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FINAL REPORT

This project comprised of three major components, for each of
which the requested work was completed. Some elements were even more
extensively covered than originally intended.

The individual project components were:
(a) the analysis of profitability and productivity, their relation
to supply and demand conditions (especially the export performance)
and the calculation of linkage effects of exports for both employment
and income. The output of this part of the project is available
mainly as computer print-outs but the logic of the sequence of steps
undertaken is briefly described below (1.1 - 1.3).

(b) the implementation of an input-output software package, the major
elements and problems of which are described below under item 2.

(c) the preparation of a regional input-output import table. For
this purpose a pilot study has been undertaken whereby the major problems
in the construction of an input-output import table are identified
and discussed, and methods for their solution suggested and evaluated
for the case of the Japanes input-output table. The study is attached
below.

1.1 The first subject to be analyzed were the trends in profitability,
labour productivity and wage rates in the UNITAD regions for 28
manufacturing sectors. The data for this task was taken from United
Nations Industrial Statistics. Some 75 countries were selected and
used as a representative sample for the regions. The trends were
established for two different time periods 1963-1973 and 1974-1980
(results attached).

In order to investigate further the supply side conditions
in each region the changes in profitability were first attributed
to changes in prices and unit labour costs (results attached).

Since profit changes can be expressed as the difference between prices and unit labour cost changes:

$$R = \dot{P} - \dot{U}$$

R = change in profits

$\dot{P}$ = change in prices

$\dot{U}$ = change in unit labour costs

the tendency of profitability will depend on whether labour costs exceed prices or not. Therefore, in a second step, the dependency of price changes on unit labour costs was further analyzed. The influence of the determinants of unit labour cost changes (wage rate and productivity) and material costs on prices was calculated (results attached).

1.2 Given the results on profitability and its domestic supply determinants it was interesting to see how these manifest themselves in competitiveness in international trade. For this purpose it was analyzed to which extent competitiveness determines the export performances of individual countries in manufacturing trade. Two different types of approaches were chosen for this subject: 1. a constant market share analysis and 2. a regression analysis following the approach of J. Low (Journal of Econometrics, 1984, p.279-291).

In both cases the export performance was related to external market conditions (world effect), the commodity composition of exports (diversification) and the competitive position of the country. Three markets were distinguished in each case: World, Northern and Southern market. The constant market share analysis was computed for four different time periods: 1965-70, 1970-75, 1975-79, and 1979-82 (detailed results of both analyses are attached).

1.3 In order to establish the influence of exports on domestic production, industrial production and employment models derived from input-output tables for 1980 were used. At first labour coefficients for the separate branches of the economy were calculated. Then it was calculated which contain manufacturing exports and imports of each country in the terms of all other countries. Given the labour coefficients it is possible to calculate the labour content of exports and imports for the whole trade network. A comparison of ...

In addition to the employment effect of manufacturing trade
in the UNCTAD regions the income effects were also calculated.
This was done by means of output multipliers which determine the
extent to which sectoral output is increased if exports are
increased by one unit. Further, the internal sectoral linkages
were analyzed by calculating backward and forward linkage
coefficients (all results on regional input-output analysis are
attached).

2. The second part of the project consisted of the development
and implementation of an input-output software package. The purpose
of the software is to be able to decompose changes in sectoral
employment into factors like technological change, changes in
productivity, final demand and foreign trade. The decomposition
follows a standard methodology of input-output analysis (a sample
result of the decomposition for Germany is attached). The major
problem to be solved was the different size (number of sectors)
of national input-output tables. The software was applied to
the tables of the countries France, Germany, Italy and United Kingdom
(39 sectors), USA (157 sectors), and Japan which had even a varying
number of sectors over time (61 sectors 1975 and 72 in 1980). In
case of the USA the large number of sectors imposed problems of storage
such that it was necessary to aggregate the table into 36 sectors.

Since special care had to be taken the input-output tables
the available UN trade statistics had to be reconciled with the
varying aggregation of input-output sectors in each country. Thus
it was necessary to establish a conversion key which defines the
correspondence between SITC categories and the input-output sectors.
[unclear] obtain the tables available data on
this conversion the exports and imports of [unclear] available was
read from UN trade tapes.

The trade data was also used to obtain estimates of conversion
[unclear]
[unclear]
[unclear]
[unclear]

Import Tables from Trade Statistics

1.Introduction

The scope of this study is to investigate the possibility
of establishing import tables within the frame of regional
input-output tables.   This involves a thorough analyses of
at least the following problems:

    - Allocation of the imports based upon the SITC system
      to the ISIC system.

      Integration of the imports allocated to ISIC into
      the input-output sectors.

    - Construction of an import table.

In this study mainly the first two problems can be tackled.   The
third problem can be solved only by an intensive study of the
production processes used, the domestic production and the use
of the imports.   Existing input-output tables must be taken as
reference for this purpose.   This study is supposed to meet the
requirements and to realize the problems for the construction of
regional import tables on the basis of input-output tables.

The most recent input-output table and the best one also is used
to find out the way, how, to some degree, a correct allocation
of imports based on the Standard International Trade
Classification System (**SITC**) to the System of International
Standard Industrial Classification (**ISIC**) can be done.   The
mentioned input-output table is the **Japanese Input-Output Table**.

A linkage between SITC and ISIC has to prepared because imports
are recorded worldwide on SITC level, whereas input-output
tables are based more or less on the ISIC system.

Data on imports in thousand U.S. Dollars are available on SITC
basis for nearly all countries.   The relevant **Yearbook of
International Trade Statistics** [1] is published by the United
Nations.   It contains the imports c.i.f. and the exports f.o.b.
partly on a 5 digit SITC level.

The original Standard International Trade Classification had
been revised twice [2]. The Revision 2 of SITC consists of:

    - 10 Sections (1 digit level)
    - 63 Divisions (2 digit level)
    - 233 Groups (3 digit level)
      786 Subgroups (4 digit level)

Of the subgroups, 435 are further divided into 1753 items, so
that a total of 1924 basic items exists. The broad sectional
categories are the following:

    0 Food and live animals chiefly for food
    1 Beverages and Tobacco

3 ... ... mineral ... and ... ...
                4 ... ... lubricants and related materials
          2 Animal and vegetable oils, fats and waxes
        5 Chemicals and related products, n.e.s.
        6 Manufactured goods classified chiefly by material
        7 Machinery and transport equipment
        8 Miscellaneous manufactured goods
        9 Commodities and Transactions not classified
           elsewhere in the SITC

   It has to be noticed, that the SITC is designed to classify only
commodities.

   Two systems of recording trade are in common use, i.e.

       - special trade and
       - general trade.

   In the first case the total imports consists of imports for
direct domestic consumption (including transformation and
repair) and of withdrawals from bonded warehouses or free zones
for domestic consumption. In the second case the total imports
are the combined total of imports for direct domestic
consumption and imports into bonded warehouses or free zones.
Therefore, the differences are mainly in the way warehouses and
re-exported goods are recorded. But this has some impacts on
the construction of import tables within the input-output
system, for which the special trade is preferable. Otherwise,
inventories must be charged.

Unfortunately, the SITC, revision 2, is not generally adopted
yet. Further on, some countries report the imports and the
exports according to SITC, revision 1. Moreover, The Brussel
Tariff Nomenclature (**BTN**) is used in addition.

The situation is quiet complex and by far not easy to analyze.

The imports are reported in **c.i.f.**, as already mentioned. That
means, that the transaction value is the value at which the
goods were purchased by the importer plus the cost of
transportation and insurance to the frontiert of the importing
country. Import taxes and customs duties are not included in
c.i.f., but form part of the import valuation system in
input-output tables.

Last, but not least, the conversion problems have to be
mentioned, too. Conversion of values from national currencies
into U.S.Dollars is done by means of conversion factors based on
official exchange rates (mainly par values). In the case of
fluctuating currencies the conversion is done by using weighted
average exchange rates specially calculated for this purpose.
The relevant conversion factors are published in the Yearbook of
International Trade Statistics, but it may be doubted that these
factors , in all cases, are comparable with the import
evaluation used for the input-output tables. One has to
consider only the problem with uneven spread imports over a year
and fluctuating exchange rates to find out a lot of possible
discrepancies.

Now let us turn to the system of International Standard
Industrial Classification of All Economic Activities (**ISIC**). It
also has been revised twice (3).

