	.0299	.0298	.0297	.0296	.0295	.0294	.0293	.0292	.0291
3	.1047	.1081	.1076	.1070	.1065	.1059	.1054	.1049	.1044	.1034
4	.3771	.3766	.3762	.3757	.3752	.3748	.3743	.3739	.3734	.373x
Coordinates: X	.3267	.3265	.3262	.3259	.3257	.3254	.3251	.3249	.3246	.3244
Y	.2182	.2175	.2169	.2162	.2155	.2149	.2142	.2136	.2130	.2123
C	-.0189	-.0189	-.0188	-.0188	-.0187	-.0187	-.0186	-.0186	-.0185	-.0185

Inputs from	0	1	2	3	4	5	6	7	8	9
6	.0090	.0088	.0087	.0085	.0084	.0082	.0081	.0079	.0078	.0076
7	.0059	.0059	.0059	.0060	.0060	.0060	.0060	.0061	.0061	.0061
8	.0674	.0675	.0675	.0676	.0676	.0677	.0677	.0678	.0678	.0679
9	.3561	.3578	.3596	.3613	.3630	.3647	.3663	.3680	.3696	.3713
10	.0324	.0324	.0324	.0325	.0325	.0325	.0325	.0325	.0325	.0325
6	.0129	.0129	.0129	.0130	.0130	.0130	.0130	.0130	.0131	.0131
7	.0390	.0298	.0297	.0295	.0294	.0292	.0291	.0290	.0288	.0287
8	.1047	.1079	.1070	.1062	.1054	.1046	.1038	.1030	.1022	.1014
9	.3771	.3764	.3757	.3750	.3743	.3736	.3729	.3723	.3716	.3709
Coordinates: X	.3267	.3263	.3259	.3255	.3251	.3247	.3244	.3240	.3236	.3232
Y	.2182	.2172	.2162	.2152	.2142	.2132	.2123	.2113	.2103	.2094
C	-.0189	-.0188	-.0188	-.0187	-.0186	-.0186	-.0185	-.0184	-.0184	-.0183

Projections of Input Coefficients for 1990 and 2000

Inputs from	Annual average rates of growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
1	.0101	.0100	.0099	.0098	.0097	.0096	.0095	.0094	.0093	.0092
2	.0028	.0028	.0028	.0026	.0029	.0029	.0029	.0029	.0029	.0029
3	.0620	.0620	.0621	.0621	.0621	.0622	.0622	.0623	.0623	.0623
4	.4748	.4760	.4771	.4783	.4794	.4805	.4816	.4827	.4838	.4849
5	.0203	.0203	.0203	.0203	.0203	.0204	.0204	.0204	.0204	.0204
6	.0137	.0137	.0137	.0137	.0138	.0138	.0138	.0138	.0138	.0138
7	.0015	.0014	.0013	.0012	.0011	.0010	.0009	.0008	.0007	.0006
8	.1306	.1300	.1295	.1289	.1284	.1278	.1273	.1268	.1263	.1257
A	.2838	.2833	.2829	.2824	.2819	.2815	.2810	.2806	.2801	.2797
Coordinates:										
y	.2307	.2305	.2302	.2299	.2297	.2294	.2291	.2289	.2286	.2284
Y	.2103	.2096	.2089	.2083	.2076	.2069	.2063	.2056	.2050	.2044
?	-.0189	-.0189	-.0188	-.0188	-.0187	-.0187	-.0186	-.0186	-.0186	-.0185
1	.0101	.0099	.0098	.0096	.0095	.0093	.0092	.0090	.0089	.0087
2	.0028	.0028	.0028	.0029	.0029	.0029	.0029	.0030	.0030	.0030
3	.0620	.0621	.0621	.0622	.0622	.0623	.0623	.0624	.0624	.0625
4	.4748	.4765	.4783	.4800	.4817	.4834	.4850	.4867	.4883	.4900
5	.0203	.0203	.0203	.0204	.0204	.0204	.0204	.0204	.0204	.0204
6	.0137	.0137	.0137	.0138	.0138	.0138	.0138	.0138	.0139	.0139
7	.0015	.0013	.0012	.0010	.0009	.0007	.0006	.0005	.0003	.0002
8	.1306	.1298	.1289	.1281	.1273	.1265	.1257	.1249	.1241	.1233
A	.2838	.2831	.2824	.2817	.2810	.2803	.2796	.2790	.2783	.2776
Coordinates										
y	.2307	.2303	.2299	.2295	.2291	.2287	.2283	.2279	.2276	.2272
Y	.2103	.2093	.2082	.2072	.2063	.2053	.2043	.2033	.2024	.2014
?	-.0189	-.0189	-.0138	-.0187	-.0186	-.0186	-.0185	-.0184	-.0184	-.0183

Sector: Basic Products

Region: Japan

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Projections of Input Coefficients for 1990 and 2000

Inputs from

Annual average rates of growth of GDP/c

	0	1	2	3	4	5	6	7	8	9
1	.0003	.0002	.0001	-.0000	-.0001	-.0002	-.0003	-.0004	-.0005	-.0006
2	.0034	.0034	.0034	.0034	.0035	.0035	.0035	.0035	.0035	.0035
3	.0423	.0423	.0424	.0424	.0424	.0425	.0425	.0426	.0426	.0426
4	.3300	.3312	.3323	.3335	.3346	.3357	.3368	.3379	.3390	.3401
5	.0372	.0372	.0372	.0372	.0372	.0373	.0373	.0373	.0373	.0373
6	.0203	.0203	.0203	.0203	.0204	.0204	.0204	.0204	.0204	.0204
7	.0044	.0043	.0042	.0041	.0040	.0039	.0038	.0037	.0036	.0035
8	.1567	.1561	.1556	.1550	.1545	.1539	.1534	.1529	.1524	.1518
VA	.4050	.4045	.4041	.4036	.4031	.4027	.4022	.4018	.4013	.4009

Coordinates:

	0	1	2	3	4	5	6	7	8	9
X	.3386	.3383	.3381	.3378	.3375	.3373	.3370	.3367	.3365	.3362
Y	.2739	.2732	.2725	.2719	.2712	.2705	.2699	.2692	.2686	.2680
Z	-.0074	-.0074	-.0073	-.0073	-.0072	-.0072	-.0071	-.0071	-.0070	-.0070

	0	1	2	3	4	5	6	7	8	9
1	.0003	.0001	-.0000	-.0002	-.0003	-.0005	-.0006	-.0008	-.0009	-.0011
2	.0034	.0034	.0034	.0035	.0035	.0035	.0035	.0036	.0036	.0036
3	.0423	.0424	.0424	.0425	.0425	.0426	.0426	.0427	.0427	.0428
4	.3300	.3317	.3335	.3352	.3369	.3386	.3402	.3419	.3435	.3452
5	.0372	.0372	.0372	.0373	.0373	.0373	.0373	.0373	.0373	.0373
6	.0203	.0203	.0203	.0204	.0204	.0204	.0204	.0204	.0205	.0205
7	.0044	.0042	.0041	.0039	.0038	.0036	.0035	.0034	.0032	.0031
8	.1567	.1559	.1550	.1542	.1534	.1526	.1518	.1510	.1502	.1494
VA	.4050	.4043	.4036	.4029	.4022	.4015	.4008	.4002	.3995	.3988

Coordinates:

	0	1	2	3	4	5	6	7	8	9
X	.3386	.3382	.3378	.3374	.3370	.3366	.3362	.3358	.3354	.3351
Y	.2739	.2729	.2718	.2708	.2699	.2689	.2679	.2669	.2660	.2650
Z	-.0074	-.0073	-.0073	-.0072	-.0071	-.0071	-.0070	-.0069	-.0069	-.0068

Sector: Basic Products
Region: North America

V-1

REVIEW OF PAST RESULTS

Inputs from:	Regression analysis		February 1980
	October 1970		
	y,p,d	industry composition	correlation coefficient*)
agriculture	y	textiles	-.278
agri-food			-.189
energy		apparel, printing	-.365
basic products	y	chemical, metals, metal prod.	.00?
light industry		wood products	.143
equipment	y		.187
construction	p,y		.178
services	d	plastic, rubber	-.278
value added		wood products	.048

Factor analysis: **Impact of relative importance of textiles and/ or metal products**

Link between the factor analysis and the February 1980 regression coefficients
established for the following coefficients: a_{15}, a_{45}, a_{65}

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*) See Table 0c, last column

