

**UNITED NATIONS  
ECONOMIC COMMISSION  
FOR LATIN AMERICA  
AND THE CARIBBEAN - ECLAC**

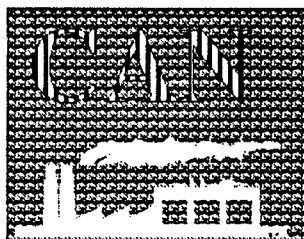


Distr.  
GENERAL

LC/G. 1863  
20 January 1997

ENGLISH  
ORIGINAL: SPANISH

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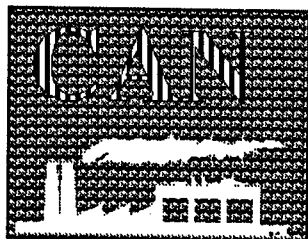


**Competitive Analysis of Nations**

**SOFTWARE TO EVALUATE AND DESCRIBE THE INTERNATIONAL  
COMPETITIVE ENVIRONMENT**

Version 2.0

**USER'S MANUAL**



## **Competitive Analysis of Nations**

(Software to evaluate and describe the international competitive environment)

Version 2.0

### **USER'S MANUAL**



Economic Commission for Latin America and the Caribbean  
Division of Production, Productivity and Management  
Joint ECLAC/UNIDO Industrial and Technological Development Unit

Santiago, Chile, 1997

The Competitive Analysis of Nations (CAN) computer software was designed in Paradox 4.02, using the MS-DOS (version 2.0) operating system, and was compressed using PKZIP 2 software. Paradox is a registered trade mark of Borland International, IBM of International Business Corporation, MS-DOS of Microsoft Corporation and PKZIP of PKWARE, Inc.

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ECLAC will provide support to national institutions using CAN, but cannot guarantee that such assistance will always be immediately available. The costs of such support (demonstrations and training seminar-workshops) will be borne entirely by the institution requesting it.

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**IMPORTANT NOTE:** The mathematical illustrations in this manual are based on statistical information available as of 15 January 1995. ECLAC updates the CAN database at the end of each calendar year, as the United Nations Statistical Information System (UNSI) in New York updates its data when it receives fresh information from countries. It is important to note that this statistical procedure does not invalidate the analytical methodology presented in this manual.

## CONTENTS

	<i>Page</i>
1. Foreword .....	1
2. Introduction .....	3
2.1 Sector share .....	4
2.2 Global and relative market share .....	4
2.3 Contribution .....	5
2.4 Specialization .....	5
2.5 Competitive matrix .....	5
2.6 Adaptability index .....	6
3. Fundamentals .....	7
3.1 Hardware and software requirements .....	7
3.2 Installation procedure .....	7
3.3 Keyboard .....	8
3.4 Menu .....	9
3.5 Data .....	9
3.5.1 Countries and groups of countries .....	10
3.5.2 Sectors (Standard International Trade Classification) (SITC), Rev. 2, 3 digits) .....	12
3.5.3 Years covered .....	14
4. Formulating a query .....	15
4.1 Countries and country operators .....	16
4.2 Sectors and sector operators .....	19
4.3 Period .....	21
4.4 Operators for queries on market share, contribution, specialization and sector share .....	22
4.5 Range operators for queries on rival share and rival growth .....	24
4.6 Matrix .....	26
4.7 Processing the data .....	26
5. Interpreting the report .....	27
5.1 Sorting the data (menu 1) .....	28
5.1.1 Natural sort .....	28
5.1.2 Dynamic rank (growth) .....	28
5.1.3 Static rank (structure) .....	29
5.2 Results: consolidated, detailed, adaptability index and graphs (menu 2) .....	30
5.2.1 Consolidated results .....	31
5.2.2 Detailed results .....	32
5.2.3 Adaptability report .....	33
5.2.4 Graph .....	34

6. Output: display, printer and file (menu 3) . . . . .	34
6.1 Screen display . . . . .	34
6.2 Printer . . . . .	34
6.3 File . . . . .	35
7. Practical examples . . . . .	35
7.1 Examples of country queries . . . . .	36
7.2 Examples of sector queries . . . . .	57
7.3 Examples of matrix queries . . . . .	62

## LIST OF TABLES

	<i>Page</i>
Table 1: Country codes and country group codes available in the database . . . . .	10
Table 2. Groups of countries . . . . .	11
Table 3. Sectors (SITC Rev. 2) . . . . .	12
Table 4. Years covered . . . . .	14
Table 5. Country operators . . . . .	18
Table 6. Sector operators . . . . .	21
Table 7. Consolidated results report in standard query mode . . . . .	31
Table 8. Consolidated results report in matrix query mode . . . . .	32
Table 9. Detailed report with matrix (first screen) . . . . .	32
Table 10. Adaptability report in matrix query mode . . . . .	33
Table 11. Identification of data in output file . . . . .	35

## 1. Foreword

In view of the dynamic growth of international trade and its likely intensification in the future, the issue of international competitiveness has become increasingly important to countries throughout the world, and particularly to developing countries. For this reason, ECLAC has made it a priority issue for its research and advisory assistance efforts.

Over the past 40 years, international trade has grown at a significantly higher rate than world output. This trend is due to a number of factors, including the growing variety and differentiation of products, increased specialization, trade within transnational corporations, the globalization of production and trade liberalization, both on a unilateral and a negotiated basis (e.g., GATT or regional integration agreements). Hence the need for countries to improve their competitiveness and take full advantage of linkages with the global economy.

An increase in the competitiveness of one country does not of course, imply a decline in the competitiveness of others in absolute terms, for international trade is not a zero-sum game. What it does mean, however, is that a country whose competitiveness improves will benefit relatively more from international trade. Thus, a country not only needs to be more efficient than its competitors in a given sector, but should also be involved, as far as possible, in the most dynamic sectors of world trade, and this is particularly true for a large country. Trade can then provide a strong boost to economic development.

Although the concept of competitiveness is relatively clear, it is the product of a number of factors. Competitiveness depends inter alia, on productivity and efficiency at the plant level, and the efficiency of the business environment, whether in terms of physical, scientific and technological infrastructure and its links with the system of production, or in terms of factor markets, macroeconomic policy, and the maintenance of key prices at around their long-term equilibrium values.

Given the multiplicity of factors, it is not surprising that there are various methods of measuring competitiveness, from the simplest - such as real effective exchange rates, which are easy to calculate - to the most complex, such as the world competitiveness scoreboard which try to take into account all the variables that affect competitiveness, but are, for all that reason, more costly to apply. As a contribution to this analysis, ECLAC has developed an indicator of competitiveness based on a country's market share of OECD imports and using through the Competitiveness Analysis of Nations (CAN) computer software, version 2.0 of which is presented here. (World Economic Forum, The World Competitiveness Report, Lausanne, IMD, an annual report).

The user-friendly CAN software permits measurement of export competitiveness using a simple methodology which provides a comprehensive picture of the dynamics and determinants of world trade, together with a frame of reference which serves as a starting point for identifying and evaluating strategies to bring about medium- and long-term linkages with the global economy.

The original CAN methodology was developed by Ousmène Mandeng, an associate expert from Germany, who worked at ECLAC from 1990 to 1992. Work on the technical aspects of version 2.0

(program design, data compilation and preparation of the user's manual) was supervised by Zaida Soto, assisted by Ricardo Vásquez. Gérard Fichet, Peter Bo Hansen and Michael Mortimore participated in different aspects of the project and organized promotional workshops that were conducted in a number of Latin American and other countries.

**Joseph Ramos**

**Director**

**Division of Production, Productivity and Management**

**ECLAC**

## 2. Introduction

The method of evaluation on which the CAN program is based measures the level of penetration and participation of countries in a given trade environment. It relies on analysis of market share and shift in market share, and incorporates some elements of business management. The main feature of the methodology is that it combines changes in a country's trade structure with changes in market patterns. It is assumed that these variables, taken together, are significant determinants of patterns of trade and competitiveness. The methodology has been described by Mandeng<sup>1</sup>, and will be explained here only where relevant to the use of the computer program.

The approach is essentially descriptive and aims at measuring a country's international competitiveness, without attempting to include all explanatory factors. It is based on a simple accounting framework. Competitiveness is related to a country's share of a given sector of international trade. Global competitiveness is understood as the total share in trade resulting from both competitiveness and sectoral growth. Thus, a country's penetration into international markets is a function of both its trade performance and sectoral trends. The interaction between trade performance and market trends defines a country's adaptability, considered a significant factor in explaining a country's evolution in the international trade arena. Some of these points have been discussed in relation to the deterioration of trade, the presence or absence of tariff barriers that impede trade flows, and the slow growth in demand for capital goods exports by developed countries. Breaking down competitiveness into trade performance and adaptability makes it easier to understand the forces that shape international trade.

The methodology, which provides a consistent framework for evaluation and terminology, is based on the following five indicators:

- |    |                 |   |
|----|-----------------|---|
| 1) | Market share:   | measures the weight of a country's OECD trade in a given sector in relation to the total OECD imports in that sector. |
| 2) | Contribution:   | measures a given sector's weight in relation to all sectors of a country's trade.                                     |
| 3) | Sector share:   | measures the weight of a given OECD sector in relation to all OECD sectors.   |
| 4) | Specialization: | compares contribution with sector share.  |
| 5) | Relative share: | compares the market share of one country with that of another country.  |

The formulas for calculating these indicators are as follows:

- |                    |                                      |
|--------------------|--------------------------------------|
| 1) Market share:   | $M_{ij}/M_i * 100$                   |
| 2) Contribution:   | $M_{ij}/M_j * 100$                   |
| 3) Sector share:   | $M_i/M * 100$                        |
| 4) Specialization: | $[2]/[3] = (M_{ij} * M)/(M_j * M_i)$ |
| 5) Relative share: | $M_{ij}/M_{ir}$                      |

---

<sup>1</sup> Mandeng, O., "International competitiveness and specialization"; CEPAL Review No. 45 (LC/G.1687-P), December 1991.



Where:

- $M_{ij}$ : OECD imports in sector  $i$  from country  $j$ .
- $M_j$ : OECD imports in all sectors from country  $j$ .
- $M_i$ : OECD imports in sector  $i$  from all countries.
- $M$ : Total OECD imports in all sectors.
- $M_{ir}$ : OECD imports in sector  $i$  from country  $r$ .

## 2.1 Sector share

Sector share indicates the relative importance of a sector in a given market. Shifts in the composition of imports show direction in which the market is trending. A distinction is made between **dynamic** sectors and **stagnant** sectors; (also referred to in the program as "increasing" and "declining" sectors). The importance of dynamic sectors in trade flows increases between two points in time, while that of stagnant sectors declines. This distinction determines a sector's attractiveness in terms of market trends.

## 2.2 Global and relative market share

Market share describes a country's competitive position within a sector. Competitiveness is linked to an increase in market share over a period of time. With regard to the imports of a given marketplace, competitiveness means that a country increases its share in a particular sector of the market's import, i.e. it becomes a more important supplier.

The concept of competitiveness relates to the weight and presence of a country in a given trade flow and refers mainly to quantitative share. An increase in market share is normally associated with a drive to raise competitiveness, although, since the term is relative, it may also reflect retreats by other competitors. In the case of OECD imports from a market, a country's ability to supply relatively more than its competitors is reflected in greater trade benefits.

A country's global market share is the weighted average of its shares in all sectors of the market and reflects a country's total presence mainly in a given trade flow. Normally, a country's primary objective is to increase its global market share, which is determined chiefly by the sectors in which it competes and by whether these sectors are increasing or declining. Increases in global market share, therefore, will depend both on the extent of expansion in those sectors and on the country's trade performance. A country's position in relation to sectoral trends is therefore an important aspect of its share in international trade.

Relative market share is the market share of the reference country compared to that of a rival country and is obtained by dividing the reference country's market share by the rival's market share. A relative market share greater than 1 indicates that a country has a bigger market share than its rival. Increases in relative market share signify that the reference country is growing faster in a given sector than the rival country. This indicator reflects the relative competitive position of countries and is very useful in comparing and evaluating competitiveness.

### 2.3 Contribution

Contribution relates to the composition of OECD imports from a given country. It reveals the relative importance of and country's dependence on certain sectors within that country's overall export structure. Shifts in this indicator reveal changes and in the country's trade structure and the direction of change. This indicator is an important element in the study of trade diversification.

### 2.4 Specialization

Specialization is an indicator of a country's competitiveness in a given sector relative to its global competitiveness and the importance of a given sector for that country in relation to that sector's importance in the OECD market. It provides an indication of a country's relative strength and the orientation of its drive for competitiveness, in instances where its share in a sector is growing more quickly than its global market share. This indicator describes the proportions of international trade and helps identify the relative advantages and disadvantages of countries in relation to the market.

The specialization index is a useful tool for clarifying the relative proportions of international trade, particularly with regard to developing countries, since it reveals basic aspects of the composition of OECD imports from those countries. Depending on the underlying trade classification adopted, it is possible to perform a detailed analysis of countries' specialization patterns. The specialization index provides useful elements for the study, for example of shifts over time in the pattern of trade specialization in manufactured goods.

These indicators facilitate deeper analysis of countries' competitiveness, using the competitive matrix and the adaptability index, which are discussed briefly below.

### 2.5 Competitive matrix

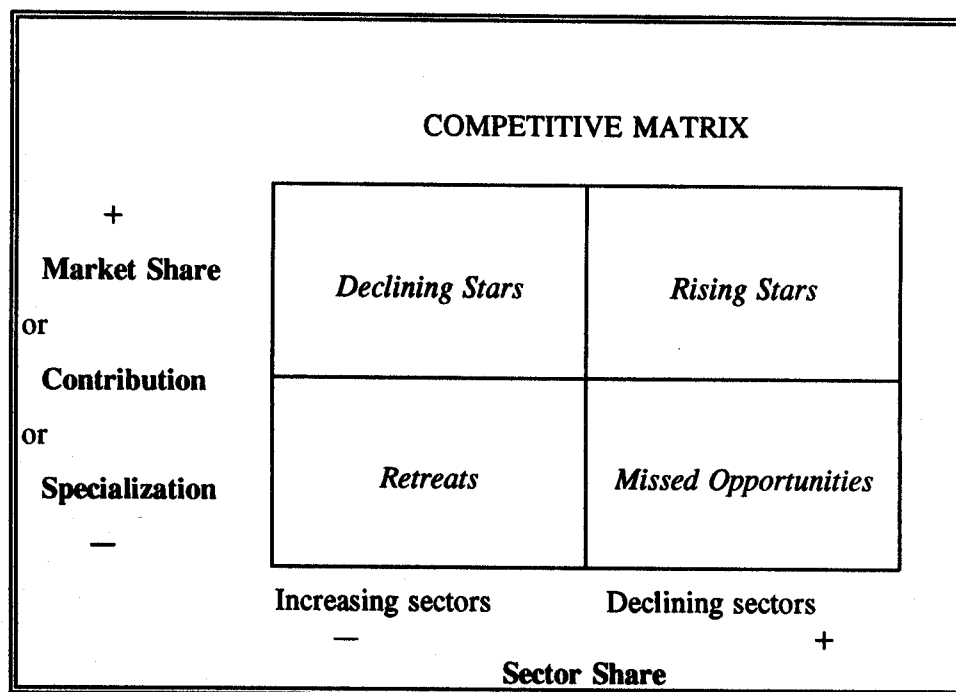
The competitive matrix is an integrated approach to the parameters mentioned above. It presents four different situations determined by **market share**, **contribution**, **specialization** and variation in **sector share**, which summarize a country's position with respect to market trends between two points in time.