The ISIC is a classification of kinds of economic activity, and not a classification of goods and services. It consists of

- 10 Major Divisions (1 digit level)
- 34 Division (2 digit level)
- 73 Major Groups (3 digit level)
- 159 Groups (4 digit level)

The broad major divisions are:

1 Agriculture, hunting, forestry and fishing
2 Mining and Quarrying
3 Manufacturing
4 Electricity, gas and water
5 Construction
6 Wholesale and retail trade and restaurants and hotels
7 Transport storage and communication
8 Financing, insurance, real estate and business
  services
9 Community, social and personal serivces
0 Activities, not adequately defined

Even at a first glance it is evident, that there are no particular simmilarities between the two systems. But as a linkage system between SITC and ISIC has striking advantages for the whole statistical system throughout the world as well as for al lot of special research work, the United Nations has undertaken this task (4).

But whereas the system of ISIC revision 2 could be used in this publication, the system of SITC is that of revision 1. A correspondence between revision 1 and revision 2 of SITC can be found in (2).

So, in most cases a conversion of imports according to SITC revision 2 into imports according to SITC 1 is necessary. After that the allocation of the SITC imports to the ISIC imports can be done. Of course, each conversion is an additional source of error, the more, as a unique allocation is not the rule. That means, that there are multiple references even between the two revisions, the more between the two different systems, of course.

2.Pilot Study for Japan

The best statistical system for building input-output tables
seems to be that of Japan (5). Great efforts are undertaken to
mobilize all the statistics and administrative records,
necessary to construct a system of input-output tables. The
most recent is for the year 1980 (6).

Three levels of classifications are established for the
commodities in the input-output tables, namely the basic sector
(the dimension of the corresponding table is 541 by 406), the
group (164 by 164) and the major group (72 by 72) classification.

The basic sector classification is directly comparable with the
ISIC system and the own Japanese industrial classification
system. But for our purpose it is too detailed, so the group
classification is adopted. This system is in principle
comparable with the 4 digit ISIC system.

Table 14 shows the import vector for the 164 sectors. Customs
and taxes can be separated, so c.i.f.values are available. From
the total imports of 38,372 billions of yens, 1,312 billions or
3.4 per cent are due taxes and customs. The remaining 37,060
billions are the cif value of all imports in the frame of the
input-output system. Only 32,843 billions are commodity
imports, the rest are services. The imports reported in the
SITC system, and converted by the official conversion factor of
0.00439 U.S.Dollars per yen (see also **Table 16**), amount to
31,823 billions of yens. These figures are close to the
commodity imports in cif. This is illustrated in the **Graph 1**.

Graph 1: Japanese Imports in 1980

1000 bill.Yen

Commodity cif,Total cif, SITC, Total IO
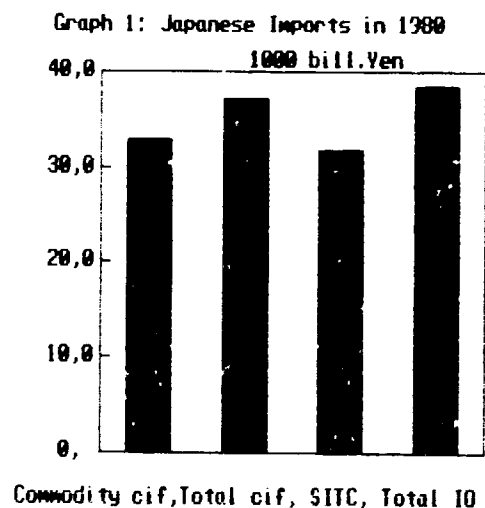
Passing over to the system of the 4 digit ISIC level reduces the
number of 164 import items to 106 distinguishable one . **Table 1**
reveals the necessity of integrating several basic sector items
into one ISIC item. The first column consists of the 160 ISIC
groups, which must be reduced to 106 in order to get a correct
correspondence between the 164 input-output sectors and the ISIC
system. The second column shows the necessary aggregation of
the input-output sectors. The first seven input-output sectors
belong to ISIC 1110, agricultural and livestock production, for
example. The eighth input-output sector is headed by veterinary
and other agricultural services. Veterinary services are group
1130, other agricultural services group 1120 in the ISIC system.

The Japanese imports in 1980 according to the SITC system amount to 140 billions of U.S.Dollars (see **Table 13**). The figure is taken from the UNIDO databank, in which 1175 items (5 digit level of SITC) and subgroups (4 digit level of SITC) of Japanese import commodities are filed (see also **Table 15**). The import total of the databank differs slightly from that in the Yearbook of International Trade Statistics, i.e. 139,891.581 millions of U.S.Dollars versus 140,527.652 millions.

But more important is the fact, that the Japanese imports in the UNIDO databank are classified according to the SITC revision 1, whereas the relevant figures in the Yearbook are categorized according to the SITC revision 2. The more detailed data in the UNIDO databank together with the advantage of a direct correspondence due to (4) plead for the UNIDO databank.

In the next step the allocation of the 1175 individual SITC import items to one or more ISIC groups has to be performed. This has been done for each SITC section separately. The result of this tedious and time consuming work is presented in the **Tables 3 to 12**.

If there is a single ISIC group stated at an SITC item, then the correspondence between the two systems is unique. A clear allocation is possible and the transformation of SITC import figures into the ISIC system is feasible, let aside possible evaluation problems. In that case the allocation is called **unique.** But this only is the case in 66 percent of the SITC items (see **Table 15**). In 405 cases out of 1175 two or more ISIC references for a SITC item are given (see also **Graph 2**).

Graph 2: ISIC References for SITC Terms

References

800
600
400
200
0

Percent
■ 65,5319
■ 20,6809
▨ 7,9149
▨ 5,8723

One,Two,Three,Four and More References
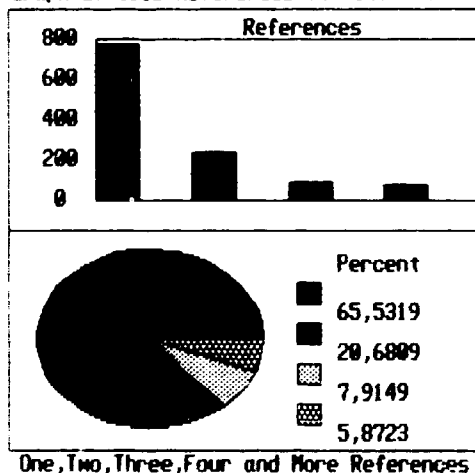
Before going into details let us analyse, first, the import structure according to the two classification systems. The commodity structure of the total imports of Japan in 1980 according to groups of the **SITC** system illustrates, that three groups are responsible for three quarters of the import value. Half of the imported commodities are mineral fuels, lubricantes and related materials (group 3 of SITC), nearly 17 % belong to crude materials (group 2 of SITC) and 10 % are commodities of group 0 of SITC, i.e. food. Finally, 7.5 % are imported manufactured goods (group 6). Japan is a wellknown high

Graph 3

Graph 3: Import Distribution Japan 1980

Percent

■	50,0325
■	15,7643
▨	15,6583
▦	9,9750
▦	7,5699
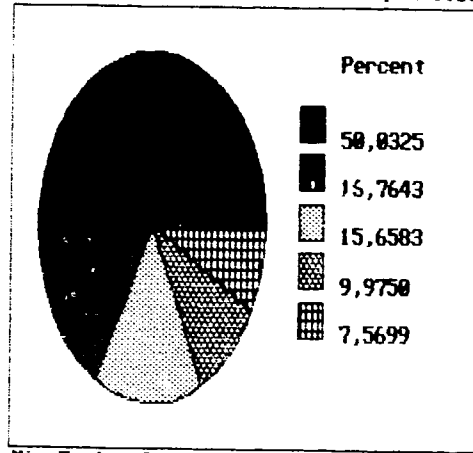
Min.Fuels, Cr.Mat., Rest, Food, Man.Gds

What about the possibility, to allocate these imports to specific ISIC groups and to IO sectors? As already mentioned, the references are not necessarily unique, even at a low level classification, on the contrary.

But let us analyse, next, the import structure according to the **ISIC** system, and to the input-output sectors, therefore. As **Graph 4** points out, a large part of the imports categorized in the ISIC system originates from establishments aggregated in major ISIC group 2, mining and quarrying (43 %). Next is major group 3, that is manufacturing, which is responsible of about one third of total imports. Food manufacturing is part of the manufacturing sector, of course. These two major groups comprise three quarters of the import value, which is here taken ex customs and taxes. Additional 10 % of the imports come from agriculture (major group 1) and 5 % are imported transport sevices. This is also illustrated in **Table 20**.