Table 0a : Technology vectors by regions

Inputs from:	Tropical Africa	Near East	Asia 1	Asia 2	Latin America	Western Europe	Japan	North America
1	.1322	.0360	.2218	.0941	.0440	.0351	.0848	.0165
2	.0122	.0113	.0244	.0032	.0101	.0051	.0036	.0031
3	.0219	.0141	.0205	.0124	.0194	.0199	.0135	.0096
4	.0292	.0400	.0598	.1005	.1370	.1565	.1900	.1884
5	.2238	.3092	.1495	.3080	.2305	.2445	.2043	.2282
6	.0134	.0020	.0051	.0064	.0053	.0160	.0059	.0199
7	.0036	.0023	.0075	.0005	.0003	.0111	.0013	.0019
8	.1623	.3147	.1150	.1244	.1879	.0857	.1477	.1235
A	.4100	.2700	.3960	.3500	.3649	.4256	.3485	.4086
Coordinates:								
X	-.0774	-.0078	-.0334	-.1000	-.1247	-.2099	-.1128	-.2037
Y	.0493	.2217	-.0528	.0212	.0953	.0105	.3331	.0484
Z	.3247	.2073	.3106	.2145	.1943	.2065	.1549	.1722

Table 0b: Eigenvectors of the factor analysis

Inputs from:	x	y	z
1	.6978	-.5478	.2997
2	-.0078	.0113	.0260
3	-.0243	-.0018	.0884
4	-.1844	-.1396	-.6569
5			
6	-.0079	.0225	-.0286
7	-.0103	-.0225	.0033
8	.4026	.8233	.1255
A	-.5623	-.0450	.6733

Table 0c: Incremental technology vectors and regression coefficients

(10^{-4})

Inputs from:	Incremental vector: calculated	corrected	b(log GDP/c)
1	-28.4357	-28.4357	- 28.4357
2	-.9629	-.9629	- 2.2163
3	-3.2833	-3.2833	- 4.2156
4	32.9010	32.9010	32.9009
5		10.3240	10.3757
6	1.3992	1.3992	1.9999
7	.1164	.1164	1.6697
8	-15.5057	-15.5057	- 15.5057
VA	-16.3322	3.4470	3.4470
Coordinates			
dX	-22.8941	-34.0156	
dY	-1.9229	-1.9120	
dZ	-43.4350	-30.1167	

Inputs from	Annual average rates of growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
1	.1322	.1316	.1311	.1305	.1300	.1294	.1289	.1284	.1278	.1273
2	.0122	.0122	.0122	.0121	.0121	.0121	.0121	.0121	.0121	.0120
3	.0219	.0218	.0218	.0217	.0216	.0216	.0215	.0215	.0214	.0213
4	.0202	.0209	.0215	.0221	.0228	.0234	.0240	.0247	.0253	.0259
5	.2238	.2240	.2242	.2244	.2246	.2248	.2250	.2252	.2254	.2256
6	.0134	.0134	.0135	.0135	.0135	.0135	.0134	.0136	.0136	.0136
7	.0036	.0036	.0036	.0036	.0036	.0036	.0036	.0036	.0036	.0036
8	.1623	.1620	.1617	.1614	.1611	.1608	.1605	.1602	.1599	.1596
VA	.4100	.4101	.4101	.4102	.4103	.4103	.4104	.4105	.4105	.4106
Coordinates:										
Y	-.0774	-.0781	-.0788	-.0795	-.0801	-.0808	-.0814	-.0820	-.0827	-.0833
Y	.0403	.0402	.0402	.0402	.0401	.0401	.0400	.0400	.0400	.0399
Z	.3247	.3241	.3235	.3229	.3223	.3217	.3212	.3206	.3200	.3195
1	.1322	.1314	.1305	.1297	.1289	.1280	.1272	.1264	.1256	.1248
2	.0122	.0122	.0121	.0121	.0121	.0121	.0120	.0120	.0120	.0120
3	.0219	.0218	.0217	.0216	.0215	.0214	.0213	.0212	.0211	.0211
4	.0202	.0212	.0222	.0231	.0241	.0250	.0260	.0269	.0278	.0287
5	.2238	.2241	.2244	.2247	.2250	.2253	.2256	.2259	.2262	.2265
6	.0134	.0134	.0135	.0135	.0136	.0136	.0136	.0137	.0137	.0138
7	.0036	.0036	.0036	.0036	.0036	.0036	.0036	.0036	.0036	.0036
8	.1623	.1618	.1614	.1609	.1605	.1600	.1596	.1592	.1587	.1583
VA	.4100	.4101	.4102	.4103	.4104	.4105	.4106	.4107	.4108	.4109
Coordinates										
Y	-.0774	-.0785	-.0795	-.0805	-.0814	-.0824	-.0834	-.0843	-.0853	-.0862
Y	.0403	.0402	.0402	.0401	.0400	.0400	.0399	.0399	.0398	.0398
Z	.3247	.3238	.3229	.3220	.3211	.3203	.3194	.3186	.3177	.3169

Projections of Input Coefficients for 1990 and 2000

Inputs from	Annual Average rates of growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
1	.0360	.0354	.0349	.0343	.0338	.0332	.0327	.0322	.0316	.0311
2	.0113	.0113	.0113	.0112	.0112	.0112	.0112	.0112	.0112	.0111
4	.0141	.0190	.0140	.0139	.0138	.0138	.0137	.0137	.0136	.0135
c	.0400	.0407	.0413	.0419	.0426	.0432	.0438	.0445	.0451	.0457
	.3092	.3094	.3096	.3098	.3100	.3102	.3104	.3106	.3108	.3110
6	.0020	.0020	.0021	.0021	.0021	.0021	.0022	.0022	.0022	.0022
8	.0023	.0023	.0023	.0023	.0023	.0023	.0023	.0023	.0023	.0023
	.3197	.3144	.3141	.3138	.3135	.3132	.3129	.3126	.3123	.3120
VA	.2700	.2701	.2701	.2702	.2703	.2703	.2704	.2705	.2705	.2706
Coordinates:										
X	-.0078	-.0085	-.0092	-.0099	-.0105	-.0112	-.0118	-.0124	-.0131	-.0137
Y	.2217	.2217	.2217	.2216	.2216	.2215	.2215	.2215	.2214	.2214
Z	.2073	.2067	.2061	.2055	.2049	.2043	.2038	.2032	.2027	.2021
1	.0360	.0352	.0343	.0335	.0327	.0318	.0310	.0302	.0294	.0286
2	.0113	.0113	.0112	.0112	.0112	.0112	.0111	.0111	.0111	.0111
3	.0141	.0140	.0139	.0138	.0137	.0136	.0135	.0134	.0133	.0133
4	.0400	.0410	.0420	.0429	.0439	.0448	.0458	.0467	.0476	.0485
5	.3092	.3095	.3098	.3101	.3104	.3107	.3110	.3113	.3116	.3119
6	.0020	.0020	.0021	.0021	.0022	.0022	.0022	.0023	.0023	.0024
8	.0023	.0023	.0023	.0023	.0023	.0023	.0023	.0023	.0023	.0023
	.3147	.3142	.3138	.3133	.3129	.3124	.3120	.3116	.3111	.3107
VA	.2700	.2701	.2702	.2703	.2704	.2705	.2706	.2707	.2708	.2709
Coordinates										
X	-.0078	-.0089	-.0099	-.0109	-.0118	-.0128	-.0138	-.0148	-.0157	-.0166
Y	.2217	.2217	.2216	.2216	.2215	.2215	.2214	.2213	.2213	.2212
Z	.2073	.2064	.2055	.2046	.2037	.2029	.2020	.2012	.2003	.1995

Sector: Light Industry

Region: Asia 1

Projections of Input- Coefficients for 1990 and 2000

Annual average rate of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
	.2218	.2212	.2207	.2201	.2196	.2190	.2185	.2180	.2174	.2169
	.0244	.0244	.0244	.0243	.0243	.0243	.0243	.0243	.0243	.0242
	.0205	.0204	.0204	.0203	.0202	.0202	.0201	.0201	.0200	.0199
	.0598	.0605	.0611	.0617	.0624	.0630	.0636	.0643	.0649	.0655
	.1495	.1497	.1499	.1501	.1503	.1505	.1507	.1509	.1511	.1513
	.0051	.0051	.0052	.0052	.0052	.0052	.0053	.0053	.0053	.0053
	.0075	.0075	.0075	.0075	.0075	.0075	.0075	.0075	.0075	.0075
	.1150	.1147	.1144	.1141	.1138	.1135	.1132	.1129	.1126	.1123
	.3960	.3961	.3961	.3962	.3963	.3963	.3964	.3965	.3965	.3966
Coordinates:	-.0334	-.0341	-.0348	-.0354	-.0361	-.0367	-.0374	-.0380	-.0387	-.0392
	-.0528	-.0528	-.0529	-.0529	-.0529	-.0530	-.0530	-.0531	-.0531	-.0531
	.3106	.3100	.3094	.3086	.3082	.3077	.3071	.3065	.3060	.3054
	.2218	.2210	.2201	.2193	.2185	.2176	.2168	.2160	.2152	.2144
	.0244	.0244	.0243	.0243	.0243	.0243	.0242	.0242	.0242	.0242
	.0205	.0204	.0203	.0202	.0201	.0200	.0199	.0198	.0197	.0197
	.0598	.0608	.0618	.0627	.0637	.0646	.0656	.0665	.0674	.0683
	.1495	.1498	.1501	.1504	.1507	.1510	.1513	.1516	.1519	.1522
	.0051	.0051	.0052	.0052	.0053	.0053	.0053	.0054	.0054	.0055
	.0075	.0075	.0075	.0075	.0075	.0075	.0075	.0075	.0075	.0075
	.1150	.1145	.1141	.1136	.1132	.1127	.1123	.1119	.1114	.1110
	.3960	.3961	.3962	.3963	.3964	.3965	.3966	.3967	.3968	.3969
Coordinates:	-.0334	-.0344	-.0354	-.0364	-.0374	-.0384	-.0394	-.0403	-.0413	-.0422
	-.0528	-.0528	-.0529	-.0530	-.0530	-.0531	-.0531	-.0532	-.0532	-.0533
	.3106	.3097	.3088	.3079	.3071	.3062	.3053	.3045	.3036	.3028