Based on a distinction between **dynamic** sectors (whose sector share increases between two points in time) and **stagnant** sectors (whose sector share declines between two points in time), the matrix identifies:

- **Rising stars:** dynamic sectors in which the country's market share, contribution or specialization is increasing.
- **Declining stars:** stagnant sectors in which the country's market share, contribution or specialization is increasing.
- **Missed opportunities:** dynamic sectors in which the country's market share, contribution or specialization is decreasing.
- **Retreats:** stagnant sectors in which the country's market share, contribution or specialization is decreasing.

It should be noted that the above refers to three types of classification (or matrix), depending on the indicator chosen for grouping sectors.

Figure 1: Competitive matrix



The design of the competitive matrix is based on contribution and thus reflects the weight of each classification in a country's trade structure. The two right-hand quadrants show what proportion of a country's trade is conducted in dynamic sectors, while the two upper quadrants indicate in which sectors it is competitive. Varying the y-axis parameters makes it possible to focus on different aspects; for example, rising stars based on specialization are sectors in which a country's share increases faster, or decreases more slowly, than its global share, whereas rising stars based on market share are only those sectors in which the country effectively increases its market share.

The competitive matrix is a new way of looking at world trade. It brings together various dimensions that are fundamental to an understanding of trade, and provides new elements that can help describe and evaluate the international competitive environment. The matrix offers an integrated approach that makes it possible to summarize some of the most significant features of trade. It is meant to complement conventional analysis of trade and competitiveness, while also providing a snapshot of the competitive performance of countries in relation to market trends.

## 2.6 Adaptability index

The adaptability index represents a concept similar to the competitive matrix, but in broader terms. It expenses the ratio of specialization and/or market share in dynamic sectors to that in stagnant sectors. It reveals the extent to which a country's trade is in line with market trends. An index greater than 1 shows that a country specializes more in dynamic sectors than stagnant ones and/or that its market share in dynamic sectors is greater than its share in stagnant ones. Adaptability describes most of the interactions between a country's pattern of competitiveness and market trends. It is figured on the basis of market share or contribution:

- The trend in market share over time towards dynamic or stagnant sectors indicates the direction in which a country is moving in competitive terms.
- The trend in contribution over time shows a country's degree of dependence on dynamic or stagnant sectors.

The adaptability index is most useful in showing whether a country's competitiveness is improving or deteriorating, and many of the possible interpretations and deductions derived from the results will refer to this aspect. The concept of competitiveness or competitive adjustment implicitly defines competitiveness in terms of market trends. This two-dimensional evaluation reveals much about the structural aspects that help or hinder a country in its competitive environment. The adaptability index reveals this interaction and helps to quantify the trends and developments in trade.

One of the most important contributions of CAN to the analysis of trade in goods is the concept of market adaptability, as revealed by the competitive matrix and the adaptability index. Although some elements of this approach have been used in shift-share analysis, the concept has never before been presented in a consistent evaluation framework. CAN provides important elements that can help in the rigorous evaluation and description of the changes that continually occur in the international competitive environment and the way in which these changes cause countries to adapt or lose ground.

### 3. Fundamentals

CAN is designed for use in individual computers, **not** for use in networks. It is operated by Paradox 4.5 Runtime, which means it is not necessary to have the Paradox software.

#### 3.1 Hardware and software requirements

- IBM-compatible PC, 386 or preferably higher, with colour monitor.
- DOS version 2.0 or higher.
- Hard disk with minimum of 15MB free.
- 4MB RAM

#### 3.2 Installation procedure

***VERY IMPORTANT: For each annual update of the statistical data base, the CAN program contains a "copy protection" that only allows three individual installations.***

The CAN software and database (version 2.0) are supplied on four 1.4MB (high density), 3.5" diskettes. To install CAN:

1. Insert diskette #1 in drive A:
2. Switch to disk drive A:
3. Type:  
INSTALL  
[ENTER]

4. When the installation programme begins, press  
[ENTER]
5. Press:  
F10 to access menu  
[ENTER] to commence installation
6. A menu with two options in Spanish appears:  
Efectúa instalación: initiates installation of the program in the default installation directory  
C:\CAN20  
Cambia directorio instalación: allows specification of a different installation directory
7. Insert the diskettes in the order requested by the program.
8. To terminate the installation process, press:  
F10  
F  
[ENTER]
9. Switch to disk drive c  
then type  
c:\cd CAN20e, press  
[ENTER]  
c:\CAN20e> CAN20  
and the programme begins to run.

### 3.3 Keyboard

CAN may be operated using the keyboard or a mouse. The keystrokes used for keyboard or mouse operations are as follows:

#### General

- [ESC] to return to the previous menu
- [F10] to enter the main menu

#### Menu

- [→] (arrow keys) to move one field in direction indicated
- Use letter keys to move directly to option where letter is highlighted in red
- [ESC] to return to the previous menu Queries
- [F1] for help and to define fields
- [F2] to process query
- [F3] to delete all fields except period fields
- [TAB] to move to next field
- [Shift]-[TAB] to move to previous field
- [CTRL]-[Backspace] to delete contents of one field
- [ALT]-letter to move to field where letter is highlighted in yellow
- [ALT]-[F5] to edit a field
- [→] Arrow keys to move one field in direction indicated
- [ENTER] to select option where cursor is located Changing screens

- [PageUp] to go to previous screen
- [PageDown] to go to next screen
- [Home] to return to first screen
- [End] to go to final screen
- [ESC] to end screen viewing

### 3.4 Menu

Menu options may be selected in two ways:

- Place the cursor on the option and type [ENTER]
- Type the letter highlighted in red in the option name

F10	Main menu (horizontal)		
	= Query	Printers {List of printers}	End {Yes, No}
[ENTER]	Query		
F2	Level 1 menu (vertical)		
	Natural sort		
	Dynamic rank	Market share	Number of sectors considered: 0
		Contribution	Minimum value for year____: 0
		Specialization	Minimum value for year____: 0
		Sector share	
		Rival share	
	Static rank	Market share	
		Contribution	
		Specialization	
		Sector share	
		Rival share	
[ENTER]	Level 2 menu (vertical)		
	Consolidated results		
	Detailed results		
	Graph		
[ENTER]	Level 3 menu (vertical)		
	Screen		
	Printer		
	File		

### 3.5 Data

The data refer to OECD imports at the three - digit level of the Standard International Trade Classification (SITC), Rev. 2. The data were obtained directly from the United Nations Statistical Information System, Statistical Division, Department of International Economic and Social Affairs, United Nations, New York. The basic data are supplied by the countries and subsequently revised and organized into annual databases for worldwide distribution. The information refers to countries and years as shown below:

## 3.5.1 Countries and groups of countries

Table 1: Country codes and country group codes available in the data base

99402	Africa <u>1</u> /	56278	German Dem. Rep. (up to 1991)	99207	North America <u>17</u> /
99403	Africa (others)	53276	German Federal Republic (since 1991 Germany)	55579	Norway
13012	Algeria	53300	Greece	99001	OECD <u>18</u> /
99999	All countries	34320	Guatemala	99602	Other Asia
99501	APEC <u>2</u> /	36328	Guyana	45586	Pakistan
33032	Argentina	35332	Haiti	36591	Panama
99601	Asia <u>3</u> /	34340	Honduras	33600	Paraguay
99301	Asian Tigers <u>4</u> /	45344	Hong Kong	33604	Peru
71036	Australia	56348	Hungary	45608	Philippines
53040	Austria	55352	Iceland	56616	Poland
35052	Barbados	45699	India	53620	Portugal
53058	Belgium/Luxembourg	45360	Indonesia	99302	Potential Asian Tigers <u>19</u> /
33068	Bolivia	44364	Iran	56642	Romania
33076	Brazil	44368	Iraq	44682	Saudi Arabia
56100	Bulgaria	53372	Ireland	16686	Senegal
45104	Burma (Myanmar)	41376	Israel	45702	Singapore
99202	CACM <u>5</u> /	53381	Italy	11711	South Africa (Rep. of)
14120	Cameroon	16384	Ivory Coast	53724	Spain
21124	Canada	35388	Jamaica	36740	Suriname
99203	Caribbean <u>6</u> /	41392	Japan	53752	Sweden
33152	Chile	44400	Jordan	55757	Switzerland
45156	China	16404	Kenya	44760	Syria (Arab Rep.)
33170	Colombia	45410	Korea Rep.	45490	Taiwan (oth. Asia nes.)
34188	Costa Rica	99201	LAIA <u>11</u> /	16834	Tanzania
35192	Cuba	99206	Latin America <u>12</u> /	45764	Thailand
56200	Czechoslovakia	13434	Libya (Jamahiriya Arabe)	35780	Trinidad/Tobago
53208	Denmark	99204	MERCOSUR <u>13</u> /	13788	Tunisia
35214	Dominican Republic	45458	Malaysia	44792	Turkey
99103	Eastern Europe <u>7</u> /	33484	Mexico	68810	USSR (inf. up to 91)
33218	Ecuador	99303	Middle East <u>14</u> /	53826	United Kingdom
99102	EFTA <u>8</u> /	13504	Morocco	21842	United States
13818	Egypt	99205	NAFTA <u>15</u> /	33858	Uruguay
34222	El Salvador	53528	Netherlands	33862	Venezuela
99101	EU <u>9</u> /	71554	New Zealand	59890	Yugoslavia (inf. up to 91)
99104	Europe <u>10</u> /	34558	Nicaragua	16180	Zaire
53246	Finland	16566	Nigeria	16894	Zambia
53251	France	99401	North Africa <u>16</u> /	16716	Zimbabwe

The statistical database contains information on 90 countries, including the whole world, up to 1991 and on 87 countries from 1992, when the German Democratic Republic and Yugoslavia ceased to exist as nations.

**Table 2: Groups of countries**

<u>1/</u>	<b>Africa</b>	<b>Africa (others), North Africa</b>
<u>2/</u>	<b>APEC: Asia Pacific Economic Cooperation Council</b>	<b>Australia, Canada, Indonesia, Japan, Korea (Republic of), Malaysia, Mexico, New Zealand, Philippines, Thailand, United States</b>
<u>3/</u>	<b>Asia</b>	<b>Asian tigers, Burma (Myanmar), India, Israel, Japan, Middle East, Pakistan, Philippines, potential Asian tigers</b>
<u>4/</u>	<b>Asian tigers</b>	<b>Hong Kong, Korea (Republic of), Singapore, Taiwan</b>
<u>5/</u>	<b>CACM: Central American Common Market</b>	<b>Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama</b>
<u>6/</u>	<b>Caribbean</b>	<b>Barbados, Cuba, Dominican Republic, Guyana, Haiti, Jamaica, Suriname, Trinidad and Tobago</b>
<u>7/</u>	<b>Eastern Europe</b>	<b>Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania</b>
<u>8/</u>	<b>EFTA: European Free Trade Association</b>	<b>Austria, Finland, Iceland, Norway, Sweden, Switzerland</b>
<u>9/</u>	<b>EU: European Union</b>	<b>Belgium and Luxembourg, Denmark, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, United Kingdom</b>
<u>10/</u>	<b>Europe</b>	<b>European Union, EFTA</b>
<u>11/</u>	<b>LAIA: Latin American Integration Association</b>	<b>Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, Venezuela</b>
<u>12/</u>	<b>Latin America</b>	<b>CACM, Caribbean, LAIA</b>
<u>13/</u>	<b>MERCOSUR: Southern Common Market</b>	<b>Argentina, Brazil, Paraguay, Uruguay</b>
<u>14/</u>	<b>Middle East</b>	<b>Iran, Iraq, Jordan, Saudi Arabia, Syria, Turkey</b>
<u>15/</u>	<b>NAFTA: North American Free Trade Agreement</b>	<b>Canada, Mexico, United States</b>
<u>16/</u>	<b>North Africa</b>	<b>Algeria, Egypt, Libya, Morocco, Tunisia</b>
<u>17/</u>	<b>North America</b>	<b>Canada, United States</b>
<u>18/</u>	<b>OECD: Organization for Economic Cooperation and Development</b>	<b>Australia, Austria, Belgium and Luxembourg, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States, Yugoslavia</b>
<u>19/</u>	<b>Potential Asian Tigers</b>	<b>China, Indonesia, Malaysia, Thailand</b>



## 3.5.2 Sectors (Standard International Trade Classification) (SITC), Rev. 2, 3 digits)

Table 3: Sectors (SITC Rev. 2)

(For reasons of space, the descriptions have been abbreviated)