Graph 4: Import Distribution Japan 1980

Percent

■	42,9143
■	33,6971
▨	10,9253
▦	7,4497
▦	5,0137
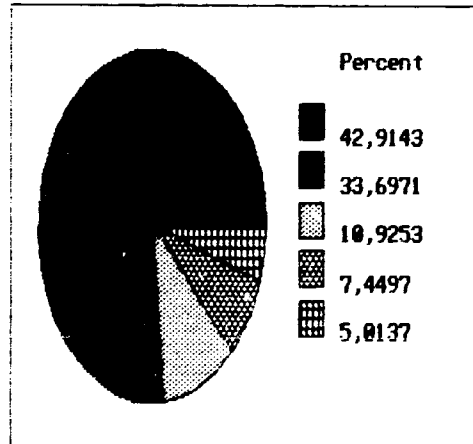
Mining,Manufact.,Agricult.,Rest,Trsprt

... ... fuels, lubricants and related materials - SITC major
group 3 - dominate the Japanese imports. So let us try to
allocate this huge bulk to the ISIC systematized input-output
sectors. As can be seen from **Table 6**, nearly 86 % of the
imports of 70 billions of U.S.Dollars can be allocated directly
to specific input-output sectors. **Graph 5** illustrates the
situation for the most relevant imported commodities in the ISIC
sectional classification. The relevant information is taken
from the **Tables 6, 5, 3 and 9**.

Graph 5: SITC Imports - Allocation ISIC

Min.Fuels, Crude Mat.,Food, Manuf.Goods
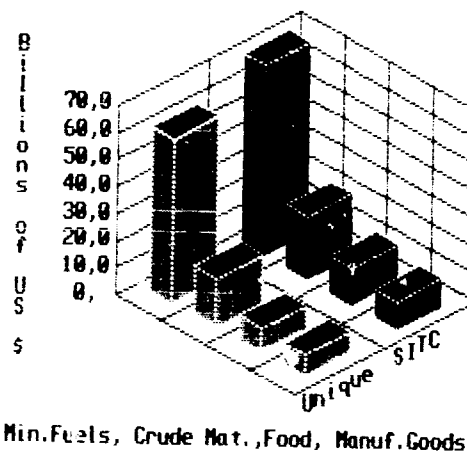
Maybe some remarks upon these tables are necessary, as for **Table
6**, for example. The first column informs on the ISIC groups to
which the SITC items in major group 3, mineral fuels etc., are
to be assigned. Of course, only such references are considered
for which a corresponding import is reported. In the table only
9 ISIC groups are addressed, but as can be noticed from **Table
15**, there are 19 different SITC items or subgroups confronted
with only 11 allocations to ISIC which are unique. **Table 19**
informs on the underlying details.

SITC subgroup 3214, coal (anthracite, bituminous) is part of the
ISIC group 2100, coal mining. But SITC subgroup 3216, lignite
briquettes and lignite is linked to two ISIC groups, i.e. 2100,
coal mining, and 3540, manufacture of miscellaneous products of
petroleum and coal. The allocation to a specific group depends
on the production establishment. If lignite briquettes and
lignite is produced at mining site then it belongs to coal
mining (2100), otherwise to manufacturing (3540). As already
mentioned, the references are for SITC revised. In SITC,
revision 2, the items 3223 (lignite, whether or not pulverized,
but not agglomerated) and 32312 (lignite, agglomerated) comprise
subgroup 3216 of the old version. It seems that this is enough
in illustrating the complications.

It is possible, of course, to allocate subgroups and items of
SITC to ISIC groups in a unique way, either by further
aggregation, or by a reasonable decision for a specific group,
or by a sharing procedure. The last method is the correct way.
It is also adopted by the statistical offices for constructing
the input-output tables. The basic statistics for import tables
within the frame of input-output tables are trade statistics and
these statistics are arranged on the SITC system or on the BTN
system.

But whereas a statistical office has the necessary information or
can collect it, this is not a practical way for our purpose,
namely the construction of regional import tables. Therefore, a
reasonable compromise between aggregation and direct allocation
must be made.

In the above case, by the way, the SITC subgroup 3216 is totally
allocated to ISIC group 3540. This can be concluded by looking
at **Table 2**, because ISIC group 2100, coal mining, are filled up
totally by considering only the direct allocations, whereas the
manufacturing group 3540 only achieves 21 % by this method.

But we left **Table 6** at the description of the first column. The
second column shows the relevant input-output sector, while the
next two columns point out the import value in the case of an
unequivocally allocation or not. If the allocation cannot be
made such that it is unique, than the amount to be allocated to
two or more ISIC groups appears in each reference group. The
imports of lignite briquettes and lignite in the size of 2055
thousand U.S.Dollars appear twice in the table. Once at ISIC
group 2100 and once at ISIC group 3540, both in the column
'Allocation to ISIC not unique'. The last column informs on the
total value of imported commodities of the relevant section,
here section 3, mineral fuels, lubricants and related materials.
In the last row the shares of the two allocations in the total
imports are calculated. 86 % of the total imported mineral
fuels can be allocated directly to a specific input-output
sector. In addition, **Graph 5** informs on the situation for the
other essential import goods for Japan, also.

Table 20 and **Graph 6** offer a comparison between the Japanese
imports structured according to the 10 major divisions of the
ISIC system and the directly allocable imports of the SITC
system. It is obvious that the commodity imports in SITC cover
only the major divisions 1 - agriculture, 2 - mining, and 3 -
manufacturing, in ISIC. For the other major divisions,
especially for that of 6 to 9, i.e. services, no commodity
correspondence exists. Stated imports of services in
input-output tables must estimated from other sources,
therefore. They amount to approximately 10 % of the total
c.i.f. import value.

Graph 6: ISIC Imports and Allocation

Total and Major Divisions 1 to 9 and 0
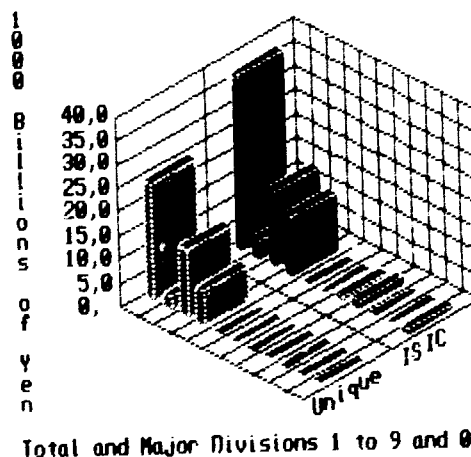
But for about 90 % of the Japanese imports the situation is not
so bad, regarding the estimation of imports out of trade
statistics. Because approximately 75 % of this imports can be
estimated out of SITC data, whereas for the total of imports the
corresponding percentag amounts to 66. **Graph 7** gives the
necessary information in an illustrative form.

Graph 7: ISIC Imports and Allocation

■	**Agricltre** 67,5665
■	**Mining** 89,8220
■	**Manufctrg** 59,2606
■	**Total** 66,4383

Percentage of Unique Allocation
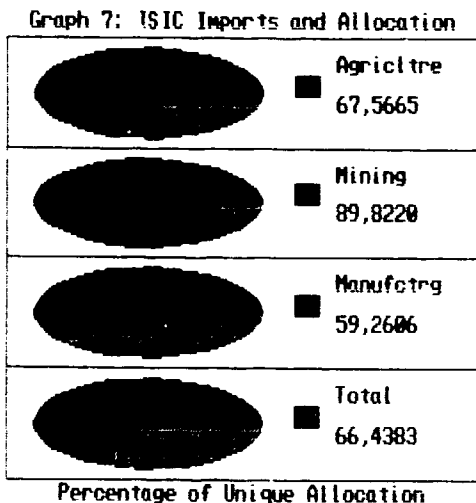
The systematic allocation of the relevant SITC import data to
the mining sector in the ISIC system leads to a 90 % target
accuracy. This is due, of course, to the mapping of the SITC
items 33101 crude petroleum, the biggest single item, to the
ISIC group 2200, crude petroleum and natural gas. The
performance is even better, if one considers natural gas
imports. In the SITC system the relevant subgroup is 3411. But
there is no one to one correspondence to an ISIC group, as can
be seen in **Table 19**. Crude hydrocarbons produced by petroleum
refineries, part of SITC subgroup 3411, have to be allocated to
ISIC group 3530, petroleum refineries. It is obvious, that
imported natural gas originates mainly, if not exclusively, from
gas wells and must be allocated to ISIC group 2200. Considering
this, the percentage goes up to even slightly more than 100 %.
It is interesting, that the reported imports of crude petroleum
and natural gas in the amount of 13027 billions of yens are
surpassed by the reported SITC imports of crude petroleum and of
natural gas. Summing up the relevant figures yields 58.702
billions of dollars, which equals 13372 billions of yens, at the
official trade conversion factor.