Projections of Input Coefficients for 1990 and 2000

Inputs from	**Annual Average Rates of Growth of GDP/c**									
0	1	2	3	4	5	6	7	8	9
1	.0941	.0935	.0930	.0924	.0919	.0913	.0908	.0903	.0897	.0892
2	.0032	.0032	.0032	.0031	.0031	.0031	.0031	.0031	.0031	.0030
3	.0124	.0123	.0123	.0122	.0121	.0121	.0120	.0120	.0119	.0118
4	.1005	.1012	.1018	.1024	.1031	.1037	.1043	.1050	.1056	.1062
5	.3080	.3082	.3084	.3086	.3088	.3090	.3092	.3094	.3096	.3098
6	.0064	.0064	.0065	.0065	.0065	.0065	.0066	.0066	.0066	.0066
7	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005
8	.1244	.1241	.1238	.1235	.1232	.1229	.1226	.1223	.1220	.1217
A	.3500	.3501	.3501	.3502	.3503	.3503	.3504	.3505	.3505	.3506
Coordinates:										
X	-.1000	-.1006	-.1013	-.1020	-.1026	-.1033	-.1039	-.1046	-.1052	-.1058
Y	.0212	.0212	.0212	.0211	.0211	.0211	.0210	.0210	.0210	.0209
Z	.2145	.2139	.2133	.2127	.2121	.2115	.2110	.2104	.2098	.2093
1	.0941	.0933	.0924	.0916	.0908	.0899	.0891	.0883	.0875	.0867
2	.0032	.0032	.0031	.0031	.0031	.0031	.0030	.0030	.0030	.0030
3	.0124	.0123	.0122	.0121	.0120	.0119	.0118	.0117	.0116	.0116
4	.1005	.1015	.1025	.1034	.1044	.1053	.1063	.1072	.1081	.1090
5	.3080	.3083	.3086	.3089	.3092	.3095	.3098	.3101	.3104	.3107
6	.0064	.0064	.0065	.0065	.0066	.0066	.0066	.0067	.0067	.0068
7	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005
8	.1244	.1239	.1235	.1230	.1226	.1221	.1217	.1213	.1208	.1204
A	.3500	.3501	.3502	.3503	.3504	.3505	.3506	.3507	.3508	.3509
Coordinates										
X	-.1000	-.1010	-.1020	-.1030	-.1040	-.1049	-.1059	-.1069	-.1078	-.1088
Y	.0212	.0212	.0211	.0211	.0210	.0210	.0209	.0209	.0208	.0208
Z	.2145	.2136	.2127	.2118	.2109	.2101	.2092	.2083	.2075	.2067

Sector: Light Industry

Region: Latin America

Projections of Input Coefficients for 1990 and 2000

Annual Average Rates of Growth of GDP/a

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0440	.0434	.0429	.0423	.0418	.0412	.0407	.0402	.0396	.0391
2	.0101	.0101	.0101	.0100	.0100	.0100	.0100	.0100	.0100	.0099
3	.0194	.0193	.0193	.0192	.0191	.0191	.0190	.0190	.0189	.0188
4	.1370	.1377	.1383	.1389	.1396	.1402	.1408	.1415	.1421	.1427
5	.2305	.2307	.2309	.2311	.2313	.2315	.2317	.2319	.2321	.2323
6	.0053	.0053	.0054	.0054	.0054	.0054	.0055	.0055	.0055	.0055
7	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003
8	.1870	.1874	.1873	.1870	.1867	.1864	.1861	.1858	.1855	.1852
9	.3649	.3650	.3650	.3651	.3652	.3652	.3653	.3654	.3654	.3655
Coordinates x.y.c	-.1247	-.1254	-.1260	-.1267	-.1274	-.1280	-.1287	-.1293	-.1299	-.1305
	.0953	.0952	.0952	.0951	.0951	.0951	.0950	.0950	.0950	.0949
	.1943	.1937	.1931	.1925	.1919	.1914	.1908	.1902	.1897	.1891
1	.0440	.0432	.0428	.0415	.0407	.0398	.0390	.0382	.0374	.0366
2	.0101	.0101	.0100	.0100	.0100	.0100	.0099	.0099	.0099	.0099
3	.0194	.0193	.0192	.0191	.0190	.0189	.0188	.0187	.0186	.0186
4	.1370	.1380	.1390	.1399	.1409	.1418	.1428	.1437	.1446	.1455
5	.2305	.2308	.2311	.2314	.2317	.2320	.2323	.2326	.2329	.2332
6	.0053	.0053	.0054	.0054	.0055	.0055	.0055	.0056	.0056	.0057
7	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003
8	.1870	.1874	.1870	.1865	.1861	.1856	.1852	.1848	.1843	.1839
9	.3649	.3650	.3651	.3652	.3653	.3654	.3655	.3656	.3657	.3658
Coordinates x.y.c	-.1247	-.1257	-.1267	-.1277	-.1287	-.1297	-.1306	-.1316	-.1325	-.1335
	.0953	.0952	.0951	.0951	.0950	.0950	.0949	.0949	.0948	.0948
	.1943	.1934	.1925	.1916	.1907	.1899	.1890	.1882	.1873	.1865

Projections of Input Coefficients for 1990 and 2000

Inputs from	Annual Average Rates of Growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
	.0351	.0345	.0340	.0334	.0329	.0323	.0318	.0313	.0307	.0302
	.0051	.0051	.0051	.0050	.0050	.0050	.0050	.0050	.0050	.0049
3	.0199	.0198	.0198	.0197	.0196	.0196	.0195	.0195	.0194	.0193
4	.1565	.1572	.1578	.1584	.1591	.1597	.1603	.1610	.1616	.1622
5	.2445	.2447	.2449	.2451	.2453	.2455	.2457	.2459	.2461	.2463
6	.0160	.0160	.0161	.0161	.0161	.0161	.0162	.0162	.0162	.0162
7	.0111	.0111	0111	.0111	.0111	.0111	.0111	.0111	.0111	.0111
8	.0857	.0854	.0851	.0848	.0845	.0842	.0839	.0836	.0833	.0830
A	.4256	.4257	.4257	.4258	.4259	.4259	.4260	.4261	.4261	.4262
Coordinates:										
X	-.2099	-.2106	-.2113	-.2119	-.2126	-.2133	-.2139	-.2145	-.2152	-.2158
Y	.0105	.0104	.0104	.0104	.0103	.0103	.0103	.0102	.0102	.0101
Z	.2065	.2059	.2053	.2047	.2041	.2036	.2030	.2024	.2019	.2013
1	.0351	.0343	.0334	.0326	.0318	.0309	.0301	.0293	.0285	.0277
2	.0051	.0051	.0050	.0050	.0050	.0050	.0049	.0049	.0049	.0049
3	.0199	.0198	.0197	.0196	.0195	.0194	.0193	.0192	.0191	.0191
4	.1565	.1575	.1585	.1594	.1604	.1613	.1623	.1632	.1641	.1650
5	.2445	.2448	.2451	.2454	.2457	.2460	.2463	.2466	.2469	.2472
6	.0160	.0160	.0161	.0161	.0162	.0162	.0162	.0163	.0163	.0164
7	.0111	.0111	.0111	.0111	.0111	.0111	.0111	.0111	.0111	.0111
8	.0857	.0852	.0848	.0843	.0839	.0834	.0830	.0826	.0821	.0817
A	.4256	.4257	.4258	.4259	.4260	.4261	.4262	.4263	.4264	.4265
Coordinates										
X	-.2099	-.2110	-.2120	-.2130	-.2139	-.2149	-.2159	-.2168	-.2178	-.2187
Y	.0105	.0104	.0104	.0103	.0103	.0102	.0101	.0101	.0100	.0100
Z	.2065	.2056	.2047	.2038	.2030	.2021	.2012	.2004	.1996	.1987