001 Live animals chiefly for food	245 Fuel wood (excluding wood waste) and wood charcoal
011 Meat and edible meat offals, fresh, chilled or frozen	246 Pulpwood (including chips and wood waste)
012 Meat and edible meat offals, salted, in brine, dried, smoked	247 Other wood in the rough or roughly squared
014 Meat and edible meat offals, prepared or preserved, n.e.s.	248 Wood, simply worked and railway sleepers
01② Meat and meat preparations	24② Cork and wood
022 Milk and cream	251 Pulp and waste paper
023 Butter	25② Pulp and waste paper
024 Cheese and curd	261 Silk
025 Eggs, birds' and egg yolks, fresh or preserved	263 Cotton
02② Dairy products and birds' eggs	264 Jute and other textile bast fibers n.e.s.
034 Fish, fresh (live or dead), chilled, dried or frozen	265 Vegetable textile fibers (excl. cotton and jute)
035 Fish, dried, salted or in brine; smoked fish	266 Synthetic fibers suitable for spinning
036 Crustaceans and molluscs, whether in shell or not	267 Other man-made fibers suitable for spinning
037 Fish, crustaceans and molluscs, prepared or preserved, n.e.s.	268 Wool and other animal hair (excluding wool tops)
03② Fish, crustaceans and molluscs, and preparations thereof	269 Old clothing and other old textile articles; rags
041 Wheat (including spelt) and meslin, unmilled	26② Textile fibres (other than wool tops) and their wastes
042 Rice	271 Fertilizers, crude
043 Barley, unmilled	273 Stone, sand and gravel
044 Maize (corn), unmilled	274 Sulphur and unroasted iron pyrites
045 Cereals, unmilled (other than wheat, rice, barley, maize)	277 Natural abrasives, n.e.s. (incl. industrial diamonds)
046 Meal and flour of wheat and flour of meslin	278 Other crude minerals
047 Other cereal meals and flours	27② Crude fertilizers and crude minerals
048 Cereal preparations and preparations of flour, starch	281 Iron ore and concentrates
04② Cereals and cereal preparations	282 Waste and scrap metal of iron or steel
054 Vegetables, fresh, chilled, frozen or simply preserved	286 Ores and concentrates of uranium and thorium
056 Vegetables, roots and tubers, prepared or preserved	287 Ores and concentrates of base metals n.e.s.
057 Fruit and nuts (not oil nuts) fresh or dried	288 Non-ferrous base metal waste and scrap, n.e.s.
058 Fruit, preserved and fruit preparations	289 Ores and concentrates of precious metals, waste, scrap
05② Vegetables and fruit	28② Metalliferous ores and metal scrap
061 Sugar and honey	291 Crude animal materials, n.e.s.
062 Sugar confectionery (except chocolate), other sugar prep.	292 Crude vegetable materials, n.e.s.
06② Sugar, sugar preparations and honey	29② Crude animal and vegetable materials, n.e.s.
071 Coffee and coffee substitutes	2②② Crude materials, inedible, except fuels
072 Cocoa	322 Coal, lignite and peat
073 Chocolate, other food preparations containing cocoa, n.e.s.	323 Briquettes; coke and semi-coke of coal, etc.
074 Tea and maté	32② Coal, coke and briquettes
075 Spices	333 Petroleum oils, crude, also from bituminous minerals
07② Coffee, tea, cocoa, spices, and manufactures thereof	334 Petroleum products, refined
081 Feeding stuff for animals (excl. unmilled cereals)	335 Residual petroleum products, n.e.s.
091 Margarine and shortening	33② Petroleum, petroleum products and related materials
098 Edible products and preparations, n.e.s.	341 Gas, natural and manufactured
09② Miscellaneous edible products and preparations	34② Gas, natural and manufactured
0②② Food and live animals chiefly for food	351 Electric current
111 Non-alcoholic beverages n.e.s.	3②② Minerals fuels, lubricants and related materials
112 Alcoholic beverages	411 Animal oils and fats
11② Beverages	423 Fixed vegetable oils, soft, crude, refined or purified
121 Tobacco, unmanufactured; tobacco refuse	424 Other fixed vegetable oils, fluid or solid, crude, etc.
122 Tobacco, manufactured	42② Fixed vegetable oils and fats
12② Tobacco and tobacco manufactures	431 Animal and vegetable oils and fats, processed and waxes
1②② Beverages and tobacco	43② Animal and vegetable oils and fats, processed and waxes
211 Hides and skins (except furskins), raw	4②② Animal and vegetable oils and fats, processed and waxes
212 Furskins, raw (including astrakhan, caracul, Persian, etc.)	511 Hydrocarbons, n.e.s. and their derivatives
21② Hides, skins and furskins, raw	512 Alcohols, phenols, phenol-alcohols and their derivatives
222 Oil seeds and oleaginous fruit, whole or broken, for soft oils	513 Carboxylic acids and their derivatives
223 Oil seeds and oleaginous fruit, whole or broken, for other oils	514 Nitrogen-function compounds
22② Oil seeds and oleaginous fruit	515 Organo-inorganic and heterocyclic compounds
232 Natural rubber latex; natural rubber and similar, natural gums	516 Other organic chemicals
233 Synthetic rubber latex; synthetic and reclaimed rubber	51② Organic chemicals
23② Crude rubber (including synthetic and reclaimed)	522 Inorganic chemical elements, oxides and halogen salts
244 Cork, natural, raw and waste	523 Other inorganic chemicals; org. and inorg. compounds

- 524 Radio-active and associated materials
- 52@ Inorganic chemicals
- 531 Synthetic organic dyestuffs, etc., natural indigo, colour lakes
- 532 Dyeing and tanning extracts and synthetic tanning materials
- 533 Pigments, paints, varnishes and related materials
- 53@ Dyeing, tanning and colouring materials
- 541 Medicinal and pharmaceutical products
- 551 Essential oils, perfume and flavor materials
- 553 Perfumery, cosmetic and toilet preparations
- 554 Soap, cleansing and polishing preparations
- 55@ Essential oils and perfume materials; toilet, polishing and clean
- 562 Fertilizers, manufactured
- 572 Explosives and pyrotechnic products
- 582 Condensation, polycondensation and polyaddition prod.
- 583 Polymerization and copolymerization products
- 584 Regenerated cellulose; cellulose nitrate, etc.
- 585 Other artificial resins and plastic materials
- 58@ Artificial resins and plastic materials, cellulose esters/ethers
- 591 Disinfectants, insecticides, fungicides, etc.
- 592 Starches, inulin and wheat gluten, etc.
- 598 Miscellaneous chemical products, n.e.s.
- 59@ Chemical materials and products, n.e.s.
- 5@ Chemicals and related products, n.e.s.
- 611 Leather
- 612 Manufactures of leather, parts of footwear, etc.
- 613 Furskins, tanned or dressed
- 61@ Leather, leather manufactures, n.e.s., and dressed furskins
- 621 Materials of rubber
- 625 Rubber tires, tire cases, tubes, treads, etc.
- 628 Articles of rubber, n.e.s.
- 62@ Rubber manufactures, n.e.s.
- 633 Cork manufactures
- 634 Veneers, plywood, reconstituted wood, etc.
- 635 Wood manufactures, n.e.s.
- 63@ Cork and wood manufactures (excluding furniture)
- 641 Paper and paperboard
- 642 Paper and paperboard, cut to size or shape, articles of
- 64@ Paper, paperboard, and articles of paper pulp, of paper
- 651 Textile yarn
- 652 Cotton fabrics, woven
- 653 Fabrics, woven, of man-made fibers
- 654 Textile fabrics, woven, not cotton or man-made fibre
- 655 Knitted or crocheted fabrics
- 656 Tullies, lace, embroidery, ribbons, trimmings, etc.
- 657 Special textile fabrics and related products
- 658 Made-up articles, wholly or chiefly of textile mat.
- 659 Floor coverings, etc.
- 65@ Textile yarn, fabrics, made-up articles, n.e.s., and related prod.
- 661 Lime, cement, and fabricated construction materials
- 662 Clay construction materials; refractory materials
- 663 Mineral manufactures, n.e.s.
- 664 Glass
- 665 Glassware
- 666 Pottery
- 667 Pearls, precious and semi-precious stones
- 66@ Non-metallic mineral manufactures, n.e.s.
- 671 Pig iron, spiegeleisen, sponge iron, ferro-alloys
- 672 Ingots and other primary forms of iron or steel
- 673 Iron and steel bars, rods, angles, shapes, sections
- 674 Universals, plates and sheets, of iron or steel
- 675 Hoop and strip, of iron or steel
- 676 Rails and railway track construction material
- 677 Iron or steel wire (excl. wire rod) not insulated
- 678 Tubes, pipes and fittings, of iron or steel
- 679 Iron and steel castings, forgings and stampings
- 67@ Iron and steel
- 681 Silver, platinum and other metals of platinum group
- 682 Copper
- 683 Nickel
- 684 Aluminum
- 685 Lead
- 686 Zinc
- 687 Tin
- 688 Uranium depleted in U235 and thorium
- 689 Miscellaneous non-ferrous base metals
- 68@ Non-ferrous metals
- 691 Structures and parts of structures, n.e.s.
- 692 Metal containers for storage and transport
- 693 Wire products (excl. insulated electrical wiring), fencing grills
- 694 Nails, screws, nuts, bolts, rivets, etc.
- 695 Tools for use in the hands or in machines
- 696 Cutlery
- 697 Household equipment of base metal, n.e.s.
- 699 Manufactures of base metal, n.e.s.
- 6@ Manufactures of metal, n.e.s.
- 6@ Manufactured goods classified chiefly by material
- 711 Steam and other vapor generating boilers
- 712 Steam and other vapor power units (excl. boilers)
- 713 Internal combustion piston engines and parts
- 714 Engines and motors, non-electric, parts, n.e.s.
- 716 Rotating electric plant and parts thereof, n.e.s.
- 718 Other power generating machinery and parts, n.e.s.
- 71@ Power generating machinery and equipment
- 721 Agricultural machinery (excl. tractors) and parts
- 722 Tractors (other than 744.11 and 783.2)
- 723 Civil engineering and contractor's plant/eqpt.
- 724 Textile and leather machinery, and parts, n.e.s.
- 725 Paper mill and pulp mill machinery, etc.
- 726 Printing and bookbinding machinery and parts
- 727 Food-processing machines (excl. domestic)
- 728 Other machinery and equipment, specialized
- 72@ Machinery specialized for particular industries
- 736 Machine-tools for working metals
- 737 Metalworking machinery (excl. machine tools)
- 73@ Metalworking machinery
- 741 Heating and cooling equipment and parts
- 742 Pumps (including motor and turbo pumps) for liquids
- 743 Pumps (excl. pumps for liquids), compressors, fans
- 744 Mechanical handling equipment, and parts
- 745 Other non-electrical machinery, tools, etc.
- 749 Non-electric parts and accessories of machinery
- 74@ General industrial machinery and equipment, n.e.s.
- 751 Office machines
- 752 Automatic data processing machines, units thereof
- 759 Parts, n.e.s., of and accessories for 751 and 752
- 75@ Office machines and automatic data processing equipment
- 761 Television receivers
- 762 Radio-broadcast receivers
- 763 Sound equipment, dictating machines, etc.
- 764 Telecommunications equipment, n.e.s.
- 76@ Telecommunications and sound recording and reproducing apparatus
- 771 Electric power machinery (other than 716)
- 772 Elec. apparatus for making and breaking elect. circuits
- 773 Equipment for distributing electricity
- 774 Electric apparatus for medical purposes
- 775 Other household type, electrical and non-elec. eqpt.
- 776 Thermionic valves and tubes, and other semiconductors, n.e.s.
- 778 Electrical machinery and apparatus, n.e.s.
- 77@ Electrical machinery, apparatus and appliances, n.e.s.
- 781 Passenger motor cars (excl. public service type)
- 782 Motor vehicles for the transport of goods/materials
- 783 Road motor vehicles, n.e.s.
- 784 Parts and accessories, n.e.s. of motor vehicles
- 785 Motorcycles, motor scooters and other cycles
- 786 Trailers and other vehicles, not motorized, n.e.s.
- 78@ Road vehicles (including air-cushion vehicles)
- 791 Railway vehicles and associated equipment

792 Aircraft and associated equipment, and parts  
 793 Ships, boats (incl. hovercraft), floating struct  
 79@ Other transport equipment  
 7@@ Machinery and transport equipment  
 812 Sanitary, plumbing, heating and lighting fixtures  
 81@ Sanitary, plumbing, heating and lighting fix. and fittings, n.e.s.  
 821 Furniture and parts thereof  
 831 Travel goods (e.g., trunks, suitcases, etc.)  
 842 Outer garments, men's and boys' of textile fabrics  
 843 Outer garments, women's, and girls' of textile fab.  
 844 Under garments, textile fab. (not knitted/crocheted)  
 845 Outer garments, other articles, knitted/crocheted  
 846 Under garments, knitted or crocheted  
 847 Clothing accessories, of textile fabrics, n.e.s.  
 848 Articles of apparel, clothing access., not textile fab.  
 84@ Articles of apparel and clothing accessories  
 851 Footwear  
 871 Optical instruments and apparatus  
 872 Medical instruments and appliances, n.e.s.  
 873 Meters and counters, n.e.s.  
 874 Measuring, checking, analyzing, control instruments  
 87@ Professional, scientific and controlling instruments, n.e.s.  
 881 Photographic apparatus and equipment, n.e.s.  
 882 Photographic and cinematographic supplies

883 Cinematograph film, exposed and developed  
 884 Optical goods, n.e.s.  
 885 Watches and clocks  
 88@ Photographic apparatus, eq. and supplies and optical goods n.e.s.  
 892 Printed matter  
 893 Articles, n.e.s., of materials of division 58  
 894 Baby carriages, toys, games and sporting goods  
 895 Office and stationary supplies, n.e.s.  
 896 Works of art, collectors' pieces and antiques  
 897 Jewelry, goldsmiths' and silversmiths' wares, etc.  
 898 Musical instruments and parts and accessories  
 899 Other miscellaneous manufactured articles  
 89@ Miscellaneous manufactured articles, n.e.s.  
 90@ Miscellaneous manufactured articles  
 911 Postal packages not classified according to kind  
 931 Special transactions and commodities not classif.  
 941 Animals, live, n.e.s.  
 951 Armored fighting vehicles, war arms, ammunition  
 961 Coin (other than gold coin), not legal tender  
 971 Gold, non-monetary  
 999 Compose sector  
 9@@ Commodities and transactions not classified elsewhere in the sit  
 @@@ All sectors

### 3.5.3 Years covered

The database contains information for the period 1977 to 1995. Annual values were calculated as moving averages of three years, in order to stabilize the estimator. The exception is 1995, which was calculated as an average of 1994 and 1995. Results for that year should therefore be treated with this in mind.

**Table 4: Years covered**

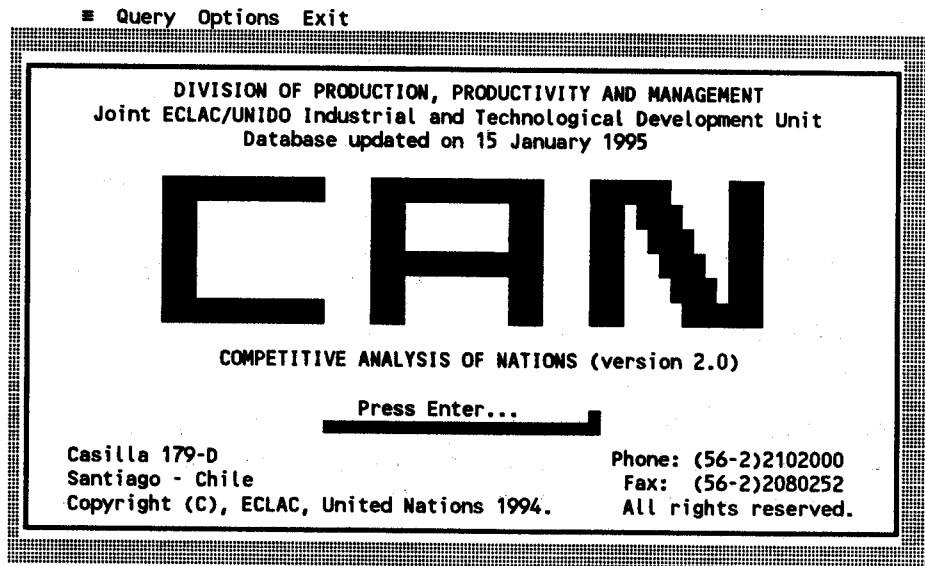
YEAR	Average of:
1977	1976 1977 1978
1978	1977 1978 1979
1979	1978 1979 1980
1980	1979 1980 1981
1981	1980 1981 1982
1982	1981 1982 1983
1983	1982 1983 1984
1984	1983 1984 1985
1985	1984 1985 1986
1986	1985 1986 1987
1987	1986 1987 1988
1988	1987 1988 1989
1989	1988 1989 1990
1990	1989 1990 1991
1991	1990 1991 1992
1992	1991 1992 1993
1993	1992 1993 1994
1994	1993 1994 1995
1995	1994 1995

ECLAC intends to update the statistical information every year, on the basis of three-year averages, with the exception of the final year, which will be a two-year average.