This example illustrates, that a transformation from the SITC
system to the ISIC system is possible in most cases only by a
thorough analysis of the data and a corresponding technical and
economical reasoning.

Evidently, the problems are more aggrevating for the
manufacturing sector. The corresponding division in the ISIC
system gives rise to a number of serious problems. First, most of
the imports of less developed countries are products of the
manufacturing sector, second, it is the category within the ISIC
system with the most detailed breakdown, because it consists of 9
major divisions, 28 major groups, and 81 groups. Indeed, the ISIC
has a much finer disaggregation for the disaggregation of the

manufacturing sector.

The consequences of this facts are, that the construction of the regional import tables is very sensitive to the correct classification in this field and, a more technical problem, that each section of the trade classification system ISIC is connected in a multiple way with the manufacturing division in the SITC system. Anyway, it is necessary, to find out an appropriate aggregation in order to avoid ambiguities in the allocation procedure.

From the analysis of the Japanese situation the following can be stated and suggested:

Section 0 in SITC, food and live animals, displays a lot of multiple ISIC references, partly within the ISIC major division 3, manufacturing, partly among the major division 1, agriculture, hunting, forestry and fishing, and the major division 3, manufacturing. The cross divisional references are due to the fact, that prepared products have to be allocated to the manufacturing division, unprepared one's to the agricultural division. In most of the cases a preparation can be assumed. As to multiple references within the manufacturing division it is to diagnose, that the aggregation to the ISIC major group 311-312, food manufacturing, would solve the problem.

In section 1 of SITC, beverages and tobacco, it must be known, whether the imported unmanufacture tobacco leaves are either raw or processed on farms, because then the imports count to the agricultural division in ISIC, or if the leaves are processed (cured, dried, fermented, cut, stemmed) or otherwise processed elsewhere, in which case ISIC division 3, manufacturing, is competent.

Going into section 2 of SITC, crude materials, inedible, except fuels, the situation is partly similar to section 0. A divisional mix between agriculture and manufacturing is given and can be disentangled by necessary information of the kind, whether hides and skins are obtained in slaughterhouses (manufacturing) or by hunters (agriculture), wool is from live animals (sheep shearing, agriculture) or from dead animals (manufacturing) and cotton is imported as harvested (agriculture) or not (manufacturing). In principle, a unique allocation seems possible, and even a wrong one would not matter very seriously. As to multiple references within the manufacturing division an aggregation to the 3 digit level of ISIC major group 321, manufacture of textiles is recommended. Additional problems arise out of the imports of stone and minerals. If there is no treatment of these minerals, then the mining division is competent, otherwise the manufacturing divison. Finally scrap imports are also problematic. If scrap is due to waste at the metal working processes, then it is manufacturing, if it consists of worn out or broken articles, then it is wholesale trade.

Section 3, mineral fuels, lubricants and related materials, has been analysed already.

No problems arise in section 4, animal and vegetable oils, fats and waxes. Nearly all of these imports can be allocated to the manufacturing division and most of it in a unique way.

Section 5, chemicals and related products, can be mapped almost
exclusively into the division 35, manufacture of chemicals and
chemical, petroleum, coal, rubber and plastic products. The
ISIC major group 351, manufacture of industrial chemicals, is
dominating. The best aggregation scheme is the 3 digit level
with ISIC 352, manufacture of other chemical products, in
addition. Problems can be found in fertilizers, plastic
materials, and chemical products and prepartions, n.e.s.,
because imports of these products are not negligible and
difficult to allocate into ISIC groups or even major groups.
Potassic fertilizers obtained in the sugar industry must be
allocated to food manufacturing, but this seems unimportant. In
the imports of plastic materials waste and scrap can be included
and must be dedicated then to 356, manufacture of plastic
products n.e.s. or to the wholesale division. If this is the
case, the amount should be neglected. The last item, other
chemical products and preparations, n.e.s., has 8 different ISIC
reference groups and an import record not quiet negligible (400
millions of dollars). Even on the level of major groups 6
allocation possibilities remain, all within the manufacturing
sector. In that case a sharing procedure would be the best,
where dental plaster, one of the group, can be neglected.

Section 6, manufacture goods classified chiefly by material,
consists of the greatest number of individual items in the SITC
system for Japanese imports, i.e. 349. Whereas imports of that
goods are not so striking for Japan, such imports may dominate
in other countries, less developed than Japan. But **Table 15**
exhibits, that more than 73 % of the items can be allocated
directly to ISIC groups. An aggragation to ISIC major groups
would eliminate additional 5 %. Almost all references are for
the manufacturing division. If we look at some more important
items, let us say, imports of more than 100 millions of dollars,
then imports of wood simply shaped or work, n.e.s.,(SITC item
63183) is unproblematic, because only a small amount might be
hoopwood, split poles, piles etc. produced by loggers, if any.
Most of the paper and paperboard, impregnated, coated, etc. and
other than printing and writing paper (SITC item 64195) could be
also carbon paper of a specific width, or asphalted or
bitumenized paper, but rather design printed paper produced in
bulk (ISIC 342) or even better paper and paperboard made in
paper mills or produced by manufacturers of paper articles (ISIC
341). As to diamonds (SITC 6672) and other precious and
semi-precious stones (SITC 6673) it depends, if these imported
stones are unworked (ISIC division 2) or worked (division 3).
This may be judged on the basis of the relevant jewellery
industry of the relevant country.

Most of the SITC section 7, machinery and transport equipment,
is part of the manufacturing division 38, manufacture of
fabricated metal products, machinery and equipment, in the ISIC
system. Similar to the foregoing sections the performance of a
unique allocation can be improved by aggregating the groups into
major groups (3 digit level of ISIC). After that problems may
arise with other telecommunications equipment (SITC 72499), as
the radio and television cabinets should be separated according
to the material, i.e. wooden means major group 332, manufacture
of furniture anf fixtures, moulded plastic materials 356,
manufacture of plastic products n.e.c.. In addition, major
group 383 in ISIC, manufacture of electrical machinery,
apparatus, appliances and supplies may be involved, too. Minor
problems exhibits the non elsewhere stated machineries and
used final appliances, but most of the imports should be part

of the major subgroup manufacture of machinery except
electrical, ISIC 382. The imports of ships and boats, other
than warships seems to be part of ISIC 384, manufacture of
transport equipment, because the imports of rubber boats,
allocable to manufacture of rubber products (ISIC 355), might be
unimportant and negligible in most cases.

Imports of section 8 in SITC, miscellaneous manufactured
articles, are rather unimportant for Japan, but maybe not for
other countries. Allocation to the manufacturing division
prevails, of course. Difficulties for a correct allocation to
the 3 digit ISIC level can be seen in furniture, because it is
unlikely to distinguish between furniture primarily made of
metal or not (ISIC 381 versus 332), in travel goods for sporting
goods or not (ISIC 390 versus 323), in the imports of outer
garments (SITC 84144), for which the manufacturing major group
321 in ISIC is appropriate (manufacture of textiles), if it is
produced in knitting mills, otherwise major group 322,
manufacture of wearing apparel. Footwear is also difficult to
classify. Here the material of the soles is responsible for the
problem. If it is of leather, then the ISIC major group 324 is
addressed, if it is of rubber, then the ISIC 355, and if it is
of plastic, then the ISIC 356 is relevant. But more
complications arise for the allocation of the SITC division 89,
miscellaneous manufactured articles, n.e.s. A lot of the
subgroups and items involved exhibit multiple ISIC references of
differente major ISIC groups. From the practical point of view
this SITC section may cause the greatest problems.

The residual section 9 in SITC, commodities and transactions not
classified elsewhere the relevant ISIC division is the major
division 0, activies not adequately defined.