Region: Western Europe

Sector: High- Industry

Projections of Input Coefficients for 1990 and 2000

Inputs from	Annual average rates of growth									
	0	1	2	3	4	5	6	7	8	9
1	.0848	.0842	.0837	.0831	.0826	.0820	.0815	.0810	.0804	.0799
2	.0036	.0036	.0036	.0035	.0035	.0035	.0035	.0035	.0035	.0034
3	.0135	.0134	.0134	.0133	.0132	.0132	.0131	.0131	.0130	.0129
4	.1900	.1907	.1913	.1919	.1926	.1932	.1938	.1945	.1951	.1957
5	.2043	.2045	.2047	.2049	.2051	.2053	.2055	.2057	.2059	.2061
6	.0059	.0059	.0060	.0060	.0060	.0060	.0061	.0061	.0061	.0061
7	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013
8	.1477	.1474	.1471	.1468	.1465	.1462	.1459	.1456	.1453	.1450
VA	.3485	.3486	.3486	.3487	.3488	.3488	.3489	.3490	.3490	.3491
Coordinates:										
X	-.1128	-.1135	-.1141	-.1148	-.1154	-.1161	-.1167	-.1174	-.1180	-.1186
Y	.0331	.0330	.0330	.0330	.0329	.0329	.0328	.0328	.0328	.0327
Z	.1549	.1543	.1537	.1531	.1526	.1520	.1514	.1508	.1503	.1497
1	.0848	.0840	.0831	.0823	.0815	.0806	.0798	.0790	.0782	.0774
2	.0036	.0036	.0035	.0035	.0035	.0035	.0034	.0034	.0034	.0034
3	.0135	.0134	.0133	.0132	.0131	.0130	.0129	.0128	.0127	.0127
4	.1900	.1910	.1920	.1929	.1939	.1948	.1958	.1967	.1976	.1985
5	.2043	.2046	.2049	.2052	.2055	.2058	.2061	.2064	.2067	.2070
6	.0059	.0059	.0060	.0060	.0061	.0061	.0061	.0062	.0062	.0063
7	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013
8	.1477	.1472	.1468	.1463	.1459	.1454	.1450	.1446	.1441	.1437
VA	.3485	.3486	.3487	.3488	.3489	.3490	.3491	.3492	.3493	.3494
Coordinates										
X	-.1128	-.1138	-.1148	-.1158	-.1168	-.1178	-.1187	-.1197	-.1206	-.1216
Y	.0331	.0330	.0330	.0329	.0328	.0328	.0327	.0327	.0326	.0326
Z	.1549	.1540	.1531	.1522	.1514	.1505	.1496	.1488	.1480	.1471

Sector: Light Industry

Region: Japan

Projections of Input Coefficients for 1990 and 2000

Inputs from	Annual Average Rates of Growth of GDP/c									
	0	1	2	3	4	5	6	7	8	9
.	.0165	.0159	.0154	.0148	.0143	.0137	.0132	.0127	.0121	.0116
-	.0031	.0031	.0031	.0030	.0030	.0030	.0030	.0030	.0030	.0029
2	.0096	.0095	.0095	.0094	.0093	.0093	.0092	.0092	.0091	.0090
4	.1884	.1891	.1897	.1903	.1910	.1916	.1922	.1929	.1935	.1941
c	.2282	.2284	.2286	.2288	.2290	.2292	.2294	.2296	.2298	.2300
t	.0199	.0199	.0200	.0200	.0200	.0200	.0201	.0201	.0201	.0201
	.0019	.0019	.0019	.0019	.0019	.0019	.0019	.0019	.0019	.0019
8	.1235	.1232	.1229	.1226	.1223	.1220	.1217	.1214	.1211	.1208
A	.4086	.4087	.4087	.4088	.4089	.4089	.4090	.4091	.4091	.4092
Coordinates:										
X	-.2037	-.2044	-.2050	-.2057	-.2064	-.2070	-.2077	-.2083	-.2089	-.2096
Y	.0484	.0484	.0483	.0483	.0482	.0482	.0482	.0481	.0481	.0481
Z	.1722	.1716	.1710	.1704	.1698	.1692	.1687	.1681	.1675	.1670
1	.0165	.0157	.0148	.0140	.0132	.0123	.0115	.0107	.0099	.0091
2	.0031	.0031	.0030	.0030	.0030	.0030	.0029	.0029	.0029	.0029
3	.0096	.0095	.0094	.0093	.0092	.0091	.0090	.0089	.0088	.0088
4	.1884	.1894	.1904	.1913	.1923	.1932	.1942	.1951	.1960	.1969
5	.2282	.2285	.2288	.2291	.2294	.2297	.2300	.2303	.2306	.2309
6	.0199	.0199	.0200	.0200	.0201	.0201	.0201	.0202	.0202	.0203
7	.0019	.0019	.0019	.0019	.0019	.0019	.0019	.0019	.0019	.0019
8	.1235	.1230	.1226	.1221	.1217	.1212	.1208	.1204	.1199	.1195
A	.4086	.4087	.4088	.4089	.4090	.4091	.4092	.4093	.4094	.4095
Coordinates										
X	-.2037	-.2047	-.2057	-.2067	-.2077	-.2087	-.2096	-.2106	-.2115	-.2125
Y	.0484	.0483	.0483	.0482	.0482	.0481	.0481	.0480	.0479	.0479
Z	.1722	.1713	.1704	.1695	.1686	.1678	.1669	.1661	.1652	.1644

VI-4

REVIEW OF FAST RESULTS

Inputs from:	Regression analysis		February 1980
	October 1970		
	y,p,d	industry composition	correlation coefficient[*]
agriculture			-.322
agri-food			-.038
energy		electricity, machinery	-.-96
basic products	p	metal ore, chemicals, metals	.'03
light industry		apparel,printing	.322
equipment	y		.''5
construction	y		.'50
services		trade	-.272
value added			.059

Factor analysis: Influence of degree of processing(value added coefficients and basic products).

Link between the factor analysis and the February 1980 regression coefficients established for the following coefficients: a_{46}, a_{56}, a_{86}

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[*] See Table 0c, last column

Section: Equipment Goods

Table 0a : Technology vectors by regions

Inputs from:	Tropical Africa	Near East	Asia 1	Asia 2	Latin America	Western Europe	Japan	North America
1	.0016		.0056	.0072	.0001		.0003	
2	.0012	.0005	.0142	.0022		.0003		.0013
3	.0176	.0613	.0248	.0147	.0113	.0165	.0107	.0086
4	.1217	.0966	.1872	.1617	.1178	.1407	.1517	.1390
5	.0514	.0114	.0667	.0573	.0648	.1233	.0535	.0789
6	.2456	.1135	.1541	.2767	.2227	.1663	.2893	.2498
7	.0032	.0017	.0190	.0010		.0088	.0011	.0020
8	.2492	.3345	.1880	.1458	.1529	.0955	.1367	.1300
VA	.3081	.3800	.3399	.3400	.4300	.4482	.3564	.3900
Coordinates:								
X	.1437	.2178	.0646	.0299	.0254	-.0415	.0199	.0070
Y	.3814	.4642	.4089	.3922	.4725	.4860	.4631	.4340
Z	.0895	.0677	.1360	.1056	.0459	.0504	.0916	.0694

Table 0b: Eigenvectors of the factor analysis

Inputs from:	x	y	z
1	-.0124	.0144	.0418
2	.0032	.0014	.0029
3	.0148	.0446	.0037
4	-.1990	.1637	.9635
5	-.0658	.1180	-.0912
6	.0018	.0110	.0034
7			
8	.9535	.2556	.1506
VA	-.2159	.9443	-.1972

Table 0c: Incremental technology vectors and regression coefficients

(10^{-4})

Inputs from:	Incremental vector: calculated	Incremental vector: corrected	b(log GTF/c)
1	.8245	.8245	- 5.4457
2	-.0814	-.0814	- .0728
3	1.8250	1.8250	- 5.3841
4	6.3532	6.3532	6.3532
5	10.0890	10.0890	10.0890
6		2.3591	15.7087
7	.4979	.4979	.6491
8	-25.2987	-25.2987	-25.2987
VA	62.6273	3.4314	3.4314
Coordinates			
dX	-39.5511	-26.7728	
dY	55.0016	-.8961	
dZ	-10.9158	.7575	

Projections of input coefficients for 198? and 200?