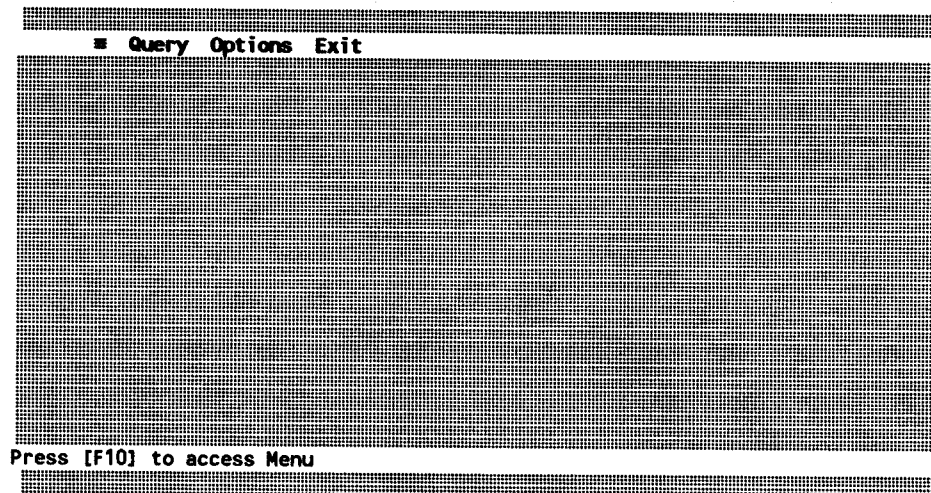
#### 4. Formulating a query

The Query option is the starting-point for CAN and is used to select information from the database. The operation involves extracting records from the database according to specific criteria defined in the query. A record is a set of information. CAN offers provides a wide range of options for formulating a query.

On entry to the program, the CAN logo appears:



To start the process, press [ENTER]. The main menu appears:



Press F10 and [ENTER] to go to the query window:

Query Options Exit			
Country :			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors :			
Sector Share	:		F1:Help
Period	:		F2:Process
Matrix Type	:	F3>DeleteAll	ESC:Cancel

The query window consists of different types of fields where the query is formulated. To complete the window, the relevant codes and operators must be typed into the fields. User help tables showing the relevant codes are available for each field, and can be obtained by pressing [F1]. The different types of field are:

**Basic fields:**

- Countries and country operators
- Sectors and sector operators
- Period

**Other fields:**

- Range operators for market share, contribution, specialization and sector share
- Range operators for rival share and rival growth
- Matrix type

#### 4.1 Countries and country operators

The country field may contain 5-digit country codes and the country operators needed to formulate the query.

Syntax rules govern the formulation of queries in the country field. The following are examples of correct syntax:

**Example 1:** A series of country codes or country group codes i.e. codes that (begin with 99), separated by at least one space.

e.g.:

Country : 33152	Chile
Country : 33152 33032 33484	Chile, Saudi Arabia, Canada, separately
Country : 99201 21842	LAIA countries, separately, and United States
Country : 99201 99202	LAIA countries and Central America, separately

**Example 2:** A combination of country codes or country group codes, to be treated as a whole, without distinguishing between countries. This requires three types of operators (\*, +, )

e.g.:

Country : *33152+33032	Chile and Argentina together
Country : *99201	LAIA as a group
Country : *99201-33076	LAIA excluding Brazil, as a group
Country : *99201-33152-36590	LAIA excluding Argentina and Brazil, as a group

**Example 3:** After a country or group code, the codes for countries to be analyzed as rivals may be entered. The | operator must be placed before each of these codes.

e.g.:

Country : 33152   33032	Chile vs Argentina
Country : 33032   33076   33484	Argentina vs Brazil and Mexico
Country : 99201   33862	LAIA countries vs Venezuela
Country : *99201-33032   33032	LAIA excluding Argentina, as a group, vs Argentina
Country : *99201-33032+99202   33032	LAIA, excluding Argentina, plus Central America, as a group, vs Argentina

**Example 4:** After a country or group code, a series of country or group codes may be entered, each preceded by the = operator, to specify that the calculations should treat the set of countries as the total number of countries from which OECD imports.

e.g.:

Country : 33484 = 99205	Mexico compared with OECD imports from NAFTA
Country : *33152 + 33032 + 33076 = 99201	Chile, Argentina and Brazil together, compared with OECD imports from LAIA

There are two ways to complete the **country** field using the syntax described. They may be used singly or in combination:

- Type country codes and operators directly
- Use the help table [F1]

Country codes and operators can be accessed via the country help table. With the cursor on the **country** field, press [F1], then select a country or group and the desired operators.

Query Options Exit

Africa	99402
Africa (others)	99403
Algeria	13012
All countries	99999
APEC	99501
Argentina	33032
Asia	99601
Asian Tigers	99301
Australia	71036
Austria	55040
Barbados	35052
Belgium/Luxembourg	53056
Bolivia	33068
Brazil	33076
Bulgaria	56100
Burma	45104
CACH	99202
Cameroon	14120

Select ...  
 \* Designate area  
 + Add country  
 - Exclude country  
 | Designate as rival  
 = Reduce global ref.  
 ESC:Cancel

The country operators are described below with examples (see table 5).

**Table 5: Country operators**

*	This operator defines the codes it precedes as a whole, without distinguishing between countries. For example: *99201 treats all LAIA countries as a whole, so the information will appear in aggregate form. If it is not used in front of a country group, the countries will be dealt with on an individual basis. For example: 99201 treats LAIA countries separately, and the information will refer to each as an individual country.
+	This operator functions only in conjunction with the operator *, to form a new, previously undefined group. For example: *33152+33032+33076 treats Chile, Argentina and Brazil as a whole, and the information will appear in aggregate form.
-	This operator functions in two ways: i) on its own, in relation to a country group code. For example: 99201-33076, treats each of the LAIA countries, excluding Brazil, individually; ii) in conjunction with the operator *, to form a new, previously undefined group. For example: *99201-33076-33032 takes all LAIA countries, excluding Brazil and Argentina, as a whole, and the information will appear in aggregate form.
=	This operator enables the user to specify exactly which countries should be considered in the calculation of M (OECD imports from all sectors and all countries) and Mi (OECD imports in sector i) which are used in the subsequent calculation of market share, contribution, specialization and sector share indicators. In other words, all calculations assume OECD imports from countries preceded by the operator = to be equal to total imports (100%). For example: 33076=99201 calculates all the data for Brazil in relation to the sum of all LAIA member States.
	This operator provides for the designation of a rival. When a country code is preceded by the operator  , calculations will not relate directly to that country, but will relate that country to the reference country. It is possible to designate several rivals at the same time. For example: 21842  21124  33484 means that the reference country is the United States (21842) and the rivals are Canada (21124) and Mexico (33484).

## 4.2 Sectors and sector operators

In the **sectors** field are entered 3-digit codes corresponding to the group level of SITC, Rev. 2, plus the sector operators needed to formulate the query.

Syntax rules govern the the formulation of queries in the **sectors** field. The following are examples of correct syntax:

**Example 1:** A series of sector codes or sector grouping codes, separated by at least one space:

e.g.:

Sectors: 074

Sector 074

Sectors: 281 282 286

Sectors 281, 282 and 286 separately

Sectors: 26@ 27@ 28@ 3@@ 4@@

Divisions 26, 27, 28 and Sections 3 and 4 separately

**Example 2:** A combination of sector codes or sector grouping codes, to be treated as a whole, without distinguishing between sectors. Three types of operators are required (\*, +, -).

e.g.:

Sectors: \*281+282+286

Sectors 281, 282 and 286 together

Sectors: \*29@

Division 29 as a whole

Sectors: \*28@-286-287

Division 28, except sectors 286 and 287, as a whole

Sectors: \*3@@ \*2@@-26@+33@

Section 3 as a whole; section 2, excluding division 26, plus division 33, as a whole

**Example 3:** After the sector or sector grouping codes, codes for a series of sectors or sector groupings may be entered, each preceded by the = operator to specify that the calculations should treat the set of sectors as the total sectors from which OECD imports.

e.g.:

Sectors: 32@ =3@@

Division 32 compared with OECD imports of products from section 3



**Example 4:** After the sector or sector grouping codes, codes for a series of sectors or sector groupings may be entered, each preceded by the / operator, to specify that the calculations should treat the set of sectors as excluded from the total sectors from which OECD imports.

e.g.:

Sectors: @@@ /3@@ /4@@ All sectors in relation to OECD imports excluding products from sections 3 and 4

Sectors: @@@ /65@ /67@ /8@@ All sectors in relation to OECD imports excluding products from divisions 65 and 67, and from section 8

There are two ways to complete the sectors field using the syntax described. They may be used singly or in combination:

- Type sector codes and operators directly
- Use the help table [F1]

Sector codes and operators can be accessed via the sector help table. With the cursor on the sectors field, press [F1], then select a sector or sector grouping and the desired operators.

■ Query Options Exit

001 Live animals chiefly for food	▲	← Select
011 Meat and edible meat offals, fresh, chilled or f		* Compose
012 Meat and edible meat offals, salted, in brine, d		+ Add sector
014 Meat and edible meat offals, prepared or preserv		- Exclude
01a Meat and meat preparations		/ Change ref
022 Milk and cream		= Allow ref
023 Butter		ESC:Cancel
024 Cheese and curd		
025 Eggs, birds' and egg yolks, fresh or preserved		
02a Dairy products and birds' eggs		
034 Fish, fresh (live or dead), chilled, dried or fr		
035 Fish, dried, salted or in brine; smoked fish		
036 Crustaceans and molluscs, whether in shell or no		
037 Fish, crustaceans and molluscs, prepared or pres		
03a Fish, crustaceans and molluscs, and preparations		
041 Wheat (including spelt) and meslin, unmilled		
042 Rice		
043 Barley, unmilled	▼	

The sector operators are summarized below with examples (see table 6).

**Table 6: Sector operators**

*	This operator defines the codes it precedes as a whole, without distinguishing between sectors. For example: *5@@ treats all chemical and related products as a whole, so that the information will appear in aggregate form. If it is not used in front of a sector grouping, sectors will be dealt with individually. For example: 5@@ treats chemical and related products separately, each at the SITC (Rev.2) 3-digit level.
+	This operator functions only in conjunction with the * operator, to form a new, previously undefined grouping. For example: *5@@+6@@ treats all chemical and related products and all manufactured goods classified by material as a whole, and the information will appear in aggregate form.
-	This operator functions in two ways: i) on its own, in relation to a sector grouping code. For example: 5@@-598 treats each of the chemical and related products (5@@), excluding miscellaneous chemical products (598), individually; ii) in conjunction with the operator *, to form a new, previously undefined grouping. For example: *5@@-598 refers to all chemical and related products (5@@), excluding miscellaneous chemical products (598), and the information will appear in aggregate form.
=	This operator enables the user to specify exactly which sectors should be considered in the calculation of M (OECD imports in all sectors from all countries) and Mj (OECD imports in all sectors from country j), which are used in the subsequent calculation of market share, contribution, specialization and sector share indicators. In other words, all calculations assume OECD imports from sectors preceded by the = operator to be equal to total imports (100%). For example: 541 =5@@ calculates all the indicators for medicinal and pharmaceutical products (541) in relation to the sum of all chemical and related products (5@@).
/	This operator enables the user to specify exactly which sectors should not be considered in the calculation of M (OECD imports in all sectors from all countries) and Mj (OECD imports in all sectors from country j) which are used in the subsequent calculation of market share, contribution, specialization and sector share indicators. In other words, all calculations assume OECD imports, excluding sectors preceded by the / operator to be equal to total imports (100%). For example: 541 /5@@ calculates all the indicators for medicinal and pharmaceutical products (541) in relation to the sum of all sectors, excluding chemical and related products (5@@).

### 4.3 Period

The period, defined as the space of time between two given years, should be entered by indicating both reference years. The information CAN provides will correspond only to those two years. Reference years are calculated as three-year averages in order to minimize possible annual fluctuations.

The methodology underlying CAN is very sensitive to the selected period. A sector which was dynamic increasing during the period 1980-1985 may not have been dynamic between 1985 and 1990. Ⓐ select a period:

- Type the first year directly into the field and press [ENTER]. Repeat for the second year.
- Press [F1] to access the help table, use the arrow keys to move the cursor to the appropriate year and press [ENTER] to select. Press [ESC] to cancel the selection. Repeat for the second year.

■ Query Options Exit

Country :	SELECT:	
Market Share	1977 ▲	Rival Share :
Contribution	1978 ■	Rival Growth :
Specialization	1979 ■	
	1980 ■	
Sectors :	1981 ■	
	1982 ■	
Sector Share	1983 ■	
Period : 1980	1984 ■	
	1985 ■	
Matrix Type :	1986 ▼	
	Accept Cancel	F1:Help
		F2:Process
		ESC:Cancel

- A second year which is earlier than the first year is meaningless.
- A second year equal to the first is meaningless.

#### 4.4 Operators for queries on market share, contribution, specialization and sector share

For each of the indicators **market share**, **contribution** and **sector share** there are two fields: the first is for range operators and the second for minimum values for each indicator in the final year of the period. For **specialization** there are three fields: the first is for range operators, the second for minimum values in the final year of the period and the third for absolute specialization.

Range operators select records which meet the condition set by the operator. The operators may specify a rising or a falling value for the indicator in question, within a given period of time. This allows data to be selected according to specific aspects of countries and sectors.

The operators available for the first field are:

- (●) > Rising (Does not mean "greater than")
- (○) < Falling (Does not mean "less than")

To specify a range operator:

- Type the range operator directly in the field and press [ENTER].
- Press [F1] to access the help table, use the arrow keys to move the cursor to the appropriate option and press [ENTER] to select. Press [ESC] to cancel the selection.

■ Query Options Exit

Country :			
Market Share :	>	SELECT:	:
Contribution :		(*) > Increasing	:
Specialization :		( ) < Decreasing	:
Sectors :		Accept	Cancel
Sector Share :			F1:Help
Period : 1990-1992			F2:Process
Matrix Type :		F3>DeleteAll	ESC:Cancel

For example, in a query about a country during the period 1990-1992, if the range operator > is entered next to market share, the program will only retrieve those sectors where the country's market share in 1992 was greater than or equal to that recorded in 1990.

The second field, which comes after the range operator field, accepts any number representing a minimum value for the second year of the period under consideration.

■ Query Options Exit

Country :			
Market share :			
Contribution :	2.0	This field accepts any one decimal number to specify a minimum value for the previous field: 1.5, 0.5, etc...	
Specialization :			
Sector : 000		Accept	
Sector share :			F1:Help
Period : 1990 1992			F2:Process
Matrix type :		F3>DeleteAll	ESC:Cancel

For example, in a query on a country for the period 1990-1992, if a value of 2.0 is entered in the second field next to contribution, the program will only retrieve those sectors where the contribution was at least 2% in 1992.