This survey informs us, that a mapping of import data from the
commodity structure of the SITC system into the establishment
structure of the ISIC system is feasible, but more or less
difficult and, maybe in some cases, even problematic.
Indispensable are information on commodity imports on the level
of 5 digits, that means on the item level, according to the SITC
system. The industrial classification system of ISIC must be
redimensioned to the three digit level of major groups, at least
in the manufacturing division. This enables a commodity related
import vector in the dimension of about 40, namely all 3 digit
major groups of the ISIC divisions 1 to 4.

3.Imports and Input-Output Tables

For a further analysis of our problem i.e. constructing regional
import tables on the basis of input-output tables, the existing
input-output tables are used. All input-output tables filed are
considered, if their reference years are 1970 and later. By this
way a total of 84 input-output tables of 51 different countries
can be found. For some countires two or more tables of different
years are available.

Of course, the input-output tables are, on the whole, not
strictly comparable. They differ in the dimension, the pricing
system, the import treatment, and the statistical quality, let
aside the development stage of the country and the different
reference years in the range of 1970 to 1980. But, nevertheless,
as it is intended to concentrate strictly on the total imports in
the input-output tables and to compare them with the reported
ones in the SITC system, much of information can be gained,
especially regarding the mark-up for the services imports.

The best illustration is given in **Table 16**, in which the total
commodity imports according to the SITC system are confronted
with the stated imports in the input-output tables. As the SITC
imports are reported in thousands of U.S.Dollars, the imports in
the input-output tables in national currencies of different
dimensions, of course, a conversion must be made, for which the
official conversion factors quoted in <1> are used. In the case
of their lacking, which is the case for the countries like Chile,
Colombia, Indonesia, Israel, Korea and the Philippines, the
period averaged par values published by the IMF are taken. The
conversion factors quoted are in U.S.Dollars per national
currency. By the way, the column before, headlined by 'System',
states the system of trade recording, i.e. special (s) or general
(g). The two columns after the conversion factor informs on the
total of reported SITC imports and the imports in the relevant
input-output table. It has to be mentioned, that in the case of
multiple total import values in the input-output table the one is
taken, which is closely or identical to the c.i.f.valuation.
Anyway, the last column informs on the extent, to which the SITC
commodity imports match the input-output imports based on the
ISIC system ultimately. The situation is visualized in the
following **Graph 8.**

Graph 8: SITC Imports as % of IO Ones

Percent
39,2857
25,0000
15,4762
14,2857

Absolut Level

35,0
30,0
25,0
20,0
15,0
10,0
5,0
0,

100 %, 90-100 %, 80-90 %, 70-80 %, less
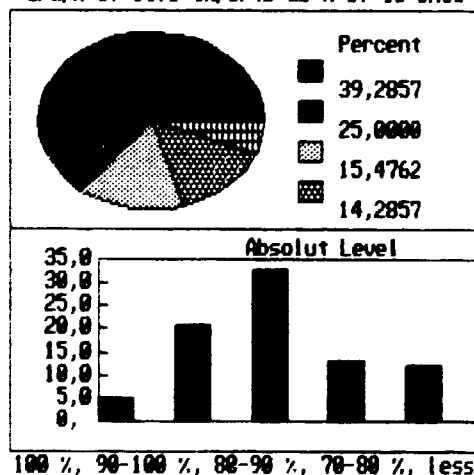
In 33 out of 84 cases, that is nearly 40 %, in between 80 and 90 % of the input-output imports can be explained by the conversion of the total SITC imports. For 25 % or 21 cases the relevant share ranges from 90 to 100 %. Only in 12 cases or in 14 % of the total of 84 input-output tables analysed a poor record of only less than 70 % can be found, for which special reasons may be responsible, like inadequate conversion factors (Hungary, Czechoslovakie, etc.). In 5 cases the SITC imports match exactly the input-output imports or exceed them even.

As a matter of calculation, the mean of the SITC share in explaining the input-output imports, is 83.20 %, with variance of 249.87 and a standard deviation of 15.81. If the weighted mean is calculated, that is weighted by the dollar volume of imports, the mean rises to 85.62 %. The correspondence is better, therefore, when the import value is large. This suggests, that the developed countries are favorized, if the imports for the input-output system must be estimated by the use of SITC import data, in spite of the facts, that there is a comparably pure SITC explaining share in the case of the United States (80 %) and of the remarkable situation, that a total agreement or an overshooting is given for countries like Greece, Guatemala, Hungary, Nicaragua and Singapore with a share of 100 % and more.

As a result of this analysis it may be stated, that, on the average, by the conversion of SITC commodity imports approximately 85 % of the imports in an input-output table can be explained.

Due to the fact, the services imports are not recorded in the SITC system, in **Table 17** the separation of commodity imports and of services imports is tried for those input-output tables, for which it is possible, i.e. for input-output systems either with an import table, or an import column vector. Attention should be given, that the total imports need not be the same as in Table 16. In the normal case of producers' prices, the imports are evaluated at their border price, taxes and customs included. The last column in Table 17 displays the mark-up. Let us take Belgium 1970 for example. Here the c.i.f.evaluted imports amount to 603200 in national currency, whereas the total distributed imports yield 666748. The additional duties amount to 10.5 %. A warning is necessary, maybe. If there is a blank in the last column, this does not mean, that there are no import taxes and customs duties, but simply, that these fees are not stated separately. Or in the case of Japan, for which we already know, that the mark-up of duties amounts to 1312 billions of yens (see Table 14), which is 3.5 % of the c.i.f.value. Here the blank illustrates simply, that the separation of services and commodities imports is possible on the c.i.f. evaluation basis. Notice also, that the total mark-up percentage is calculated on the total imports, including services also, for which customs and taxes are unusual. Due to these facts the evidence of the last column should not be overstated. But the mean of this mark-up of about 11,75 % may be of advantage for the estimation of import tables.

Now let us return to the disaggregation in commodity and services imports. A blank in the corresponding column of Table 17 means that there is only an import rown in the input-output table, in which the imports are directly allocated, either, or that no services imports are reported, as it is the case with Hungary, India and Singapore. Nevertheless, the mean of 0.81 for the share of services imports in total imports, with

ariance 28.13 and standard deviation of 5.30, is of some
informational value.

Finally, **Table 18** points out the differences between the
commodity imports of the SITC system and the commodity imports
in the existing input-output tables, each in the relevant
national currency dimension. The last column shows the share of
the SITC imports in the total imported commodities stated in the
input-output tables. Even by a quick glance over the last
column of table 16 it is evident, that the adjustment of the
SITC commodity imports ist much better in table 18 than in table
16. This fact is illustrated in **Graph 9** also.

Graph 9: SITC and IO Commodity Imports

Percent
■ 42,6471
■ 33,8235
▨ 8,8235
▦ 8,8235
8,8235

Absolut Level

100 %, 90-100 %, 80-90 %, 70-80 %, less
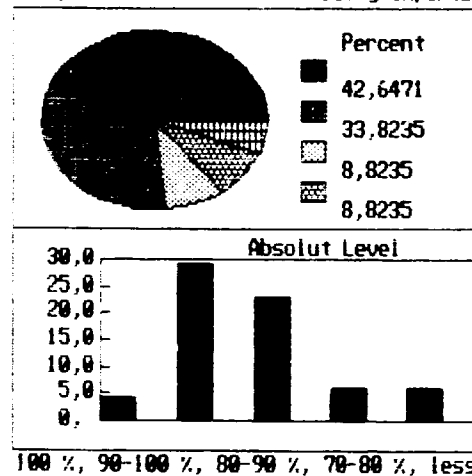
Now, in 29 cases out of 68, which can be analysed, the
correspondence of the SITC imports to the commodity imports
reported in the input-output tables ranges between 90 and 100 %.
In 5 cases of them the matching correspondence is more than 99
%! Imports of 23 input-output tables can be explained to the
extent of 80 to 90 %. This improvement is also demonstrated by
the calculated mean of 86.98 % with variation of 241.79 and
variance of 15.55, an average, which can be augmented to 90.15
%, if it is weighted by the imports, of course in dollar.

Summarizing, it can be concluded, that there is no problem in
transforming commodity imports as reported in the SITC system to
the corresponding input-output figures. Empirical knowledge in
addition may help, to estimate imports of services and to
evaluate the imports correctly for the purpose of input-output
tables. But this conclusion is up to now only valid for the
totals. On the basis of the insights gained, the following
proposals can be made regarding the construction of import
tables, regional or national.

> 1. It is relatively unproblematic to estimate total
> imports for input-output tables by the use of SITC
> data.

> 2. It is even possible to disaggregate the import data
> in approximately 40 commodity sectors, to which some
> service sectors can be added.