Inputs from

Annual average rates of growth of GDP/c

	0	1	2	3	4	5	6	7	8	9
1	.0016	.0016	.0016	.0016	.0017	.0017	.0017	.0017	.0017	.0017
2	.0012	.0012	.0012	.0012	.0012	.0012	.0012	.0012	.0012	.0012
3	.0176	.0176	.0177	.0177	.0177	.0178	.0178	.0178	.0179	.0179
4	.1217	.1218	.1220	.1221	.1222	.1223	.1224	.1226	.1227	.1228
5	.0514	.0516	.0518	.0520	.0522	.0524	.0526	.0528	.0530	.0531
6	.2456	.2456	.2457	.2457	.2458	.2458	.2459	.2459	.2460	.2460
7	.0032	.0032	.0032	.0032	.0032	.0032	.0033	.0033	.0033	.0033
8	.2492	.2487	.2482	.2477	.2472	.2467	.2463	.2458	.2453	.2448
VA	.3081	.3082	.3082	.3083	.3084	.3084	.3085	.3086	.3086	.3087
Coordinates:										
X	.1437	.1432	.1427	.1422	.1416	.1411	.1406	.1401	.1396	.1391
Y	.3814	.3814	.3814	.3814	.3814	.3814	.3813	.3813	.3813	.3813
Z	.0895	.0895	.0895	.0895	.0895	.0896	.0896	.0896	.0896	.0896
1	.0016	.0016	.0016	.0017	.0017	.0017	.0017	.0018	.0018	.0018
2	.0012	.0012	.0012	.0012	.0012	.0012	.0012	.0012	.0012	.0012
3	.0176	.0177	.0177	.0178	.0178	.0179	.0179	.0180	.0180	.0181
4	.1217	.1219	.1221	.1223	.1224	.1226	.1228	.1230	.1232	.1233
5	.0514	.0517	.0520	.0523	.0526	.0529	.0532	.0534	.0537	.0540
6	.2456	.2457	.2457	.2458	.2459	.2459	.2460	.2461	.2461	.2462
7	.0032	.0032	.0032	.0032	.0033	.0033	.0033	.0033	.0033	.0033
8	.2492	.2484	.2477	.2470	.2462	.2455	.2448	.2441	.2434	.2427
VA	.3081	.3082	.3083	.3084	.3085	.3086	.3087	.3088	.3089	.3090
Coordinates										
X	.1437	.1429	.1422	.1414	.1406	.1398	.1391	.1383	.1376	.1368
Y	.3814	.3814	.3814	.3814	.3813	.3813	.3813	.3813	.3812	.3812
Z	.0895	.0895	.0895	.0896	.0896	.0896	.0896	.0896	.0897	.0897

Sector: Equipment Goods

Region: Tropical Africa

Projections of Input Coefficients for 1990 and 2000

Inputs from

Annual Average Rates of Growth of GDP/c

	0	1	2	3	4	5	6	7	8	9
1		.0000	.0000	.0000	.0001	.0001	.0001	.0001	.0001	.0001
2	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005
3	.0613	.0613	.0614	.0614	.0614	.0615	.0615	.0615	.0616	.0616
4	.0966	.0967	.0969	.0970	.0971	.0972	.0973	.0975	.0976	.0977
5	.0114	.0116	.0118	.0120	.0122	.0124	.0126	.0128	.0130	.0131
6	.1135	.1135	.1136	.1136	.1137	.1137	.1138	.1138	.1139	.1139
7	.0017	.0017	.0017	.0017	.0017	.0017	.0018	.0018	.0018	.0018
8	.3345	.3340	.3335	.3330	.3325	.3320	.3316	.3311	.3306	.3301
VA	.3800	.3801	.3801	.3802	.3803	.3803	.3804	.3805	.3805	.3806

Coordinates:

	0	1	2	3	4	5	6	7	8	9
X	.2178	.2173	.2168	.2163	.2157	.2152	.2147	.2142	.2137	.2132
Y	.4642	.4642	.4642	.4642	.4641	.4641	.4641	.4641	.4641	.4641
Z	.0677	.0677	.0677	.0678	.0678	.0678	.0678	.0678	.0678	.0678

	0	1	2	3	4	5	6	7	8	9
1		.0000	.0000	.0001	.0001	.0001	.0001	.0002	.0002	.0002
2	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005	.0005
3	.0613	.0614	.0614	.0615	.0615	.0616	.0616	.0617	.0617	.0618
4	.0966	.0968	.0970	.0972	.0973	.0975	.0977	.0979	.0981	.0982
5	.0114	.0117	.0120	.0123	.0126	.0129	.0132	.0134	.0137	.0140
6	.1135	.1136	.1136	.1137	.1138	.1138	.1139	.1140	.1140	.1141
7	.0017	.0017	.0017	.0017	.0018	.0018	.0018	.0018	.0018	.0018
8	.3345	.3337	.3330	.3323	.3315	.3308	.3301	.3294	.3287	.3280
VA	.3800	.3801	.3802	.3803	.3804	.3805	.3806	.3807	.3808	.3809

Coordinates:

	0	1	2	3	4	5	6	7	8	9
X	.2178	.2170	.2163	.2155	.2147	.2139	.2132	.2124	.2117	.2109
Y	.4642	.4642	.4642	.4641	.4641	.4641	.4641	.4640	.4640	.4640
Z	.0677	.0677	.0678	.0678	.0678	.0678	.0678	.0679	.0679	.0679

Inputs
from

Annual average rates of growth of GDP/c

	0	1	2	3	4	5	6	7	8	9
	.0056	.0056	.0056	.0056	.0057	.0057	.0057	.0057	.0057	.0057
z	.0142	.0142	.0142	.0142	.0142	.0142	.0142	.0142	.0142	.0142
	.0248	.0248	.0249	.0249	.0249	.0250	.0250	.0250	.0251	.0251
4	.1872	.1873	.1875	.1876	.1877	.1878	.1879	.1881	.1882	.1883
	.0667	.0669	.0671	.0673	.0675	.0677	.0679	.0681	.0683	.0684
c	.1541	.1541	.1542	.1542	.1543	.1543	.1544	.1544	.1545	.1545
	.0190	.0190	.0190	.0190	.0190	.0190	.0191	.0191	.0191	.0191
A	.1880	.1875	.1870	.1865	.1860	.1855	.1851	.1846	.1841	.1836
Coordinates:	.3399	.3400	.3400	.3401	.3402	.3402	.3403	.3404	.3404	.3405
X	.0646	.0641	.0636	.0630	.0625	.0620	.0615	.0610	.0605	.0600
Y	.4089	.4089	.4089	.4089	.4089	.4088	.4088	.4088	.4088	.4088
Z	.1360	.1360	.1360	.1360	.1361	.1361	.1361	.1361	.1361	.1361
1	.0056	.0056	.0056	.0057	.0057	.0057	.0057	.0058	.0058	.0058
2	.0142	.0142	.0142	.0142	.0142	.0142	.0142	.0142	.0142	.0142
3	.0248	.0249	.0249	.0250	.0250	.0251	.0251	.0252	.0252	.0142
4	.1872	.1874	.1876	.1878	.1879	.1881	.1883	.1885	.1887	.1888
5	.0667	.0670	.0673	.0676	.0679	.0682	.0685	.0687	.0690	.0693
6	.1541	.1542	.1542	.1543	.1544	.1544	.1545	.1546	.1546	.1547
7	.0190	.0190	.0190	.0190	.0191	.0191	.0191	.0191	.0191	.0191
8	.1880	.1872	.1865	.1858	.1850	.1843	.1836	.1829	.1822	.1815
A	.3399	.3400	.3401	.3402	.3403	.3404	.3405	.3406	.3407	.3408
Coordinates										
X	.0646	.0638	.0630	.0622	.0615	.0607	.0599	.0592	.0584	.0577
Y	.4089	.4089	.4089	.4088	.4088	.4088	.4088	.4087	.4087	.4087
Z	.1360	.1360	.1360	.1361	.1361	.1361	.1361	.1362	.1362	.1362

Projections of Input Coefficients for 1990 and 2000

Inputs from

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0002	.0002	.0002	.0002	.0003	.0003	.0003	.0003	.0003	.0003
2	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022
3	.0147	.0147	.0148	.0148	.0148	.0149	.0149	.0149	.0150	.0150
4	.1617	.1618	.1620	.1621	.1622	.1623	.1624	.1626	.1627	.1628
5	.0573	.0575	.0577	.0579	.0581	.0583	.0585	.0587	.0589	.0590
6	.2767	.2767	.2768	.2768	.2769	.2769	.2770	.2770	.2771	.2771
7	.0010	.0010	.0010	.0010	.0010	.0010	.0011	.0011	.0011	.0011
8	.1458	.1453	.1448	.1443	.1438	.1433	.1429	.1424	.1419	.1414
VA	.3400	.3401	.3401	.3402	.3403	.3403	.3404	.3405	.3405	.3406
Coordinates: X	.0299	.0294	.0288	.0283	.0278	.0273	.0268	.0263	.0258	.0253
Y	.3922	.3922	.3922	.3922	.3921	.3921	.3921	.3921	.3921	.3921
Z	.1056	.1056	.1056	.1056	.1056	.1056	.1056	.1057	.1057	.1057
1	.0002	.0002	.0002	.0003	.0003	.0003	.0003	.0004	.0004	.0004
2	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022
3	.0147	.0148	.0148	.0149	.0149	.0150	.0150	.0151	.0151	.0152
4	.1617	.1619	.1621	.1623	.1624	.1626	.1628	.1630	.1632	.1633
5	.0573	.0576	.0579	.0582	.0585	.0588	.0591	.0593	.0596	.0599
6	.2767	.2768	.2768	.2769	.2770	.2770	.2771	.2772	.2772	.2773
7	.0010	.0010	.0010	.0010	.0011	.0011	.0011	.0011	.0011	.0011
8	.1458	.1450	.1443	.1436	.1428	.1421	.1414	.1407	.1400	.1393
VA	.3400	.3401	.3402	.3403	.3404	.3405	.3406	.3407	.3408	.3409
Coordinates X	.0299	.0291	.0283	.0275	.0268	.0260	.0252	.0245	.0237	.0230
Y	.3922	.3922	.3922	.3921	.3921	.3921	.3921	.3920	.3920	.3920
Z	.1056	.1056	.1056	.1056	.1056	.1057	.1057	.1057	.1057	.1058