For the specialization indicator, there is a third field where a range operator denoting the absolute specialization of a country in a sector or range of given sectors may be entered.

```

Query Options Exit

Country :

Market Share      :      Rival Share      :
Contribution      :      Rival Growth      :
Specialization    :      >
SELECT:
(●) > Increasing Specialization
( ) < Decreasing Specialization
Accept  Cancel

Sectors :

Sector Share

Period : 1990  1992

Matrix Type :      F3:DeleteAll      ESC:Cancel
  
```

The operators available on pressing [F1] are:

- (●) > Increasing specialization
- ( ) < Decreasing specialization

With increasing specialization, records are selected where specialization is equal to or greater than 1 in the second year of the period.

To specify a range operator:

- Type the range operator directly in the field and press [ENTER].
- Press [F1] to access the help table, use the arrow keys to move the cursor to the appropriate option and press [ENTER] to select. Press [ESC] to cancel the selection.

For a given period of OECD imports, such as 1990-1992, this query retrieves all those sectors in which the country specialized in 1992. The range operator applies only to the second year of the period in question.

#### 4.5 Range operators for queries on rival share and rival growth

These operators may only be used in conjunction with the | operator in the country field. If a rival is specified, this operator determines the relative position of the reference country in relation to the rival country. The range operators are:

Rival share:

- (●) > Greater share than rival
- ( ) < Smaller share than rival

■ Query Options Exit

Country : 41392 |21842

Market Share : Rival Share : >  
 Contribution :  
 Specialization : SELECT:—

Sectors : (•) > Greater share than rival  
 ( ) < Smaller share than rival

Sector Share Accept Cancel

Period : 1990 1992 F2:Process

Matrix Type : F3:DeleteAll ESC:Cancel

For a given period of OECD imports, such as 1990-1992, this query gives:

- All sectors in which Japan's share exceeded that of the United States in 1992, i.e., those in which the reference country, Japan, had a relative share greater than or equal to 1 compared with its rival, the United States.

The rival share operator refers only to the second year of the period under consideration.

Rival growth:

- (•) > Faster growth than rival
- ( ) < Slower growth than rival

■ Query Options Exit

Country : 41392 |21842

Market Share : Rival Share :  
 Contribution : Rival Growth : >  
 Specialization : SELECT:—

Sectors : (•) > Faster growth than rival  
 ( ) < Slower growth than rival

Sector Share Accept Cancel

Period : 1990 1992 F2:Process

Matrix Type : F3:DeleteAll ESC:Cancel

For a given period of OECD imports, such as 1990-1992, this query gives:

- Only those sectors where Japan's (41392) market share increased more rapidly than that of the United States (21840), i.e., sectors where the reference country, Japan, increased its relative share in comparison with the United States.

To specify a range operator:

- Type the range operator directly in the field and press [ENTER].
- Press [F1] to access the help table, use the arrow keys to move the cursor to the appropriate option and press [ENTER] to select. Press [ESC] to cancel the selection.

#### 4.6 Matrix

This field generates a competitive matrix with a choice of three different variables dimensions for the y-axis (see competitive matrix) and for the x-axis (sector share):

- The share/growth matrix is based on trends in market share and sector share.
- The contribution/growth matrix is based on trends in contribution and sector share.
- The specialization/growth matrix is based on trends in specialization and sector share.

To specify a matrix code:

- Type the matrix code directly in the field and press [ENTER].
- Press [F1] to access the help table, use the arrow keys to move the cursor to the desired matrix code and press [ENTER] to select. Press [ESC] to cancel the selection.

■ Query Options Exit

Country :			
Market Share :		Rival Share :	
Contribution :		Rival Growth :	
Specialization :			
Sectors :			
Sector Share :			
Period :			
Matrix Type :			

SELECT:

(•) 1 Share/Growth Matrix

( ) 2 Contribution/Growth Matrix

( ) 3 Specialization/Growth Matrix

#### 4.7 Processing the data

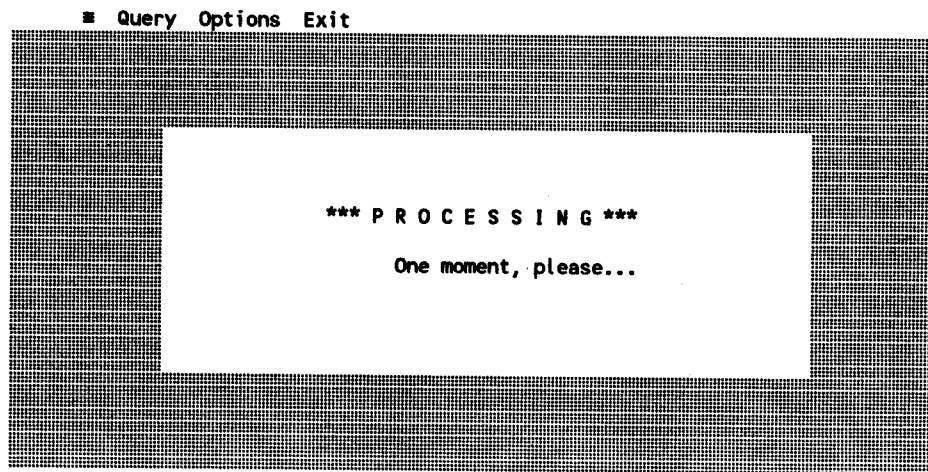
When you have completed the fields to formulate your query, press [F2] to process it.

## 5. Interpreting the report

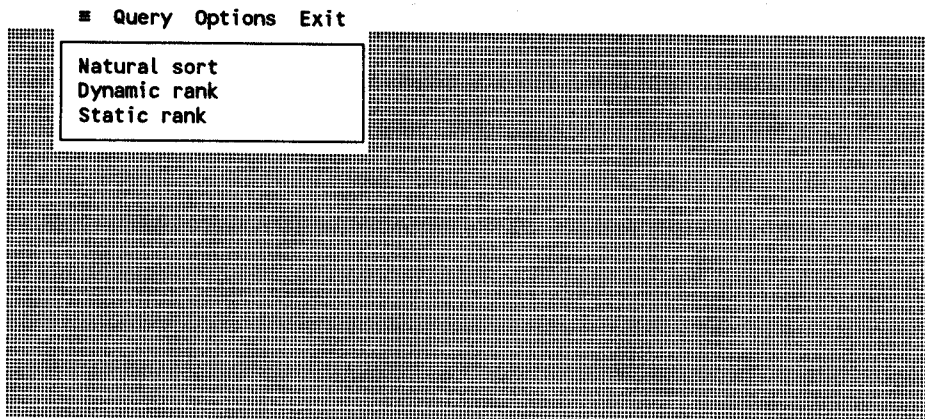
CAN produces a wide variety of reports which can be sent to the screen, the printer or a file. The reporting format allows data to be filtered further by means of sorting facilities. All reports are built around a common set of information which varies only slightly according to the query made or the type of report selected. The two basic reports are the **consolidated** report and the **detailed** report, which are explained below (see paragraph 5.2).

Screen and printer output include a status line on the query, such as type of sort, minimum values of indicators, or number of sectors or countries considered. Only on printer output will this status line show whether it is a matrix.

Press [F2] to begin the process of selecting data that meets the query specifications. While the calculations are being performed, the following screen appears:



When the **\*\*\*PROCESSING\*\*\*** message disappears, the following menu appears:



Subsequent processing of the results obtained is only performed on records which meet the query requirements.



## 5.1 Sorting the data (menu 1)

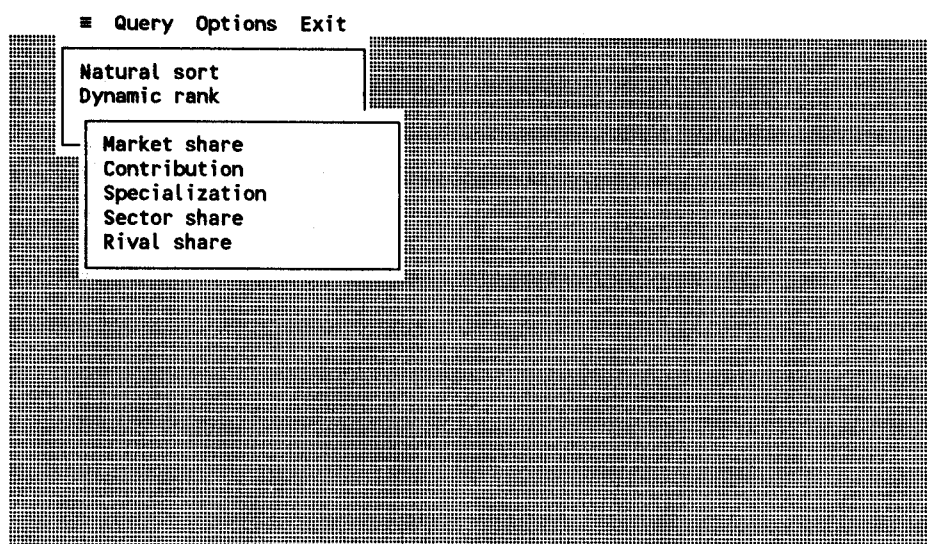
### 5.1.1 Natural sort

This option will give the query results sorted first by country code and then by sector code. It is called **natural** because it mirrors the way in which the data are stored in the database.

### 5.1.2 Dynamic rank (growth)

The dynamic rank option activates sort features that rank the results in descending order according to the selected indicator. The sort is based on the growth rate between the initial and final years of the period under consideration - hence the term **dynamic**.

On selection of the dynamic rank option a pull-down menu appears allowing specification of the indicator to be used as the sort key.



The options in the submenu are as follows:

- **Market share:** sorts the results by country and by sectors in which the country's market share increases most.
- **Contribution:** sorts the results by country and by sectors whose relative contribution increases most.
- **Specialization:** sorts the results by country and by sectors in which the country's specialization increases most.
- **Sector share:** sorts the results by country and by sectors with the greatest share.
- **Rival share:** sorts the results by greatest growth in market share, by country (not available if matrix mode selected). To use this option a large number of countries should be specified in the query.

After selecting one of these alternatives, a window appears in the center of the screen requesting:  
 i) the number of sectors to be sorted using the given indicator; ii) the minimum value for the first year of the period under consideration; and iii) the minimum value for the second year of the period:

≡ Query Options Exit

Enter rank pile number:	0
Choose minimum value for 1980:	0
Choose minimum value for 1990:	0
F2:Process	
ESC:Cancel	

In this way the number of sectors to be sorted by the main field is determined. The number of elements considered can be any integer, such as 5, 10 or 20. For example, 5 sorts the results for the five sectors that show the highest values for the relevant main field.

The minimum value enables the selection process to be restricted to those sectors that satisfy this condition in the main field. For example, if a minimum value of 0.5 is specified for the first year, and contribution has been selected, only those sectors where the country had a contribution of 0.5% or more in the first year will be selected. This is very useful, since if very low amounts are involved, high growth rates may appear.

### 5.1.3 Static rank (structure)

The static rank option activates sort features that rank the results in descending order according to the selected indicator. The sort is based on the value obtained for the final year of the period under consideration - hence the term **static**.

On selection of the static rank option a pull-down submenu appears allowing specification of the indicator to be used as the sort key.

≡ Query Options Exit

Natural sort Dynamic rank Static rank	Market share Contribution Specialization Sector share Rival share
---	---

The options in the submenu are as follows:

- **Market share:** sorts the results by country and by the sectors in which the country has the greatest market share.
- **Contribution:** sorts the results by country and by the sectors whose relative contribution is greatest.
- **Specialization:** sorts the results by country and by the sectors in which the country specializes most.
- **Sector share:** sorts the results by country and by sectors with the greatest share.
- **Rival share:** sorts the results by sector, and by those countries with the greatest market share (not available if matrix mode selected). To use this option a large number of countries should be specified in the query.

After selecting an indicator a window appears in the centre of the screen requesting the number of sectors to be sorted using the given indicator:

The screenshot shows a window titled "Query Options Exit" with a background of a fine grid. Inside the window, the text "Enter rank pile number : 0" is displayed. Below this, there are two lines of text: "F2:Process" and "ESC:Cancel", each followed by a horizontal bar indicating a cursor position.

The number of elements considered can be any integer, such as 5, 10 or 20. For example, 5 sorts the results for the five sectors showing the highest values for the selected indicator in the second year of the period.

## 5.2 Results: consolidated, detailed, adaptability index and graphs (menu 2)

The reports generated by CAN are available once the data selection process is complete. After ranking the data using dynamic or static rank, or simply considering the whole set of records obtained using natural sort, the data are presented in the aggregate (consolidated results), broken down (detailed results), or in graph form (graph). The options are described below:

The screenshot shows a window titled "Query Options Exit" with a background of a fine grid. Inside the window, the text "Natural sort" is displayed, followed by a list of options: "Consolidated results", "Detailed results", and "Graph". Each option is preceded by a horizontal bar indicating a cursor position.

### 5.2.1 Consolidated results

The consolidated results report presents the results for the sectors specified in the query is the aggregate. The presentation varies depending on whether or not the matrix parameter has been selected:

- Matrix: the consolidated results are presented in accordance with the competitive matrix.
- Standard: the consolidated results are presented in standard formats.

The consolidated results report considers all or some of the sectors obtained in response to the query, depending on the option selected:

- If **natural sort** has been selected, the consolidated results will report on all the sectors obtained for the query.
- If **dynamic rank** or **static rank** has been selected, the consolidated results will report on the selected sectors.

**Table 7: Consolidated results report in standard query mode**

■ Query Options Exit				
Natural sort				
21842	United States of America	1980	1990	RATE
Market share	%	13.54	11.82	-12.76
Contribution	%	57.97	66.19	14.17
Specialization		1.28	1.12	-12.34
sec CONSOLIDATED GROUP				
Sector share	%	45.22	58.89	30.23

When rivals are specified, there is an additional line in the consolidated results report, dealing with rival share.

The format of the reports, whether consolidated or detailed, is as follows:

1. The standard CAN indicators are shown: market share, contribution, specialization, sector share and, if required, rival share. The years to which the data correspond appear as column headings in the report.
2. If consolidated results based on sorted data are involved, the number of elements and the minimum values for the initial and final years are shown.
3. In a print-out there is a header indicating the parameters of the query. The first line gives the country codes and country operators selected; the second line shows sector codes and sector operators; the third line specifies whether any element other than the standard indicators was included.

In matrix mode all results are reported with standard CAN indicators for each field of the matrix. The report formats are the same as in standard query mode, with an extra line showing the matrix selected.