3. For the spanning up of an import table based on the above information, problems arise, especially in the following fields:

i. The import vector in the sectoral classification must be split, first, in imports for the final demand and in imports for the intermediary demand. Empirical evidence on the basis of existing tables may help to overcome these problems.

ii. For a sectoral allocation of the intermediary imports the total input-output structure must be considered. In some cases the allocation is unique, as for crude petroleum, but in most cases the technical coefficients must be considered in order to decide the allocations of the commodity imports. As enough input-output tables are available and, therefore, something like a thesaurus on technical possible production processes can be constructed, it should be possible, in principle, to estimate the relevant import tables. The starting point for these tables has to be the most detailed disaggregation of the commodities as possible.

iii. As in a lot of cases the sectoral input structure of the national tables is not in the same way disaggregated as the imported commodities, this situation occurs especially in tables for devloping countries, the commodity imports have to be allocated to the sectoral structure chosen for the construction of regional tables.

4. With due regard to the problems in 3. it can be concluded, that trade matrices can be constructed, maybe partly on a more detailed classification as the underlying regional input-ouptut tables. These estimations could be regarded as a necessary supplement to the regional input-output tables and could be used for a lot of further detailed analyses.

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<5> See Wassily Leontief: Why Economics Needs Input-Output
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<6> Government of Japan, Administrative Management Agency: 1980
Input-Output Tables. English Summary. Tokyo 1984.

Attention: In the following tables the decimal point is replaced
by a comma. This is due to the fact, that the
personal computer used for the necessary calculations
is configurated for the German situation.

Table of Japanese Imports to ...
Input-Output Imports Allocated to ISIC

ISIC	Input-Output row	no	Input-Output (9411)	Imports in millions of yens direct	customs	taxes	total
1110	1-7	1	2462732	2299	44124	0	2509155
1120	8+						
9332	8+	2	0	0	0	0	0
1130	10+						
1210	9 10+	3	28232	0	823	0	29055
1220	11	4	1304264	0	158	0	1304422
1301	12	5	222824	1388	14440	0	238652
1302	13	6	27128	0	1210	0	28338
2100	14	7	1010305	0	0	0	1010305
2200	17 18	8	13026685	0	144673	352847	13524205
2301	15	9	784834	0	0	0	784834
2302	16	10	817607	0	1	0	817608
2901	19 20	11	71294	0	0	0	71294
2902	21+						
2903	21+	12	193166	0	135	0	193301
3111	22 23	13	509906	1761	50856	0	562523
3112	24	14	63823	507	10296	0	74626
3113	25	15	126335	376	20626	0	147337
3114	26	16	514530	1013	28492	0	544035
3115	30+						
3121	30+	17	192602	2159	19243	8212	222216
3116	27	18	13484	1156	1099	0	15739
3117	28+						
3119	28+	19	41373	1467	9682	0	52522
3118	29	20	326468	0	88391	51	414910
3122	31	21	6096	0	332	0	6428
3131	32+						
3132	32+						
3133	32+	22	104886	33791	26880	71731	237288
3134	33	23	7333	299	1841	118	9591
3140	34	24	75715	3362	6016	0	85093
3211	35 36	25	317833	0	21005	0	338838
3212	48+						
3214	48+						
3215	48+						
3219	48+	26	90581	960	6431	0	97972
3213	47	27	139047	0	17216	0	156263
3220	50	28	229893	15893	28870	0	274656
3231	58+						
3232	58+	29	25478	0	1910	0	27388
3233	59	30	44922	37432	4912	1080	88346
3240	49	31	16267	463	4084	0	20814
3311	51 52+						
3312	52+						
3319	52+	32	551762	0	6010	0	557772
3320	53	33	61271	600	2183	911	64965
3411	54	34	256635	0	20	0	256655
3412	55	35	56462	0	4301	0	60763
3419	56	36	57923	280	3454	0	61657
3420	57	37	44602	886	32	0	45520
3511	61-63 68	38	557730	0	24019	0	581749
3512	67	39	104589	0	3055	0	107644
3513	64-66	40	120834	0	8612	0	129446
3521	69	41	17092	0	405	0	17497
3522	70	42	243996	259	12173	0	256428
3523	71+						
3529	71+	43	291758	17787	16793	5018	331356

	Input-Output row	no	(9411)	direct	customs	taxes	total
				in millions of yens			
3530	72	44	2164260	1084	14487	32562	2212393
3540	73	45	7744	0	86	0	8030
3551	60+						
3559	60+	46	94737	33	8120	0	102890
3560	114+						
3901	114+						
3902	114+						
3903	114+						
3909	114+	47	381376	111091	19118	5853	517438
3610	76	48	14447	0	570	0	15017
3620	75	49	30787	0	1774	0	32561
3691	74	50	3063	0	200	0	3263
3692	77	51	363	0	13	0	376
3699	78	52	90175	0	1236	0	91411
3710	79-86	53	320764	0	4235	0	324999
3720	87-90	54	1484779	0	26514	0	1511293
3811	91+ 92+						
3812	91+ 92+						
3813	91+ 92+						
3819	91+ 92+	55	112181	492	5744	65	118482
3821	93	56	52133	0	998	145	53276
3822	95+						
3823	94 95+						
3824	95+	57	276687	0	13490	0	290177
3825	97 101	58	248991	0	24737	0	273728
3829	96 98	59	234761	0	9088	551	244400
3831	99	60	99104	0	2970	0	102074
3832	100+						
3833	100+	61	89860	1032	2494	3284	96670
3839	102 103	62	444914	52	20558	215	465739
3841	104	63	123290	0	46	102	123438
3842	105	64	10159	0	573	0	10732
3843	106	65	132427	801	709	16333	150270
3844	108	66	9872	50	393	291	10606
3845	109	67	326751	0	230	0	326981
3849	110	68	3562	0	75	0	3637
3851	111	69	137039	0	5957	0	142996
3852	112	70	79944	71	5132	1578	86725
3853	113+						
9514	113+	71	56743	10535	1562	3132	71972
4101	120	72	0	1209	0	0	1209
4102	121	73	0	930	0	0	930
4103	122	74	0	0	0	0	0
4200	123+						
9200	123+ 124	75	215	338	0	0	553
5000	115-119	76	0	0	0	0	0
6100	125	77	632246	0	0	0	632246
6200	126	78	0	0	0	0	0
6310	160	79	99168	143702	0	0	242870
6320	161+						
9511	161+						
9512	161+						
9513	107 161+						
9519	161+						
9520	161+						
9530	161+						
9591	161+						
9592	161+						
9599	161+	80	153332	151351	0	0	304683
7111	132	81	19915	18652	0	0	38567
7112	133 134	82	0	0	0	0	0

IIic	Input Output row	no	(9411)	direct	customs	taxes	total
				in millions of yens			
7113	135 136	83	25348	35419	0	0	60767
7114	137 138	84	0	0	0	0	0
7116	139	85	0	0	0	0	0
7121	140	86	1065635	0	0	0	1065635
7122	141+						
7123	141+	87	268476	1318	0	0	269794
7131	142+						
7132	142+	88	353039	7410	0	0	360449
7191	143	89	26952	16884	0	0	43836
7192	144	90	0	0	0	0	0
7200	145	91	18000	1005	0	0	19005
8101	127+						
8102	127+						
8103	127+	92	238471	0	0	0	238471
8200	128	93	70065	661	0	0	70726
8310	129-131	94	0	1586	0	0	1586
8321	156+						
8322	156+						
8323	156+						
8324	156+						
8325	156+						
8329	156+	95	114122	0	0	0	114122
8330	157	96	0	0	0	0	0
9100	146 147	97	0	0	0	0	0
9310	148 149	98	0	0	0	0	0
9320	151 152	99	0	0	0	0	0
9331	153	100	0	781	0	0	781
9340	154	101	0	0	0	0	0
9350	155+						
9391	155+						
9399	155+	102	0	0	0	0	0
9411	158+						
9412	158+						
9414	158+						
9415	158+						
9490	158+	103	41622	20891	0	0	62513
9413	159	104	0	115	0	0	115
9420	150	105	0	0	0	0	0
2909							
3800							
7115							
9600							
0	162-164	106	1062987	27028	416	1692	1092123
Total			36381003	678659	306328	505771	38371761

SOURCE: Calculated from table 14.