Sector: Equipment Goods

Region: Latin America

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0001	.0001	.0001	.0001	.0002	.0002	.0002	.0002	.0002	.0002
2		-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000
3	.0113	.0113	.0114	.0114	.0114	.0115	.0115	.0115	.0116	.0116
4	.1178	.1179	.1181	.1182	.1183	.1184	.1185	.1187	.1188	.1189
5	.0648	.0650	.0652	.0654	.0656	.0658	.0660	.0662	.0664	.0665
	.2227	.2227	.2228	.2228	.2229	.2229	.2230	.2230	.2231	.2231
		.0000	.0000	.0000	.0000	.0000	.0001	.0001	.0001	.0001
	.1529	.1524	.1519	.1514	.1509	.1504	.1500	.1495	.1490	.1485
	.4300	.4301	.4301	.4302	.4303	.4303	.4304	.4305	.4305	.4306
Coordinates: X	.0254	.0249	.0244	.0238	.0233	.0228	.0223	.0218	.0213	.0208
Y	.4725	.4725	.4725	.4725	.4725	.4725	.4724	.4724	.4724	.4724
Z	.0459	.0459	.0459	.0459	.0459	.0459	.0460	.0460	.0460	.0460
1	.0001	.0001	.0001	.0002	.0002	.0002	.0002	.0003	.0003	.0003
2		-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000
3	.0113	.0114	.0114	.0115	.0115	.0116	.0116	.0117	.0117	.0118
4	.1178	.1180	.1182	.1184	.1185	.1187	.1189	.1191	.1193	.1194
5	.0648	.0651	.0654	.0657	.0660	.0663	.0666	.0668	.0671	.0674
	.2227	.2228	.2228	.2229	.2230	.2230	.2231	.2232	.2232	.2233
		.0000	.0000	.0000	.0001	.0001	.0001	.0001	.0001	.0001
	.1529	.1521	.1514	.1507	.1499	.1492	.1485	.1478	.1471	.1464
	.4300	.4301	.4302	.4303	.4304	.4305	.4306	.4307	.4308	.4309
Coordinates: X	.0254	.0246	.0238	.0231	.0223	.0215	.020?	.0200	.0192	.0185
Y	.4725	.4725	.4725	.4725	.4724	.4724	.472?	.4724	.4723	.4723
Z	.0459	.0459	.0459	.0459	.0460	.0460	.04?3	.0460	.0460	.0461

Sector: Equipment Goods

Region: Western Europe

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0003	.0000	.0000	.0000	.0001	.0001	.0001	.0001	.0001	.0001
2	.0165	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003
3	.1407	.0165	.0166	.0166	.0166	.0167	.0167	.0167	.0168	.0168
4	.1233	.1408	.1410	.1411	.1412	.1413	.1414	.1416	.1417	.1418
5		.1235	.1237	.1239	.1241	.1243	.1245	.1247	.1249	.1250
Coordinates:										
X	.1663	.1663	.1664	.1664	.1665	.1665	.1666	.1666	.1667	.1667
Y	.0088	.0088	.0088	.0088	.0088	.0088	.0089	.0089	.0089	.0089
Z	.0955	.0950	.0945	.0940	.0935	.0930	.0926	.0921	.0916	.0911
	.4442	.4443	.4443	.4444	.4445	.4465	.4486	.4487	.4487	.4488
X	-.0415	-.0421	-.0426	-.0411	-.0436	-.0442	-.0447	-.0452	-.0457	-.0462
Y	.4860	.4860	.4860	.4860	.4860	.4860	.4859	.4859	.4859	.4859
Z	.0504	.0504	.0504	.0505	.0505	.0505	.0505	.0505	.0505	.0505
1	.0003	.0000	.0000	.0001	.0001	.0001	.0001	.0002	.0002	.0002
2	.0165	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003
3	.1407	.0166	.0166	.0167	.0167	.0168	.0168	.0169	.0169	.0170
4	.1233	.1409	.1411	.1413	.1414	.1416	.1418	.1420	.1422	.1423
5		.1236	.1239	.1242	.1245	.1248	.1251	.1253	.1256	.1259
Coordinates:										
X	.1663	.1664	.1664	.1665	.1666	.1666	.1667	.1668	.1668	.1669
Y	.0088	.0088	.0088	.0088	.0089	.0089	.0089	.0089	.0089	.0089
Z	.0955	.0947	.0940	.0933	.0925	.0918	.0911	.0904	.0897	.0890
	.4442	.4483	.4484	.4485	.4486	.4487	.4488	.4489	.4490	.4491
X	-.0415	-.0423	-.0431	-.0419	-.0447	-.0455	-.0462	-.0470	-.0477	-.0485
Y	.4860	.4860	.4860	.4860	.4859	.4859	.4859	.4859	.4858	.4858
Z	.0504	.0504	.0505	.0505	.0505	.0505	.0505	.0506	.0506	.0506

Sector: Equipment Goods

Region: Japan

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
	.0003	.0003	.0003	.0003	.0004	.0004	.0004	.0004	.0004	.0004
	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000
	.0107	.0107	.0108	.0108	.0108	.0109	.0109	.0109	.0110	.0110
	.1517	.1518	.1520	.1521	.1522	.1523	.1524	.1526	.1527	.1528
	.0535	.0537	.0539	.0541	.0543	.0545	.0547	.0549	.0551	.0552
	.2893	.2893	.2894	.2894	.2895	.2895	.2896	.2896	.2897	.2897
	.0011	.0011	.0011	.0011	.0011	.0011	.0012	.0012	.0012	.0012
	.1367	.1362	.1357	.1352	.1347	.1342	.1338	.1333	.1328	.1323
	.3564	.3565	.3565	.3566	.3567	.3567	.3568	.3569	.3569	.3570
Coordi-nates: X Y G	.0199	.0193	.0188	.0183	.0178	.0172	.0167	.0162	.0157	.0152
	.4031	.4031	.4031	.4031	.4030	.4030	.4030	.4030	.4030	.4030
	.0916	.0917	.0917	.0917	.0917	.0917	.0917	.0917	.0918	.0918
	.0003	.0003	.0003	.0004	.0004	.0004	.0004	.0005	.0005	.0005
	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000
	.0107	.0108	.0108	.0209	.0109	.0110	.0110	.0111	.0111	.0112
	.1517	.1519	.1521	.1523	.1524	.1526	.1528	.1530	.1532	.1533
	.0535	.0538	.0541	.0544	.0547	.0550	.0553	.0555	.0558	.0561
	.2893	.2894	.2894	.2895	.2896	.2896	.2897	.2898	.2898	.2899
	.0011	.0011	.0011	.0011	.0012	.0012	.0012	.0012	.0012	.0012
	.1367	.1359	.1352	.1345	.1337	.1330	.1323	.1316	.1309	.1302
	.3564	.3565	.3566	.3567	.3568	.3569	.3570	.3571	.3572	.3573
Coordi-nates: X Y G	.0199	.0191	.0183	.0175	.0167	.0159	.0152	.0144	.0137	.0129
	.4031	.4031	.4031	.4030	.4030	.4030	.4030	.4029	.4029	.4029
	.0916	.0917	.0917	.0917	.0917	.0918	.0918	.0918	.0918	.0918