Table 8: Consolidated results report in matrix query mode

Query Options Exit				
DR: Market share      Min 1980: .2   Min 1990: .1   for 12   sec				
21840 United States of America				
R.S: Market share	%	1980	1990	RATE
Contribution	%	4.27	8.99	110.38
Specialization		1.11	2.97	167.19
Sector share	%	.4	.88	116.44
D.S: Market share	%	2.75	3.39	23.45
Contribution	%	3.01	5.87	95.08
Specialization	%	2.49	3.32	33.55
Sector share	%	.28	.57	100.70
M.O: Market share	%	8.74	5.82	-33.46
Contribution	%	11.92	11.62	-2.58
Specialization	%	5.12	7.64	49.15
Sector share	%	1.13	1.13	.23
RET: Market share	%	4.54	6.75	48.82
Contribution	%	8.66	7.72	-10.92
Specialization	%	3.29	2.37	-27.83
Sector share	%	.82	.75	-8.35
		4.01	3.16	-21.26

### 5.2.2 Detailed results

The detailed results option provides information broken down for each sector in the query separately. It features the same indicators as the consolidated results report, but the name of each sector is given.

The detailed results report varies depending on whether natural sort, dynamic or static rank has been selected.

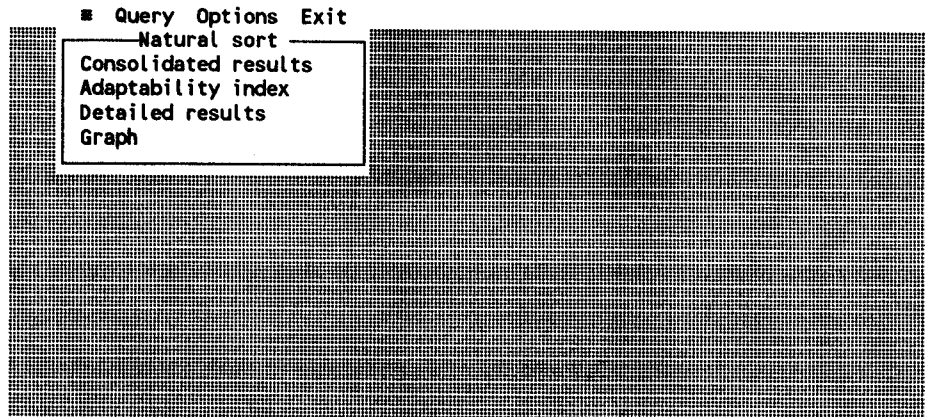
- If natural sort is selected, the records are sorted first by country and then by sector code in ascending order.
- If dynamic rank or static rank is selected, the records are individualized by country and in descending order of the selected indicators.

Table 9: Detailed results report with matrix (first screen)

Query Options Exit				
Natural sort				
Rising Star				
21842 United States of America				
		1980	1990	RATE
Market share	%	.34	.6	74.02
Contribution	%	.01	.01	120.81
Specialization		.03	.06	79.04
022 Milk and cream				
Sector share	%	.16	.19	23.33

### 5.2.3 Adaptability report

This report generates the adaptability index based on the results obtained, whether using natural sort, dynamic rank or static rank. It is only available in matrix mode. The adaptability report is based on the same indicators as the consolidated results report, but the data are organized according to market trends, and a distinction is made between dynamic increasing and static declining sectors. The data on each group of sectors is consolidated. The menu for this option is as follows:



The adaptability index gives information on market share and contribution:

- For market share, the adaptability index shows the direction in which competitiveness is trending, by comparing the market share of increasing dynamic sectors with that of declining stagnant sectors.
- For contribution, the adaptability index shows the pattern of trade dependence, by comparing the relative share of increasing sectors with that of declining sectors.

**Table 10: Adaptability report in matrix query mode**

■ Query Options Exit				
Natural sort				
41392 Japan				
		1980	1990	RATE
Increasing sectors:				
Market share	%	8.11	9.61	18.54
Contribution	%	82.03	92.87	13.22
Specialization		1.67	1.3	-22.11
Sector share	%	49.22	71.54	45.35
Declining sectors:				
Market share	%	1.73	1.86	7.98
Contribution	%	17.97	7.13	-60.34
Specialization		.35	.25	-29.04
Sector share	%	50.68	28.32	-44.11
Adaptability index:				
Market share		4.7	5.16	9.77
Contribution		4.57	13.03	185.47

### 5.2.4 Graph

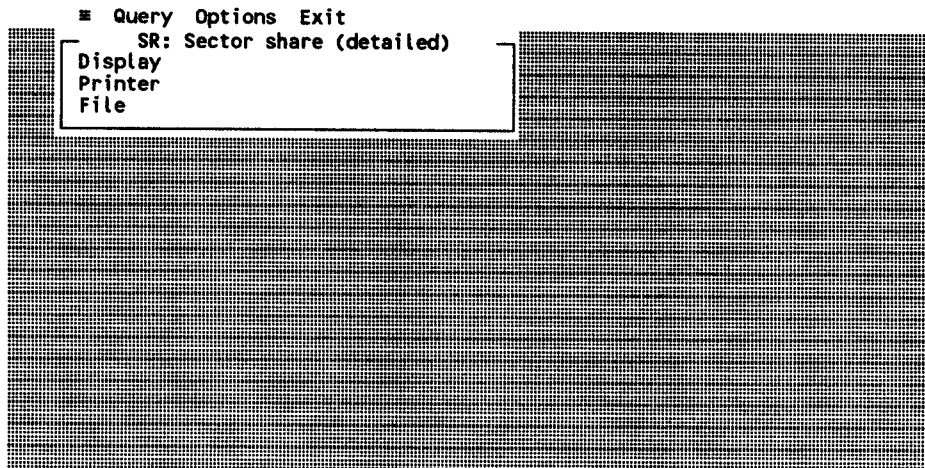
The **graph** can be used with natural sort, dynamic rank or static rank. It plots the general characteristics of the results obtained. This type of report is available only on screen.

Results are reported for:

- Market share for all, dynamic rank or static rank, when no rival country has been specified.
- Relative share for all, dynamic rank or static rank, when a rival country has been specified.
- Contribution in matrix mode for all, dynamic rank or static rank.

## 6. Output: display, printer and file (menu 3)

The CAN program sends its reports to screen, printer or file. The options menu is as follows:



### 6.1 Screen display

Reports on screen, whether consolidated or detailed, provide standard information on the results. The information may be scrolled using the [PageUp] and [PageDown] keys. To exit the report, press [ESC].

### 6.2 Printer

Reports may be printed out. After selecting Printer, the message **\*\*\*PRINTING\*\*\*** appears.

A print job may be cancelled by pressing [ESC]. A message appears in the upper part of the screen. Type 'C' to cancel the print job or 'R' to resume.

Correct printing depends how the printer is set up. To define the type of printer connected to your computer, select **printer** options in the main menu.

### 6.3 File

The **file** option stores the list-out in Lotus 1-2-3 WK1 format. A window appears with the message "Filename:". Disk drive, path and filename should be typed in (if no filename extension is specified, the program will assign the extension .WK1).

The information in the output file is easy to identify. The following table shows the column headings used in the file.

**Table 11: Identification of data in output file**

Column headings	Description
PAIS	Country codes
SECTOR	Sector codes
PM1	Reference country's market share in year 1
PM2	Reference country's market share in year 2
DPM	Rate of change of market share
CT1	Reference country's contribution in year 1
CT2	Reference country's contribution in year 2
DCT	Rate of change of contribution
ESP1	Reference country's specialization in year 1
ESP2	Reference country's specialization in year 2
DESP	Rate of change of specialization
CS1	Sector share in year 1
CS2	Sector share in year 2
DCS	Rate of change of sector share
PR1	Relative share in year 1
PR2	Relative share in year 2
DPR	Rate of change of relative share

## 7. Practical examples

This section describes the most common queries, with interpretations of the data obtained from them. The aim of the examples is to take the user right through the process of formulating the query and obtaining the results.

Each illustration first sets out the analysis that is required, then gives the exact sequence of steps required to formulate the query appropriately, so that the desired information is obtained:

- **Basic information:** the information to be entered in each of the fields relevant to the query is given.
- **Execution:** once the necessary fields are completed, [F2] starts the processing.
- **Options:** sequence of selection of options which will allow the desired information to be obtained.
- **Interpretation:** comments on the results obtained.



## 7.1 Examples of country queries

**Example 1:** You wish to know the following competitiveness indicators for the United States for the period 1985-1992:

- a) Its global share in OECD imports
- b) Its three most competitive sectors (0.1 minimum market share for 1985 and 1992)
- c) The combined share of the three most competitive sectors

Query procedure:

### a) Global share of OECD imports

#### 1. Basic information

Country: United States (21842)

Sectors: All (@@@)

Period: 1985-1992

```

      Query Options Exit
  
```

Country : 21842	
Market Share :	Rival Share :
Contribution :	Rival Growth :
Specialization :	
Sectors : @@@	
Sector Share :	
Period : 1985 1992	
Matrix Type :	

F1:Help
F2:Process

F3>DeleteAll
ESC:Cancel

#### 2. Execution

[F2]

#### 3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
21842 United States of America				
		1985	1992	RATE
Market share	%	10.4	10.47	.65
Contribution	%	100	100	.00
Specialization		1	1	.00
sec CONSOLIDATED GROUP				
Sector share	%	100	100	-.00

#### 4. Interpretation

The United States' global share in OECD imports remained practically unchanged, from 10.4% in 1985 to 10.47% in 1992, a rise of 0.65%. Global share refers to all sectors, and contribution is therefore 100%, i.e. total imports from the United States. Specialization is 1, because the report shows consolidated share compared with global share. Sector share equals 100%, because total share includes all sectors. The percentage variation between 1985 and 1992 for the last three items is 0% since the proportions did not change over time.

#### b) Three most competitive sectors

##### 1. Basic information:

Country: United States (21842)

Sectors: All (@@@)

Period: 1985-1992

■ Query Options Exit

Country : 21842			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : @@@			
Sector Share	:	F1:Help	
Period : 1985 1992		F2:Process	
Matrix Type :	F3>DeleteAll	ESC:Cancel	

## 2. Execution [F2]

## 3. Options

Menu 1: Dynamic rank

Market share

3 sectors, 0.1, 0.1

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

DR: Market share				
Min 1985: .1 Min 1992: .1 for 3 sec				
21842 United States of America				
Market share	%	1985	1992	RATE
Contribution	%	.22	9.88	4438.29
Specialization		.00	.18	6047.80
783 Road motor vehicles, n.e.s.		.02	.94	4409.11
Sector share	%	.14	.19	36.34
21842 United States of America				
Market share	%	.45	2.18	389.32
Contribution	%	.02	.09	448.85
Specialization		.04	.21	386.18
672 Ingots and other primary forms of iron and steel				
Sector share	%	.37	.42	12.89
21842 United States of America				
Market share	%	.29	1.26	333.50
Contribution	%	.00	.01	297.75
Specialization		.03	.12	330.71
686 Zinc				
Sector share	%	.1	.09	-7.65

## 4. Interpretation

The three sectors in which the United States recorded most growth were: road motor vehicles; ingots and other primary forms of iron and steel; and zinc. In the road motor vehicles sector the United States' total market share increased by 4,438.29% in the period in question, to 9.88% in 1992, i.e. 9.88% of all OECD imports in this sector were from the United States. This sector also accounted for 0.18% of all OECD imports from the United States in 1992. The specialization index shows that the United States' contribution in this sector was 0.94% of its total contribution (9.88/10.47). The same sector accounted for 0.19% of all OECD imports in 1992.

### c) Combined share of the three most competitive sectors

#### 1. Basic information:

Country: United States (21842)

Sectors: All (@@@)

Period: 1985-1992

■ Query Options Exit

Country : 21842			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : 000			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :	F3>DeleteAll	ESC:Cancel	

## 2. Execution

[F2]

## 3. Options

Menu 1: Dynamic rank

Market share

3 sectors, 0.1, 0.1

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

DR: Market share				
		Min 1985: .1	Min 1992: .1	for 3 sec
21842 United States of America				
		1985	1992	RATE
Market share	%	.37	4.17	1031.38
Contribution	%	.02	.28	1192.81
Specialization		.04	.4	1024.10
sec CONSOLIDATED GROUP				
Sector share	%	.61	.7	15.01

#### 4. Interpretation

The status line indicates that the consolidated results are reported in dynamic rank (DR) for market share for three sectors in which the United States held a market share of not less than 0.1% in 1985 and 1992. The consolidated market share in 1992, that is the weighted average share for the three sectors, was 4.17%  $(9.88 \cdot .19 + 2.18 \cdot .42 + 1.26 \cdot .09) / (.19 + .42 + .09)$ . These three sectors accounted for 0.28% of all OECD imports from the United States in 1992  $(.18 + .09 + .01)$ . The weighted average specialization in these sectors in 1992 was 0.4  $(.94 \cdot .19 + .21 \cdot .42 + .12 \cdot .09) / (.19 + .42 + .09)$ . The three sectors accounted for 0.7% of all OECD imports in 1992  $(.2 + .41 + .09)$ .

**Example 2:** You wish to know the following competitiveness indicators for the United States for the period 1985-1992:

- a) All competitive sectors in OECD imports
- b) The three most important competitive sectors

Query procedure:

#### a) All competitive sectors in OECD imports

##### 1. Basic information:

Country: United States (21842)

Market share: >

Sectors: All (@@@)

Period: 1985-1992

■ Query Options Exit

Country : 21842			
Market Share	:	>	Rival Share :
Contribution	:		Rival Growth :
Specialization	:		
Sectors : @@@			
Sector Share	:		F1:Help
Period	:	1985 1992	F2:Process
Matrix Type	:	F3>DeleteAll	ESC:Cancel

## 2. Execution

[F2]

## 3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

\* Query Options Exit

Natural sort				
21842 United States of America				
		1985	1992	RATE
Market share	%	6.33	8.99	41.89
Contribution	%	26.51	37.08	39.88
Specialization		.61	.86	40.98
sec CONSOLIDATED GROUP				
Sector share	%	43.54	43.2	-.78

## 4. Interpretation

In 1992, the United States average weighted market share in OECD imports was 8.99% in sectors in which it increased its market share between 1985 and 1992. In the second year these sectors accounted for 37.08% of all OECD imports from the United States, i.e. 37.08% of OECD imports from the United States were in sectors in which the United States was competitive. These sectors, which accounted for 43.20% of all OECD imports in 1992, declined on average by 0.78% between 1985 and 1992. The United States was on average competitive in stagnant sectors.

## b) The three most important competitive sectors

## 1. Basic information:

Country: United States (21842)

Market share: &gt;

Sectors: All (@@@)

Period: 1985-1992

■ Query Options Exit

Country : 21842	
Market Share : >	Rival Share :
Contribution :	Rival Growth :
Specialization :	
Sectors : 000	
Sector Share :	F1:Help
Period : 1985 1992	F2:Process
Matrix Type :	F3>DeleteAll ESC:Cancel

## 2. Execution

[F2]

## 3. Options

Menu 1: Static rank  
Contribution  
3 sectors

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

SR: Contribution Min 1985: 0 Min 1992: 0 for 3 sectores				
21842 United States of America				
Market share	%	1985	1992	RATE
Contribution	%	33.57	41.46	23.51
Specialization		3.84	7.24	88.38
792 Aircraft and associated equipment and parts thereof		3.23	3.96	22.72
Sector share	%	1.19	1.83	53.51
21842 United States of America				
Market share	%	11.09	12.78	15.24
Contribution	%	1.33	1.98	49.14
Specialization		1.07	1.22	14.50
764 Telecommunications equipment and parts and accessories				
Sector share	%	1.25	1.63	30.25
21842 United States of America				
Market share	%	13.01	21.59	65.97
Contribution	%	.56	1.43	156.75
Specialization		1.25	2.06	64.91
898 Musical instruments and parts and accessories				
Sector share	%	.44	.69	55.69

#### 4. Interpretation

The three most important competitive sectors for the United States, i.e. the ones whose contribution was greatest in 1992, are, in descending order: aircraft and associated equipment and parts thereof; telecommunications equipment, parts and accessories; and musical instruments, parts and accessories.