ISIC	IO no	Allocation of SITC Imports to ISIC in thousand US $		IO no in million yens		Share unique allocation in per cent
		unique	not unique	unique	not unique	
1110	1	6330034	5068834	1441921	1154632	58
1120		0	0			
9332	2	0	28546	0	6503	100
1130		0	364946			
1210	3	0	1496786	0	424085	0
1220	4	5679595	989697	1293757	225444	99
1301	5	0	3737687	0	851409	0
1302	6	0	2725026	0	620735	0
2100	7	4458347	2055	1015569	468	101
2200	8	51032719	9897281	11624765	2254506	89
2301	9	3448670	0	785574	0	100
2302	10	3461440	0	788483	0	96
2901	11	124154	253465	28281	57737	40
2902		186657	164440			
2903	12	0	166258	42519	75330	22
3111	13	2797340	2153472	637207	490540	125
3112	14	230970	1203679	52613	274187	82
3113	15	303418	326515	69116	74377	55
3114	16	0	3441226	0	783878	0
3115		317396	174286			
3121	17	51076	2070754	83934	511399	43
3116	18	59468	951312	13546	216700	93
3117		37181	0			
3119	19	69092	250764	24208	57122	57
3118	20	1325073	381823	301839	86976	92
3122	21	26690	154352	6080	35160	100
3131		271918	502545			
3132		60646	0			
3133	22	201115	119204	121567	141628	88
3134	23	7974	68	1816	15	24
3140	24	59175	305210	13479	69524	17
3211	25	1633626	1767115	372124	402532	117
3212		59924	693248			
3214		76876	53466			
3215		14540	39969			
3219	26	35677	73367	42601	195911	47
3213	27	76222	554057	17363	126209	12
3220	28	709375	932929	161589	212512	66
3231		78154	22357			
3232	29	34510	117826	25664	31932	101
3233	30	6218	287195	1416	65420	2
3240	31	184	227948	42	51924	0
3311		120521	51239			
3312		25538	258373			
3317	32	35751	238535	41415	124863	8
3320	33	0	414054	0	94318	0
3411	34	1325353	196291	301903	44713	118
3412	35	3236	44078	737	10041	1
3419	36	1920	294582	437	67103	1
3420	37	193836	400731	44154	91283	97
3511	38	2785394	1214785	634486	276716	114
3512	39	90685	356744	20657	81263	20
3513	40	139388	627339	31751	142902	26
3521	41	6424	431148	1463	98211	9
3522	42	1040383	561509	236989	127906	97
3523		128574	2064			
3529	43	444821	706168	130614	161328	42

ISIC	IO no	ISIC in thousand US $ unique	not unique	IO no in million yens unique	not unique	allocation in per cent
3530	44	4466412	10625642	1017406	2420420	47
3540	45	7352	339015	1675	77224	21
3551		106662	0			
3559	46	77329	1215138	41911	276797	44
3560		0	1964048			
3901		99013	881231			
3902		53414	80592			
3903		23694	250932			
3909	47	232964	389505	93186	812371	19
3610	48	45647	55142	10398	12561	72
3620	49	141890	113642	32321	25887	105
3691	50	7304	19023	1664	4333	54
3692	51	1605	2686	366	612	101
3699	52	159973	513250	36440	116913	40
3710	53	880529	184355	200576	41994	63
3720	54	4943551	154356	1126094	35161	76
3811		89367	362430			
3812		12841	199454			
3813		42434	434862			
3819	55	33577	576437	40597	358356	36
3821	56	8842	335085	2014	76329	4
3822		97786	292449			
3823		301841	413909			
3824	57	413416	188550	185203	203851	67
3825	58	1032284	5084	235144	1158	94
3829	59	151423	1429143	34493	325545	15
3831	60	9615	765438	2190	174359	2
3832		1053114	1132109			
3833	61	23470	47692	245236	268747	270
3839	62	126174	552649	28741	125888	6
3841	63	9111	892481	2075	203299	2
3842	64	42298	211508	9635	48179	95
3843	65	479404	515949	109204	117528	82
3844	66	43791	190105	9975	43304	101
3845	67	1260428	66891	287113	15237	88
3849	68	311	6379	71	1453	2
3851	69	576619	1259138	131348	286820	96
3852	70	366333	244741	83447	55750	104
3853		180626	33963			
9514	71	0	0	41145	7736	61
4101	72	0	0	0	0	0
4102	73	0	13854	0	3156	0
4103	74	0	0	0	0	100
4200		0	0			
9200	75	0	0	0	0	0
5000	76	0	0	0	0	100
6100	77	4922	1580235	1121	359962	0
6200	78	30128	158630	6863	36134	?
6310	79	0	0	0	0	0
6320		0	0			
9511		0	0			
9512		0	0			
9513		0	0			
9519		0	0			
9520		0	0			
9530		0	0			
9591		2520	0			
9592		0	10141			
9599	80	0	0	574	2310	0
7111	81	0	0	0	0	0
7112	82	0	0	0	0	100

ISIC	IO no	unique	not unique	unique	not unique	in per cent
		Allocation of SITC Imports to ISIC in thousand US $		IO no in million yens		Share unique allocation
7113	83	0	0	0	0	0
7114	84	0	0	0	0	0
7116	85	0	0	0	0	100
7121	86	0	0	0	0	0
7122		0	0			
7123	87	0	0	0	0	0
7131		0	0			
7132	88	0	0	0	0	0
7191	89	0	0	0	0	0
7192	90	0	0	0	0	100
7200	91	0	0	0	0	0
8101		0	0			
8102		0	0			
8103	92	0	0	0	0	0
8200	93	0	0	0	0	0
8310	94	0	0	0	0	0
8321		0	0			
8322		0	0			
8323		0	0			
8324		0	8171			
8325		0	0			
8329	95	0	2612	0	2456	0
8330	96	0	0	0	0	100
9100	97	0	0	0	0	100
9310	98	0	0	0	0	100
9320	99	0	0	0	0	100
9331	100	0	3603	0	821	0
9340	101	0	0	0	0	100
9350		0	0			
9391		0	0			
9399	102	0	0	0	0	100
9411		0	6954			
9412		0	0			
9414		0	138206			
9415		0	165810			
9490	103	0	0	0		0
9413	104	0	102097	0		0
9420	105	0	32149	0		100
2909		2851	1019531			
3800		0	988486			
7115		0	0			
9600		0	0			
0	106	839559	0	191893		
Total		108089702	78672830	24621800		

SOURCE: Own calculations from tables 3 to 12.
the factor given in table 16.

Table 3: Japanese Imports in 1980
SITC 0 Imports Allocated to ISIC

ISIC	IO no	SITC 0 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
1110	1	4852983	1470406	
1130	3	0	178292	
1210	3	0	24535	
1301	5	0	3150626	
1302	6	0	2637798	
3111	13	1404014	263584	
3112	14	230970	215166	
3113	15	303418	326515	
3114	16	0	3289330	
3115	17	126939	138704	
3121	17	19951	1347292	
3116	18	59468	951131	
3117	19	37181	0	
3119	19	67277	250764	
3118	20	1325073	177585	
3122	21	26690	138704	
3132	22	2562	0	
3133	22	191535	119204	
Total		8648061	14679636	13954159
Share	%	61,97	105,20	

SOURCE: Own calculatirns.

Table 4: Japanese Imports in 1980
SITC 1 Imports Allocated to ISIC

ISIC	IO no	SITC 1 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
1110	1	0	305210	
3121	17	0	68	
3131	22	271918	0	
3132	22	58084	0	
3133	22	9580	0	
3134	23	7974	68	
3140	24	59175	305210	
Total		406731	610556	712009
Share	%	57,12	85,75	

SOURCE: Own calculations.