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	0	1	2	3	4	5	6	7	8	9
1	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013
2	.0086	.0086	.0087	.0087	.0087	.0088	.0088	.0088	.0089	.0089
3	.1390	.1391	.1393	.1394	.1395	.1396	.1397	.1399	.1400	.1401
4	.0789	.0792	.0793	.0795	.0797	.0799	.0801	.0803	.0805	.0806
1	.2498	.2498	.2499	.2499	.2500	.2500	.2501	.2501	.2502	.2502
2	.0020	.0020	.0020	.0020	.0021	.0021	.0021	.0021	.0021	.0021
3	.1300	.1295	.1290	.1285	.1280	.1275	.1271	.1266	.1261	.1256
4	.3900	.3901	.3901	.3902	.3903	.3903	.3904	.3905	.3905	.3906
A Coordi-nates: X Y C	.0070	.0065	.0060	.0055	.0049	.0044	.0039	.0034	.0029	.0024
	.4340	.4339	.4339	.4339	.4339	.4339	.4339	.4338	.4338	.4338
	.6696	.6695	.6695	.6695	.6695	.6695	.6695	.6695	.6696	.6696
1	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013	.0013
2	.0086	.0087	.0087	.0088	.0088	.0089	.0089	.0090	.0090	.0091
3	.1390	.1392	.1394	.1396	.1397	.1399	.1401	.1403	.1405	.1406
4	.0789	.0792	.0795	.0798	.0801	.0804	.0807	.0809	.0812	.0815
1	.2498	.2499	.2499	.2500	.2501	.2501	.2502	.2503	.2503	.2504
2	.0020	.0020	.0020	.0020	.0021	.0021	.0021	.0021	.0021	.0021
3	.1300	.1292	.1285	.1278	.1270	.1263	.1256	.1249	.1242	.1235
4	.3900	.3901	.3902	.3903	.3904	.3905	.3906	.3907	.3908	.3909
A Coordi-nates: X Y C	.0070	.0062	.0055	.0047	.0039	.0031	.0024	.0016	.0009	.0001
	.4340	.4339	.4339	.4339	.4339	.4338	.4338	.4338	.4337	.4337
	.6696	.6695	.6695	.6695	.6695	.6696	.6696	.6696	.6696	.6696

REVIEW OF PAST RESULTS

Inputs from:	Regression analysis		February 1980
	October 1970		
	y,p,d	industry composition	correlation coefficient *)
agriculture	d		-.259
agri-food	y	services	.226
energy	p,d	services	.133
basic products	y,d	paper, metals, transport	.507
light industry	p,y	metal products	.212
equipment	p,y	transport	-.047
construction	y	services	.367
services			.359
value added			-.443

Factor analysis: Influence of population (size of the country, population pressure (large cities), of the value added share and statistical system (in the new SNA used e.g. in Western Europe , the government consumption is in the intermediate consumption).

Link between the factor analysis and the February 1980 regression coefficients established for the following coefficients: a_{48}, a_{vb}

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*) See Table 0c, last column

Sector: Services

Table 9a : Technology vectors by regions

Inputs from:	Tropical Africa	Near East	Asia 1	Asia 2	Latin America	Western Europe	Japan	North America
1	.0232	.0070	.0247	.0039	.0029	.0057	.0053	.0048
2	.0207	.0076	.0012	.0115	.0056	.0203	.0020	.0040
3	.0342	.0576	.0199	.0193	.0241	.0277	.0214	.0174
4	.0041	.0201	.0328	.0000	.0169	.0323	.0261	.0152
5	.0350	.0287	.0226	.0152	.0284	.0216	.0391	.0299
6	.0307	.0163	.0235	.0157	.0137	.0282	.0196	.0105
7	.0301	.0207	.0166	.0078	.0059	.0282	.0004	.0123
8	.1045	.1101	.0984	.2339	.1739	.1676	.1721	.2006
VA	.6101	.7350	.7602	.6757	.7350	.6720	.6629	.6925
Coordinates:								
X	.6075	.7170	.7302	.5533	.7115	.6907	.6626	.6740
Y	.0616	.0914	.0988	.0790	.0709	.0913	.0715	.0622
Z	.0232	.0455	.0202	.0241	.0330	.0209	.0302	.0329

Table 9b: Eigenvectors of the factor analysis

Inputs from:	x	y	z
1	-.0072	-.0173	-.0947
2	-.0505	-.0829	-.1613
3	-.0258	-.2077	.2744
4	-.0074	-.0528	-.0319
5	-.0276	-.7073	.7194
6	-.0501	-.0416	-.3131
7	-.1652	.4978	.2944
8			
VA	.0914	.1256	.0231

Table 9c: Incremental technology vectors and regression coefficients

(10^{-4})

Inputs from:	Incremental vector: calculated	corrected	b(log GDP/c)
1	1.0251	-1.6931	- 1.6931
2	0.7371	2.7140	2.7149
3	22.1570	1.4517	1.4517
4	4.3005	6.3045	6.3045
5	38.2073	2.4049	2.4049
6	5.3117	-.4873	- .4873
7	-00.9565	.8809	.8809
8		17.4635	17.5035
VA	-29.1510	-29.1610	-29.1618
Coordinates			
dX	-14.3160	-29.2772	
dY	-110.4725	-8.5072	
dZ	-.0001	-1.0457	

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/a

Inputs from	.	1	2	3	4	5	6	7	8	9
							.0068	.0068	.0067	.0067
							.0041	.0042	.0042	.0043
							.0578	.0578	.0578	.0579
							.0208	.0210	.0211	.0214
							.0283	.0283	.0284	.0284
							.0162	.0162	.0162	.0162
							.0268	.0268	.0268	.0269
							.1121	.1125	.1128	.1131
							.7266	.7261	.7255	.7250
Coordinates:							.7036	.7031	.7025	.7020
							.0909	.0908	.0907	.0906
							.0454	.0454	.0454	.0454
							.0067	.0067	.0066	.0066
							.0043	.0044	.0044	.0045
							.0579	.0579	.0579	.0580
							.0212	.0214	.0216	.0217
							.0284	.0285	.0286	.0286
							.0162	.0162	.0162	.0162
							.0269	.0269	.0269	.0269
							.1132	.1136	.1141	.1146
							.7249	.7241	.7233	.7225
Coordinates:							.7019	.7011	.7003	.6995
							.0906	.0905	.0904	.0902
							.0454	.0453	.0453	.0453

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	9
1	.0247	.0246	.0246	.0246	.0245	.0245	.0245	.0244	.0244
2	.0011	.0011	.0012	.0012	.0013	.0013	.0014	.0014	.0015
3	.0194	.0196	.0200	.0200	.0202	.0211	.0201	.0201	.0202
4	.0328	.0330	.0332	.0333	.0334	.0335	.0337	.0338	.0334
5	.0224	.0226	.0229	.0230	.0230	.0231	.0231	.0232	.0232
A Coord-inates:	.0235	.0235	.0235	.0235	.0235	.0234	.0234	.0234	.0234
	.0166	.0166	.0167	.0167	.0167	.0167	.0167	.0167	.0168
	.0997	.1001	.1005	.0998	.1011	.1004	.1008	.1011	.1014
X Y C	.7600	.7589	.7583	.7577	.7572	.7566	.7561	.7555	.7550
X Y C	.7362	.7377	.7365	.7359	.7354	.7398	.7343	.7337	.7532
	.0948	.0947	.0946	.0945	.0944	.0943	.0942	.0941	.0940
	.0200	.0200	.0201	.0201	.0201	.0201	.0200	.0200	.0200
1	.0247	.0246	.0245	.0245	.0245	.0244	.0244	.0243	.0243
2	.0011	.0012	.0012	.0013	.0014	.0015	.0016	.0016	.0017
3	.0199	.0200	.0200	.0201	.0201	.0202	.0202	.0202	.0203
4	.0328	.0332	.0334	.0335	.0337	.0339	.0341	.0343	.0344
5	.0224	.0229	.0230	.0231	.0232	.0232	.0233	.0234	.0234
6 Coord-inates:	.0234	.0235	.0235	.0234	.0234	.0234	.0234	.0234	.0234
7	.0166	.0167	.0167	.0167	.0167	.0168	.0168	.0168	.0168
8	.1098	.0994	.1000	.1005	.1010	.1015	.1019	.1024	.1024
X Y C	.7613	.7591	.7578	.7566	.7557	.7549	.7541	.7533	.7525
X Y C	.7552	.7378	.7356	.7348	.7340	.7351	.7523	.7515	.7507
	.0944	.0947	.0944	.0943	.0942	.0940	.0939	.0938	.0937
	.0202	.0201	.0201	.0201	.0200	.0200	.0200	.0199	.0199

Sector: Services

Region: Asia 2

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/o

Inputs from	1	2	3	4	5	6	7	8	9
	.0096	.0096	.0096	.0096	.0097	.0097	.0097	.0096	.0096
	.0115	.0116	.0117	.0117	.0118	.0118	.0119	.0119	.0120
	.0183	.0184	.0184	.0184	.0184	.0185	.0185	.0185	.0186
	.0090	.0092	.0094	.0095	.0096	.0097	.0099	.0100	.0101
	.0181	.0181	.0181	.0182	.0182	.0183	.0183	.0184	.0184
Coordi- nates	.0157	.0157	.0157	.0157	.0157	.0156	.0156	.0156	.0156
	.0074	.0074	.0075	.0075	.0075	.0075	.0075	.0075	.0076
	.2339	.2346	.2349	.2353	.2356	.2359	.2363	.2366	.2369
	.6757	.6746	.6740	.6734	.6729	.6723	.6718	.6712	.6707
	.6587	.6577	.6565	.6560	.6554	.6549	.6543	.6538	.6534
	.0780	.0780	.0788	.0787	.0786	.0785	.0784	.0783	.0783
	.0281	.0281	.0240	.0280	.0240	.0240	.0240	.0239	.0239
	.0096	.0096	.0097	.0097	.0097	.0096	.0096	.0095	.0095
	.0115	.0117	.0117	.0118	.0119	.0120	.0121	.0121	.0122
	.0183	.0184	.0184	.0185	.0185	.0186	.0186	.0186	.0187
	.0092	.0094	.0096	.0097	.0099	.0101	.0103	.0105	.0106
	.0181	.0181	.0182	.0183	.0184	.0184	.0185	.0186	.0186
Coordi- nates	.0157	.0157	.0157	.0156	.0156	.0156	.0156	.0156	.0156
	.0074	.0075	.0075	.0075	.0075	.0076	.0076	.0076	.0076
	.2359	.2349	.2355	.2361	.2365	.2370	.2374	.2379	.2384
	.6757	.6740	.6711	.6723	.6714	.6706	.6698	.6690	.6684
	.6587	.6565	.6577	.6546	.6540	.6532	.6523	.6515	.6507
	.0790	.0789	.0786	.0785	.0784	.0782	.0781	.0780	.0779
	.0281	.0281	.0280	.0240	.0239	.0239	.0239	.0238	.0238