**Example 3:** You wish to know the following competitiveness indicators for the United States for the period 1985-1992:

- a) All sectors of increasing importance in OECD imports
- b) The three sectors accounting for the largest contribution

Query procedure:

- a) All sectors of increasing importance in OECD imports

##### 1. Basic information:

Country: United States (21842)

Sectors: All (@@@)

Period: 1985-1992

Contribution: >

■ Query Options Exit

Country : 21842

Market Share :  
Contribution : >  
Specialization :

Sectors : @@@

Sector Share :

Period : 1985 1992

Matrix Type :

Rival Share :  
Rival Growth :

**F1:Help**

**F2:Process**

**F3>DeleteAll**    **ESC:Cancel**

##### 2. Execution

[F2]

##### 3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display



Query Options Exit

Natural sort				
21842 United States of America				
		1985	1992	RATE
Market share	%	9.74	11	13.02
Contribution	%	42.71	58.9	37.92
Specialization		.94	1.05	12.29
sec CONSOLIDATED GROUP				
Sector share	%	45.63	56.05	22.82

#### 4. Interpretation

The United States held an average weighted market share in OECD imports of 11% in 1992, in sectors into which it diversified between 1985 and 1992. In 1992 these sectors accounted for 58.9% of all OECD imports from the United States, i.e. 58.9% of OECD imports from the United States were in sectors in which the United States increased its trade between 1985 and 1992. These sectors accounted for 56.05% of all OECD imports in 1992 and increased on average by 22.82% between 1985 and 1992. The United States diversified its trade into dynamic sectors.

#### b) The three sectors accounting with the largest contribution

##### 1. Basic information:

Country: United States (21842)

Sectors: All (@@@)

Period: 1985-1992

Contribution: >

Query Options Exit

Country : 21842			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		:
Sectors : @@@			
Sector Share	:	F1:Help	
Period : 1985 1992		F2:Process	
Matrix Type :	F3>DeleteAll	ESC:Cancel	

## 2. Execution

[F2]

## 3. Options

Menu 1: Static rank

Contribution

3 sectors

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

SR: Contribution Min 1985: 0 Min 1992: 0 for 3 sectores				
21842 United States of America				
Market share	%	1985	1992	RATE
Contribution	%	33.57	41.46	23.51
Specialization		3.84	7.24	88.38
		3.23	3.96	22.72
792 Aircraft and associated equipment and parts thereof				
Sector share	%	1.19	1.83	53.51
21842 United States of America				
Market share	%	26.21	21.81	-16.77
Contribution	%	3.24	3.45	6.40
Specialization		2.52	2.08	-17.30
759 Parts, n.e.s., of and accessories for 751 and 752				
Sector share	%	1.29	1.65	28.66
21842 United States of America				
Market share	%	18.68	16.79	-10.09
Contribution	%	2.3	2.9	25.95
Specialization		1.8	1.6	-10.67
776 Thermionic valves and tubes, and other semiconductors, n.e.s.				
Sector share	%	1.28	1.81	41.00

## 4. Interpretation

The three sectors most important to the United States, i.e. those which accounted by the largest contribution, in descending order: aircraft and associated equipment and parts thereof; parts and accessories for office machine and automatic data processing machines; and thermionic valves and tubes, and other semiconductors.

**Example 4:** You wish to know the following competitiveness indicators for Korea compared with Mexico for the period 1985-1992:

- a) Competitive position of all sectors in OECD imports
- b) The three most important sectors

Query procedure:

a) Competitive position of all sectors in OECD imports

1. Basic information:

Country : Korea (45410) compared with Mexico (33484)  
 Sectors: All (@@@)  
 Period: 1985-1992  
 Rival share: >

■ Query Options Exit

Country : 45410  33484			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		:
Sectors : @@@			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :	F3:DeleteAll	F5:Cancel	

2. Execution

[F2]

3. Options

Menu 1: Natural sort  
 Menu 2: Consolidated results  
 Menu 3: Display

■ Query Options Exit

Natural sort				
45410 Korea (Republic of)				
Market share	%	1985	1992	RATE
Contribution	%	2.79	2.8	.29
Specialization		87.8	83.24	-5.20
		1.88	1.65	-12.55
sec CONSOLIDATED GROUP				
Sector share	%	46.64	50.57	8.41
33484 Mexico				
Rival share		3.55	3.43	-3.41

#### 4. Interpretation

In 1992 Korea's average weighted market share of OECD imports was 2.8% in sectors where its market share was greater than Mexico's. In 1992 those sectors accounted for 83.24% of all OECD imports from Korea and 50.57% of total OECD imports. In 1992 Korea's market share in those sectors was 3.43 times greater than Mexico's. The decrease in the relative share index shows that Mexico's trade grew faster on average than Korea in those sectors. Korea's average market share was 83.24% greater than Mexico's in OECD imports from Korea in dynamic sectors as a whole.

#### b) The three most important sectors

##### 1. Basic information:

Country : Korea (45410) compared with Mexico (33484)  
 Sectors: All (@@@)  
 Period: 1985-1992  
 Rival share: >

■ Query Options Exit

Country : 45410  33484			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : @@@			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :		F3>DeleteAll	ESC:Cancel

##### 2. Execution

[F2]

##### 3. Options

Menu 1: Static rank

Contribution

3 sectors

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

SR: Contribution Min 1985: 0 Min 19 2: 0 for 3 sectors				
45410	Korea (Republic of)			
	Market share	%	1985 5.28	1992 7.69
	Contribution	%	4.57	8.18
	Specialization		3.56	4.52
776	Thermionic valves and tubes, and other semiconductors, n.e.s.			
	Sector share	%	1.28	1.81
33484	Mexico			
	Rival share		3.6	6.62
45410	Korea (Republic of)			
	Market share	%	12.65	10.96
	Contribution	%	8.09	6.79
	Specialization		8.53	6.45
851	Footwear			
	Sector share	%	.95	1.05
33484	Mexico			
	Rival share		20.94	15.12
45410	Korea (Republic of)			
	Market share	%	1.82	2.76
	Contribution	%	2.21	4.75
	Specialization		1.23	1.63
752	Automatic data processing machines, units thereof			
	Sector share	%	1.8	2.92
33484	Mexico			
	Rival share		10.26	3.33

#### 4. Interpretation

The three most important sectors in which Korea had a greater market share than Mexico are, in descending order: thermionic valves and tubes, and other semiconductors; footwear; and automatic data processing machines, units thereof. In 1992, Korea's market share in footwear was 15.12 times greater than Mexico's.

**Example 5:** You wish to know the following competitiveness indicator for Korea compared with Mexico for the period 1985-1992:

- a) Competitiveness in all sectors of OECD imports

Query procedure:

- a) Competitiveness in all sectors of OECD imports

##### 1. Basic information:

Country : Korea (45410) compared with Mexico (33484)  
 Sectors: All (@@@)  
 Period: 1985-1992  
 Rival growth: >

■ Query Options Exit

Country : 45410 {33484

Market Share : Rival Share :  
 Contribution : Rival Growth : >  
 Specialization :

Sectors : 000

Sector Share : F1:Help

Period : 1985 1992 F2:Process

Matrix Type : F3>DeleteAll ESC:Cancel

## 2. Execution

[F2]

## 3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
45410 Korea (Republic of)				
Market share	%	1985	1992	RATE
Contribution	%	.63	1.07	69.85
Specialization		23.56	31.28	32.75
		.42	.63	48.11
sec CONSOLIDATED GROUP				
Sector share	%	55.58	49.82	-10.37
33484 Mexico				
Rival share		.26	.65	150.61

## 4. Interpretation

In 1992 Korea's average weighted market share of OECD imports was 1.07%, in sectors in which it grew faster than Mexico. In 1992 these sectors accounted for 31.28% of all OECD imports from Korea, and, Korea's market share in them was 0.65 times that of Mexico. In 1985 Mexico's market share in these sectors was greater, but Korea's grew faster than Mexico's between 1985 and 1992. The sectors in which Korea grew faster than Mexico in 1992 accounted for 49.82% of all OECD imports. These

sectors as a percentage of OECD imports decreased on average by 10.37% between 1985 and 1992. Relative share and contribution indicate that Korea grew faster than Mexico in sectors that were of increasing importance for Korea.

**Example 6:** You wish to know the following competitiveness indicators for Germany for the period 1985-1992:

- a) Competitive position in OECD imports of machinery and transport equipment
- b) The three most important sectors

Query procedure:

- a) **Competitive position in OECD imports of machinery and transport equipment**

1. Basic information:

Country: Germany (53276)

Sectors: Machinery and transport equipment (7@@)

Period: 1985-1992

■ Query Options Exit

Country : 53276			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : 7@@			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :	F3>DeleteAll	ESC:Cancel	

2. Execution

[F2]

3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
53276 German F.Rep.(since 91 Germany)				
		1985	1992	RATE
Market share	%	16.53	14.88	-9.96
Contribution	%	45.77	46.28	1.12
Specialization		1.52	1.31	-13.94
sec CONSOLIDATED GROUP				
Sector share	%	30.04	35.29	17.50

#### 4. Interpretation

Germany's average weighted market share in OECD imports of machinery and transport equipment was 14.88 in 1992. These sectors accounted for 46.28% of all OECD imports from Germany. Germany specialized in sectors that accounted for 35.29% of total OECD imports in 1992. Trends indicate a loss of competitiveness for Germany in machinery and transport equipment. The specialization index shows that Germany's competitiveness fell more in this section than in its global market share.

#### b) The three most important sectors

##### 1. Basic information:

Country: Germany (53276)

Sectors: Machinery and transport equipment (7@@)

Period: 1985-1992

■ Query Options Exit

Country : 53276		
Market Share	:	Rival Share :
Contribution	:	Rival Growth :
Specialization	:	
Sectors : 7@@		
Sector Share	:	F1:Help
Period : 1985 1992		F2:Process
Matrix Type :	F3:DeleteAll	ESC:Cancel



## 2. Execution

[F2]

## 3. Options

Menu 1: Static rank

Contribution

3 sectors

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

SR: Contribution Min 1985: 0 Min 1992: 0 for 3 sectores				
53276 German F.Rep.(since 91 Germany)				
		1985	1992	RATE
Market share	%	22.89	21.33	-6.79
Contribution	%	11.88	11.37	-4.26
Specialization		2.11	1.88	-10.91
781 Passenger motor cars				
Sector share	%	5.63	6.05	7.47
53276 German F.Rep.(since 91 Germany)				
Market share	%	17.52	17.65	0.75
Contribution	%	4.25	3.93	-7.39
Specialization		1.61	1.55	-3.70
784 Parts and accessories, n.e.s of motor vehicles				
Sector share	%	2.63	2.53	-3.83
53276 German F.Rep.(since 91 Germany)				
Market share	%	25.43	22.94	-9.79
Contribution	%	2.01	2.17	7.82
Specialization		2.34	2.02	-13.77
749 Non-electric parts and accessories of machinery				
Sector share	%	.86	1.07	25.04

## 4. Interpretation

The three most important sectors for Germany in the machinery and transport equipment section were, in descending order: passenger motor cars, parts and accessories of motor vehicles, and non-electric parts and accessories of machinery. These three sectors accounted for 17.47% of total OECD imports from Germany in 1992.

**Example 7:** You wish to know the following competitiveness indicators for Germany for the period 1985-1992:

- Competitive position in OECD imports of machinery and transport equipment, considering only those sectors of trade
- The three most important sectors

Query procedure:

a) **Competitive position in OECD imports of machinery and transport equipment, considering only those sectors of trade**

1. Basic information:

Country: Germany (53276)

Sectors: Machinery and transport equipment (7@@ =7@@)

Period: 1985-1992

■ Query Options Exit

Country : 53276	
Market Share :	Rival Share :
Contribution :	Rival Growth :
Specialization :	
Sectors : 7@@ =7@@	
Sector Share :	
Period : 1985 1992	
Matrix Type :	
	F1:Help
	F2:Process
	ESC:Cancel
	F3>DeleteAll

2. Execution

[F2]

3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
53276 German F.Rep.(since 91 Germany)				
		1985	1992	RATE
Market share	%	16.53	14.88	-9.96
Contribution	%	100	100	.00
Specialization		1	1	.00
sec CONSOLIDATED GROUP				
Sector share	%	100	100	-.00

#### 4. Interpretation

Germany's average weighted market share in OECD imports of machinery and transport equipment was 14.88% in 1992, as in example 6 (a). The remaining indicators are defined in relation to the new base of reference. The ratio of machinery and transport equipment to machinery and transport equipment is, of course, one.

#### b) The three most important sectors

##### 1. Basic information:

Country: Germany (53276)

Sectors: Machinery and transport equipment (7@@ =7@@)

Period: 1985-1992

■ Query Options Exit

Country : 53276	
Market Share	:
Contribution	:
Specialization	:
Sectors : 7@@ =7@@	
Sector Share	:
Period : 1985	1992
Matrix Type :	

Rival Share :

Rival Growth :

F1:Help

F2:Process

F3>DeleteAll

ESC:Cancel

##### 2. Execution

[F2]

##### 3. Options

Menu 1: Static rank

Contribution

3 sectors

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

SR: Contribution Min 1985: 0 Min 1992: 0 for 3 sectores				
53276 German F.Rep.(since 91 Germany)				
Market share	%	1985	1992	RATE
Contribution	%	22.89	21.33	-6.79
Specialization		1.38	1.43	-5.31
781 Passenger motor cars				3.53
Sector share	%	18.74	17.14	-8.54
53276 German F.Rep.(since 91 Germany)				
Market share	%	17.52	17.65	.75
Contribution	%	9.28	8.5	-8.42
Specialization		1.06	1.19	11.90
784 Parts and accessories, n.e.s. of motor vehicles				
Sector share	%	8.76	7.17	-18.16
53276 German F.Rep.(since 91 Germany)				
Market share	%	25.43	22.94	-9.79
Contribution	%	4.39	4.69	6.63
Specialization		1.54	1.54	.20
749 Non-electric parts and accessories of machinery				
Sector share	%	2.86	3.04	6.42

#### 4. Interpretation

The three most important sectors for Germany in the machinery and transport equipment section were, in descending order: passenger motor cars, parts and accessories of motor vehicles, and non-electric parts and accessories of machinery. The composition of the three most important sectors did not change with regard to the reference base. In 1992, these three sectors accounted for 37.76% of total OECD imports of machinery and transport equipment from Germany. In comparison to the previous example there are three major changes in the indicators:

- Contribution is affected by the change in the proportion of the sectors.
- Sector share has increased in line with the new proportion. Thus, the passenger motor car sector, which was dynamic (7.47% growth) in relation to total OECD imports, has now lost importance (contracting, with a value of -8.54%). The machinery and transport equipment section recorded above-average growth in relation to OECD imports. The sectors that increased at less rate than the average rate of growth in machinery and transport equipment have now decreased relative to the new reference base.
- The specialization index responds to the new proportions in the trade pattern. The reference is now the consolidated market share in machinery and transport equipment.

**Example 8:** You wish to know the following competitiveness indicator for Germany for the period 1985-1992:

- a) Competitive position in OECD imports of passenger motor cars (781), considering only OECD trade with the European Union (99101)

Query procedure:

**a) Competitive position in OECD imports of passenger motor cars (781), considering only OECD trade with the European Union (99101)**

**1. Basic information:**

Country: Germany (53276 =99101)  
 Sectors: Passenger motor cars (781)  
 Period: 1985-1992

■ Query Options Exit

Country : 53276 =99101			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : 781			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :		F3>DeleteAll	ESC:Cancel

**2. Execution**

[F2]

**3. Options**

Menu 1: Natural sort  
 Menu 2: Detailed results  
 Menu 3: Display

■ Query Options Exit

Natural sort				
53276 German F.Rep.(since 91 Germany)				
		1985	1992	RATE
Market share	%	55.2	41.72	-24.42
Contribution	%	11.88	11.37	-4.26
Specialization		1.92	1.51	-21.44
781 Passenger motor cars				
Sector share	%	6.18	7.62	23.26

#### 4. Interpretation

In 1992, Germany accounted for 41.72% of all OECD imports of passenger motor cars from the EU. The remaining indicators are set to the new reference base. In comparison to the previous example there are three major changes in the indicators:

- The market share changes owing to Germany's importance in passenger motor cars within the EU.
- The sector share has increased in line with the new proportion. It represents the share of passenger motor cars in imports from the EU.
- The specialization index is affected by the new reference base, which is now global market share within the EU.

#### 7.2 Examples of sector queries

Unlike queries on countries, those referring to sectors aim to obtain information from the standpoint of a sector or a set of sectors.

**Example 1:** You wish to know the following competitiveness indicators for the Latin American Integration Association (LAIA), excluding Brazil, for the period 1985-1992:

- a) The three biggest competitors for OECD imports in the leather sector
- b) The three most efficient competitors for OECD in the leather sector (minimum market share 0.1 for 1985 and 1992)

Query procedure:

- a) **The three biggest competitors in the leather sector among OECD imports**

##### 1. Basic information:

Country: LAIA, excluding Brazil (99201-33076)  
 Sectors: Leather (611)  
 Period: 1985-1992

## ■ Query Options Exit

Country : 53276			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : 700 =700			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :	F3>DeleteAll	ESC:Cancel	

## ■ Query Options Exit

Country : 99201-33076			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : 611			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :	F3>DeleteAll	ESC:Cancel	

## 2. Execution

[F2]

## 3. Options

Menu 1: Static rank

Rival share

3 countries

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

SR: Relative share		Min 1985: 0	Min 1992: 0	for 3 countries
<b>33032 Argentina</b>				
Market share	%	1985 6.15	1992 4.98	RATE -19.01
Contribution	%	4.64	3.92	-15.43
Specialization		20.22	19.64	-2.87
611 Leather				
Sector share	%	.23	.2	-12.93
<b>33858 Uruguay</b>				
Market share	%	1.07	1.31	22.44
Contribution	%	4.04	8.49	110.32
Specialization		17.59	42.48	141.55
611 Leather				
Sector share	%	.23	.2	-12.93
<b>33600 Paraguay</b>				
Market share	%	.49	.61	24.81
Contribution	%	5.64	8.64	53.29
Specialization		24.57	43.25	76.04
611 Leather				
Sector share	%	.23	.2	-12.93

#### 4. Interpretation

Among LAIA member countries, excluding Brazil, the three biggest competitors in the leather sector were Argentina, Uruguay and Paraguay.

- b) The three most efficient competitors in the leather sector among OECD imports (minimum market share 0.1 for 1985 and 1992)

##### 1. Basic information:

Country: LAIA, excluding Brazil (99201-33076)

Sectors: Leather (611)

Period: 1985-1992

■ Query Options Exit

Country : 99201-33076			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : 611			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type :	F3>DeleteAll		ESC:Cancel



2. Execution  
[F2]

3. Options

Menu 1: Dynamic rank

Rival share

3 countries, 0.1, 0.1

Menu 2: Detailed results

Menu 3: Display

■ Query Options Exit

DR: Rival share      Min 1985: .1   Min 1992: .1   for 3   countries				
33862 Venezuela				
Market share	%	1985	1992	RATE
Contribution	%	.12	.22	83.60
Specialization		.04	.1	159.14
611 Leather		.17	.51	197.61
Sector share	%	.23	.2	-12.93
33600 Paraguay				
Market share	%	.49	.61	24.81
Contribution	%	5.64	8.64	53.29
Specialization		24.57	43.25	76.04
611 Leather				
Sector share	%	.23	.2	-12.93
33858 Uruguay				
Market share	%	1.07	1.31	22.44
Contribution	%	4.04	8.49	110.32
Specialization		17.59	42.48	141.55
611 Leather				
Sector share	%	.23	.2	-12.93

4. Interpretation

Among LAIA member countries, excluding Brazil, the three most efficient competitors in the leather sector were Venezuela, Paraguay and Uruguay.

**Example 2:** You wish to know the following competitiveness indicators for the United States (21842) and Mexico (33484) for the period 1985-1992:

a) The dynamic sectors of OECD imports

Query procedure:

a) The dynamic sectors of OECD imports

(33484) 1. Basic information:      Country : United States (21842) and Mexico

Sectors: All (@@@)

Period: 1985-1992

■ Query Options Exit

Country : 21842 33484

Market Share : Rival Share :  
 Contribution : Rival Growth :  
 Specialization :

Sectors : 000

Sector Share : > F1:Help

Period : 1985 1992 F2:Process

Matrix Type : F3>DeleteAll ESC:Cancel

## 2. Execution

[F2]

## 3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
21842 United States of America				
		1985	1992	RATE
Market share	%	11.69	11.4	-2.52
Contribution	%	58.5	72.05	23.17
Specialization		1.12	1.09	-3.15
sec CONSOLIDATED GROUP				
Sector share	%	52.05	66.2	27.17
33484 Mexico				
Market share	%	1.14	1.59	39.26
Contribution	%	33.55	62.25	85.55
Specialization		.65	.94	45.93
sec CONSOLIDATED GROUP				
Sector share	%	51.96	66.07	27.15

## 4. Interpretation

In 1992 the United States average weighted market share of the United States in dynamic sectors of OECD imports was 11.4%, while Mexico's was 1.59%. These sectors accounted for 72.05% of all OECD imports from the United States and 62.25% of all OECD imports from Mexico. The United States lost 2.52% in dynamic sectors, while Mexico's market share grew by 39.26%. The specialization index shows that the United States lost more in these sectors than globally. In contrast, Mexico increased its market share in the dynamic sectors more than its global market share. The contribution index shows that Mexico diversified significantly into dynamic sectors.

### 7.3 Examples of matrix queries

Matrix queries aim at a global picture of the competitive structure.

**Example 1:** You want to know the following competitiveness indicators for Malaysia (45458) for the period 1985-1992:

- a) The consolidated structure of sales by Malaysia according to level of competitiveness
- b) The consolidated structure of sales by potential Asian tigers, excluding Malaysia, according to level of competitiveness

Query procedure:

- a) The consolidated structure of sales by Malaysia according to level of competitiveness

#### 1. Basic information:

Country : Malaysia (45458)  
 Sectors: All (@@@)  
 Period: 1985-1992  
 Matrix type: 1 (growth/share)

■ Query Options Exit

Country : 45458			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : @@@			
Sector Share	:		F1:Help
Period : 1985		1992	F2:Process
Matrix Type : 1		F3>DeleteAll	ESC:Cancel

#### 2. Execution [F2]

- #### 3. Options
- Menu 1: Natural sort
  - Menu 2: Consolidated results
  - Menu 3: Display

Query Options Exit

Natural sort 45458 Malaysia				
R.S: Market share	%	1985	1992	RATE
Contribution	%	.26	.66	156.30
Specialization		18.08	43	137.86
Sector share	%	.38	.7	87.49
D.S: Market share	%	48.2	61.15	26.87
Contribution	%	.53	1.11	108.90
Specialization		22.83	25.5	11.69
Sector share	%	.78	1.19	52.82
M.O: Market share	%	29.2	21.34	-26.91
Contribution	%	3.39	3.1	-8.54
Specialization		19.17	16.8	-12.35
Sector share	%	4.97	3.33	-33.10
RET: Market share	%	3.85	5.05	31.01
Contribution	%	1.45	1.1	-24.26
Specialization		39.93	14.7	-63.17
Sector share	%	2.13	1.18	-44.59
		18.75	12.46	-33.53

#### 4. Interpretation

Malaysia's competitive position improved noticeably between 1985 and 1992 with regard to market share. In 1992, slightly less than half its exports to OECD (43%) were ideally situated, as their share was increasing in a growing market. Furthermore, the percentage of its exports in adverse situations went down: missed opportunities from 19.17% to 16.8% and retreats from 39.93% to 14.7%.

b) The consolidated structure of sales by potential Asian tigers, excluding Malaysia, according to their level of competitiveness

#### 1. Basic information:

Country : Potential Asian tigers (99302) excluding Malaysia (45458)  
 Sectors: All (@@@)  
 Period: 1985-1992  
 Matrix type: 1 (growth/share)

Query Options Exit

Country : *99302-45458			
Market Share	:	Rival Share	:
Contribution	:	Rival Growth	:
Specialization	:		
Sectors : @@@			
Sector Share	:		F1:Help
Period : 1985	1992		F2:Process
Matrix Type : 1		F3>DeleteAll	ESC:Cancel

## 2. Execution

[F2]

## 3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
P0001 *99302-45458				
		1985	1992	RATE
R.S: Market share	%	1.45	5.11	252.60
Contribution	%	27.79	70.1	152.24
Specialization		.57	1.14	98.45
Sector share	%	48.44	61.57	27.11
D.S: Market share	%	2.48	3.63	46.10
Contribution	%	29.61	18.68	-36.92
Specialization		.98	.81	-17.78
Sector share	%	30.14	23.12	-23.29
M.O: Market share	%	3.17	2.69	-15.23
Contribution	%	4.53	2.77	-38.90
Specialization		1.25	.6	-52.29
Sector share	%	3.61	4.63	28.08
RET: Market share	%	5.4	3.55	-34.22
Contribution	%	38.07	8.45	-77.79
Specialization		2.14	.79	-62.98
Sector share	%	17.81	10.68	-40.01

## 4. Interpretation

The competitive position of potential Asian tigers was excellent as regards market share - in fact, much better than Malaysia's. A high percentage of products (70.1%) were ideally-placed, while there was a lower proportion of missed opportunities (2.77%) in 1992.

**Example 2:** You want to know the following competitiveness indicators for Greece (53300) for the period 1985-1992:

- The consolidated structure of sales by Greece according to level of competitiveness
- The consolidated structure of sales by the European Union, according to level of competitiveness

Query procedure:

- The consolidated structure of sales by Greece according to level of competitiveness

## 1. Basic information:

Country : Greece (53300)  
 Sectors: All (@@@)  
 Period: 1985-1992  
 Matrix type: 1 (growth/share)

■ Query Options Exit

Country : 53300

Market Share : Rival Share :  
 Contribution : Rival Growth :  
 Specialization :

Sectors : 000

Sector Share : F1:Help

Period : 1985 1992 F2:Process

Matrix Type : 1 F3>DeleteAll ESC:Cancel

## 2. Execution [F2]

## 3. Options

- Menu 1: Natural sort
- Menu 2: Consolidated results
- Menu 3: Display

■ Query Options Exit

Natural sort				
53300 Greece				
		1985	1992	RATE
R.S: Market share	%	.17	.25	49.15
Contribution	%	18.97	40.23	112.13
Specialization		.56	.94	69.30
Sector share	%	34	42.6	25.30
D.S: Market share	%	.25	.36	46.75
Contribution	%	17.01	21.82	28.30
Specialization		.83	1.38	66.58
Sector share	%	20.56	15.84	-22.98
M.O: Market share	%	.46	.26	-44.23
Contribution	%	28.04	23.2	-17.26
Specialization		1.55	.98	-36.69
Sector share	%	18.06	23.6	30.70
RET: Market share	%	.39	.22	-44.97
Contribution	%	35.99	14.75	-59.02
Specialization		1.31	.82	-37.53
Sector share	%	27.39	17.97	-34.39

## 4. Interpretation

Generally speaking, Greece's market share is small. It improved during the period 1985-1992 in the sense that a larger percentage of its exports were in good competitive positions, with rising stars at 40.23% and waning stars at 21.82%. However, around 40% of its exports remained in difficult positions: missed opportunities (23.2%) and retreats (14.75%); this situation changed more rapidly than the situation of products in dynamic sectors.

b) The consolidated structure of sales by the European Union, according to level of competitiveness

1. Basic information:

Country : European Union (99101)

Sectors: All (@@@)

Period: 1985-1992

Matrix type: 1 (growth/share)

■ Query Options Exit

Country : *99101	
Market Share :	Rival Share :
Contribution :	Rival Growth :
Specialization :	
Sectors : @@@	
Sector Share :	F1:Help
Period : 1985 1992	F2:Process
Matrix Type : 1	F3>DeleteAll ESC:Cancel

2. Execution

[F2]

3. Options

Menu 1: Natural sort

Menu 2: Consolidated results

Menu 3: Display

■ Query Options Exit

Natural sort				
99101 European Union				
		1985	1992	RATE
R.S:	Market share	%	41.98	46.28
	Contribution	%	28.53	35.69
	Specialization		1.11	1.14
	Sector share	%	25.66	31.4
D.S:	Market share	%	35.64	42.23
	Contribution	%	23.62	19.48
	Specialization		.94	1.04
	Sector share	%	25.02	18.78
M.O:	Market share	%	47.7	42.71
	Contribution	%	33.35	36.49
	Specialization		1.26	1.05
	Sector share	%	26.39	34.79
RET:	Market share	%	23.88	22.62
	Contribution	%	14.5	8.34
	Specialization		.63	.56
	Sector share	%	22.93	15.02
				-34.48

#### 4. Interpretation

The EU made a strong showing in terms of market share, particularly as regards goods with an increasing share of expanding markets (35.69%). However, a high proportion of its exports were in adverse competitive situations: missed opportunities (36.49%) and retreats (8.34%).