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Projections of Input Coefficients for 1990 and 2000

Inputs from

Annual average rates of growth of GDP/c

Inputs from	··	1	2	3	4	5	6	7	8	9
1	.0057	.0057	.0056	.0056	.0056	.0055	.0055	.0055	.0054	.0054
2	.0293	.0294	.0294	.0295	.0295	.0296	.0296	.0207	.0207	.0208
4	.0277	.0277	.0278	.0278	.0278	.0278	.0279	.0279	.0279	.0280
c	.0323	.0324	.0325	.0327	.0328	.0329	.0330	.0332	.0333	.0334
	.0216	.0216	.0217	.0217	.0218	.0218	.0219	.0219	.0220	.0220
6	.0262	.0262	.0262	.0262	.0262	.0262	.0261	.0261	.0261	.0261
7	.0282	.0282	.0282	.0293	.0283	.0283	.0283	.0283	.0283	.0284
8	.1676	.1679	.1683	.1686	.1690	.1693	.1696	.1700	.1703	.1706
A	.6700	.6608	.6689	.6693	.6677	.6672	.6666	.6661	.6655	.6650
Coordinates:										
X	.6447	.6441	.6455	.6449	.6444	.6438	.6432	.6427	.6421	.6416
Y	.3913	.3913	.0912	.0911	.0910	.0909	.0908	.0907	.0906	.0906
Z	.0209	.0209	.0209	.0208	.0208	.0208	.0208	.0207	.0207	.0207
1	.0057	.0056	.0056	.0055	.0055	.0055	.0054	.0054	.0053	.0053
2	.0293	.0294	.0205	.0295	.0206	.0207	.0208	.0209	.0209	.0210
3	.0277	.0277	.0278	.0278	.0279	.0279	.0280	.0280	.0280	.0281
4	.0323	.0325	.0327	.0329	.0330	.0332	.0334	.0336	.0338	.0339
5	.0216	.0217	.0217	.0218	.0219	.0220	.0220	.0221	.0222	.0222
6	.0262	.0262	.0262	.0262	.0261	.0261	.0261	.0261	.0261	.0261
7	.1292	.0282	.0283	.0293	.0283	.0283	.1284	.0284	.0284	.0284
8	.1676	.1681	.1686	.1692	.1697	.1702	.1707	.1711	.1716	.1721
A	.6700	.6691	.6683	.6674	.6666	.6657	.5649	.6641	.6633	.6625
Coordinates										
X	.6867	.6458	.6449	.6451	.6432	.6424	.6415	.6407	.6399	.6391
Y	.1913	.0912	.0911	.0909	.0910	.0907	.0905	.0904	.0903	.0902
Z	.0209	.0209	.0208	.0208	.0208	.0207	.0207	.0207	.0206	.0206

Sector: Services

Region: Japan

Projections of Input Coefficients for 1990 and 2000

Annual average rates of growth of GDP/c

Inputs from	1	2	3	4	5	6	7	8	9
1		.1221	.1221	.0222	.0222	.1223	.0224	.0224	.0225
2	.1221	.1221	.1215	.1215	.0215	.0216	.0216	.0216	.0217
3	.1291	.1293	.1285	.0287	.0288	.0289	.0290	.0291	.0292
4	.1391	.0392	.0392	.0393	.0393	.0394	.0396	.0395	.0395
	.0106	.0106	.0196	.0196	.0196	.0195	.0195	.0195	.0195
	.0098	.0098	.0095	.0095	.0095	.0095	.0096	.0096	.0096
	.1721	.1728	.1731	.1737	.1735	.1738	.1741	.1745	.1748	.1751
	.6829	.6823	.6818	.6803	.6806	.6801	.6795	.6790	.6784	.6779
Coordinates	.6626	.6621	.6615	.6609	.6603	.6598	.6592	.6587	.6581	.6576
	.0715	.0718	.0713	.0712	.0712	.0704	.0710	.0709	.0708	.0707
	.0302	.0302	.0301	.0301	.0301	.0301	.0301	.0300	.0300	.0300
1	.0046	.0046	.0046	.0048	.0048	.0046	.0047	.0047	.0046	.0046
2	.0221	.0221	.0222	.0222	.0223	.0224	.0225	.0226	.0226	.0227
3	.0218	.0218	.0215	.0215	.0216	.0216	.0217	.0217	.0217	.0218
4	.0293	.0293	.0285	.0287	.0288	.0290	.0292	.0294	.0296	.0297
	.0392	.0392	.0303	.0303	.0394	.0395	.0395	.0396	.0397	.0397
	.0196	.0196	.0196	.0196	.0195	.0195	.0195	.0195	.0195	.0195
	.0098	.0098	.0095	.0095	.0095	.0095	.0096	.0096	.0096	.0096
	.1726	.1726	.1731	.1737	.1742	.1747	.1752	.1756	.1761	.1766
	.6820	.6820	.6812	.6803	.6795	.6786	.6778	.6773	.6762	.6754
Coordinates	.6628	.6618	.6609	.6592	.6592	.6584	.6575	.6567	.6559	.6551
	.0716	.0718	.0712	.0710	.0710	.0708	.0707	.0706	.0705	.0703
	.0302	.0302	.0301	.0301	.0361	.0360	.0300	.0300	.0299	.0299

Projections of Input Coefficients for 1980 and 2000

Annual average rates of growth of GDP/o

Inputs from		1	2	3	4	5	6	7	8	9
1	.0048	.0048	.0047	.0047	.0047	.0046	.0046	.0046	.0045	.0045
2	.0041	.0041	.0041	.0042	.0042	.0043	.0043	.0044	.0044	.0045
3	.0174	.0174	.0175	.0175	.0175	.0175	.0176	.0176	.0176	.0177
4	.0152	.0153	.0154	.0156	.0157	.0158	.0159	.0161	.0162	.0163
5	.0290	.0290	.0290	.0290	.0291	.0291	.0292	.0292	.0293	.0293
6	.0145	.0145	.0145	.0145	.0145	.0145	.0144	.0144	.0144	.0144
7	.0123	.0123	.0123	.0124	.0124	.0124	.0124	.0124	.0124	.0125
8	.2098	.2101	.2105	.2108	.2112	.2115	.2118	.2122	.2125	.2128
A	.6925	.6919	.6914	.6908	.6902	.6897	.6891	.6896	.6880	.6875
Coordinates: X	.6734	.6734	.6728	.6723	.6717	.6711	.6706	.6700	.6695	.6690
Y	.0822	.0821	.0820	.0819	.0819	.0818	.0817	.0816	.0815	.0814
Z	.0329	.0329	.0329	.0329	.0328	.0328	.0328	.0328	.0326	.0327
1	.0048	.0047	.0047	.0046	.0046	.0046	.0045	.0045	.0044	.0044
2	.0041	.0041	.0042	.0042	.0043	.0044	.0045	.0046	.0046	.0047
3	.0174	.0174	.0175	.0175	.0176	.0176	.0177	.0177	.0177	.0178
4	.0152	.0152	.0156	.0158	.0159	.0161	.0163	.0165	.0167	.0164
5	.0289	.0290	.0290	.0291	.0292	.0293	.0293	.0294	.0295	.0295
6	.0145	.0145	.0145	.0145	.0144	.0144	.0144	.0144	.0144	.0144
7	.0123	.0123	.0124	.0124	.0124	.0124	.0125	.0125	.0125	.0125
8	.2105	.2103	.2108	.2114	.2119	.2124	.2129	.2133	.2138	.2143
A	.6925	.6916	.6908	.6899	.6891	.6882	.6874	.6866	.6858	.6850
Coordinates: X	.6734	.6731	.6723	.6714	.6706	.6697	.6689	.6681	.6672	.6664
Y	.0822	.0821	.0819	.0818	.0817	.0815	.0814	.0813	.0812	.0810
Z	.0329	.0329	.0329	.0328	.0326	.0328	.0327	.0327	.0327	.0326