Table 5: Japanese Imports in 1980
SITC Imports Allocated to ISIC

ISIC	IO no	SITC 2 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
1110	1	1477051	3259189	
1130	3	0	157872	
1210	3	0	1369968	
1220	4	5679595	36857	
1301	5	0	497594	
1302	6	0	26307	
2301	9	3448670	0	
2302	10	3461440	0	
2901	11	124154	252069	
2902	12	186657	95883	
2903	12	0	166258	
3111	13	1303734	901491	
3114	16	0	145140	
3115	17	4	0	
3121	17	0	235351	
3116	18	0	181	
3119	19	1815	0	
3122	21	0	15648	
3211	25	468196	1475989	
3212	26	0	939	
3214	26	0	5665	
3215	26	0	38925	
3219	26	9	37167	
3213	27	0	13561	
3220	28	0	1668	
3231	29	0	22357	
3233	30	0	729	
3240	31	0	729	
3311	32	0	36857	
3319	32	0	5393	
3320	33	0	9180	
3411	34	1079024	9180	
3412	35	0	42767	
3419	36	0	42767	
3420	37	0	42767	
3511	38	0	14762	
3512	39	0	181	
3513	40	113455	5665	
3522	42	0	69093	
3529	43	0	102211	
3530	44	0	1	
3540	45	0	5330	
3559	46	301	829	
3901	47	0	1436	
3902	47	0	80592	
3909	47	0	148441	
3610	48	0	29968	
3692	51	0	2686	
3699	52	52390	498512	
3710	53	27650	0	
3720	54	529456	0	
4102	73	0	1	
6100	77	204	1063297	

ISIC	IO no	SITC 2 Imports in thousand of US $		Total
		Allocated to ISIC		
		unique	not unique	
9591	80	2520	0	
2909	106	133	265176	
3800	106	0	988486	
Total		17956458	12223115	23451870
Share	%	76,57	52,12	

SOURCE: Own calculations.

Table 6: Japanese Imports in 1980
SITC 3 Imports Allocated to ISIC

ISIC	IO no	SITC 3 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
2100	7	4458347	2055	
2200	8	51032719	9897281	
3115	17	0	18508	
3529	43	0	25062	
3530	44	4466412	10017252	
3540	45	5724	128025	
3710	53	0	5999	
4102	73	0	5999	
2909	106	2718	6554	
Total		59965920	20106735	69991226
Share	%	85,68	28,73	

SOURCE: Own Calculations.

Table 3 Japanese Imports in 1980
SITC 4 Imports Allocated to ISIC

ISIC	IO no	SITC 4 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
1110	1	0	5483	
1130	3	0	236	
1210	3	0	5483	
3111	13	89592	331	
3114	16	0	6756	
3115	17	190453	17074	
3211	25	0	300	
3511	38	0	9687	
3523	43	0	151	
3529	43	0	5483	
Total		280045	50984	302602
Share	%	92,55	16,85	

SOURCE: Own calculations.

ISIC	IO no	SITC 5 Imports in thousands of US $		Total
		Allocated to ISIC		
		unique	not unique	
1210	3	0	96800	
2902	12	0	68557	
3121	17	31125	488043	
3118	20	0	204238	
3131	22	0	502545	
3211	25	0	58976	
3411	34	4474	24086	
3511	38	2758415	1153299	
3512	39	90685	356563	
3513	40	25933	537097	
3521	41	6424	431148	
3522	42	1040383	492416	
3523	43	128574	1913	
3529	43	198434	551821	
3530	44	0	605745	
3540	45	0	81272	
3560	47	0	537097	
3909	47	906	762	
3710	53	609	7854	
3829	59	2093	0	
3839	62	0	5379	
3851	69	13169	419885	
4102	73	0	7854	
6100	77	0	503056	
Total		4301224	7136406	6200397
Share	%	69,37	115,10	

SOURCE: Own Calculations.

ISIC	IO no	SITC 6 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
1220	4	0	952840	
1301	5	0	60921	
1302	6	0	60921	
2901	11	0	1396	
3111	13	0	988066	
3112	14	0	988513	
3211	25	1165430	231850	
3212	26	59924	116453	
3214	26	76876	47801	
3215	26	14540	1044	
3219	26	35668	36200	
3213	27	42162	91	
3220	28	3926	0	
3231	29	78154	0	
3232	29	34510	0	
3233	30	6218	789	
3240	31	0	30383	
3311	32	120521	0	
3312	32	25538	41600	
3319	32	35751	789	
3411	34	241855	163025	
3412	35	3236	1311	
3419	36	1920	251783	
3420	37	2688	226186	
3511	38	26979	15446	
3513	40	0	84577	
3540	45	1628	121744	
3551	46	106662	0	
3559	46	77028	25938	
3560	47	0	24418	
3901	47	0	844679	
3909	47	606	166093	
3610	48	44303	15267	
3620	49	134225	0	
3691	50	7304	19023	
3692	51	1605	0	
3699	52	107583	11117	
3710	53	852270	152615	
3720	54	4414095	109083	
3811	55	87633	161279	
3813	55	16294	47148	
3819	55	26228	149722	
3822	57	0	10125	
3823	57	0	55201	
3829	59	0	16689	
6100	77	0	13882	
9414	103	0	36109	
2909	0	0	747801	
Total		7853360	7029918	10589642
Share	%	74,16	66,38	

SOURCE: Own calculations.

Table 1 : Japanese Imports in 1980
SITC 7 Imports Allocated to ISIC

ISIC	IO no	SITC 7 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
3319	32	0	197057	
3320	33	0	184683	
3420	37	0	37963	
3559	46	0	637393	
3560	47	0	466768	
3610	48	0	9907	
3620	49	0	110975	
3699	52	0	3589	
3710	53	0	17885	
3720	54	0	26326	
3811	55	1719	197289	
3813	55	26140	387714	
3819	55	1129	305589	
3821	56	8842	335085	
3822	57	97786	282324	
3823	57	301841	331908	
3824	57	413416	188550	
3825	58	1032284	5084	
3829	59	138158	1257285	
3831	60	9615	759579	
3832	61	1011048	948411	
3833	61	23470	20178	
3839	62	126174	544429	
3841	63	9111	892481	
3842	64	42298	211508	
3843	65	479404	515949	
3844	66	43791	189703	
3845	67	1260428	66891	
3849	68	0	6379	
3851	69	486273	437668	
6100	77	4718	0	
Total		5517645	9576550	8746024
Share	%	63,09	109,50	

SOURCE: Own calculations.

ISIC	IO no	SITC 8 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
3212	26	0	575856	
3213	27	34060	540405	
3220	28	705449	931261	
3232	29	0	117826	
3233	30	0	285677	
3240	31	184	196836	
3311	32	0	14382	
3312	32	0	216773	
3319	32	0	31442	
3320	33	0	220191	
3419	36	0	32	
3420	37	191148	93815	
3511	38	0	21591	
3529	43	246387	21591	
3530	44	0	2644	
3540	45	0	2644	
3559	46	0	547124	
3560	47	0	935765	
3901	47	98321	35116	
3902	47	53414	0	
3903	47	23694	250932	
3909	47	231452	74209	
3610	48	1344	0	
3620	49	7665	2667	
3699	52	0	32	
3720	54	0	18947	
3811	55	0	3862	
3812	55	12841	199454	
3819	55	6220	121126	
3823	57	0	26800	
3829	59	10035	116963	
3831	60	0	5859	
3832	61	42066	149348	
3833	61	0	27514	
3839	62	0	2841	
3844	66	0	402	
3849	68	311	0	
3851	69	77177	401585	
3852	70	366333	244741	
3853	71	180626	33963	
6200	78	30128	158630	
9592	80	0	10141	
8324	95	0	8171	
8329	95	0	2612	
9331	100	0	3603	
9411	103	0	6954	
9414	103	0	102097	
9415	103	0	165810	
9413	104	0	102097	
9420	105	0	3603	
Total		2318855	7035934	5035435
Share %		46,05	139,73	

SOURCE: Own Calculations.

ISIC	IO no	SITC 9 Imports in thousands of US $ Allocated to ISIC		Total
		unique	not unique	
1110	1	0	28546	
9332	2	0	28546	
1130	3	0	28546	
1301	5	0	28546	
3319	32	0	3854	
3559	46	0	3854	
3901	47	692	0	
3710	53	0	2	
3811	55	15	0	
3829	59	1137	38206	
3832	61	0	34350	
9420	105	0	28546	
0	106	839559	0	
Total		841403	222996	908155
Share	%	92,65	24,55	

SOURCE: Own calculations.

| SITC | Imports in thousands of US Dollars | | |
| | Allocated to ISIC | | Total |
	unique	not unique	
0	8648061	14679636	13954159
1	406731	610556	712009
2	17956458	12223115	23451870
3	59965920	20106735	69991226
4	280045	50984	302602
5	4301224	7136406	6200397
6	7853360	7029918	10589642
7	5517645	9576550	8746086
8	2318855	7035934	5035435
9	841403	222996	908155
Total	108089702	78672830	139891581
Share %	77,27	56,24	

SOURCE: Calculated from tables 3 to 12.

Input-Output row	code	Input-Output Imports in millions of yens				
		(9411)	direct	customs	taxes	total
1	0011	344090	0	9	0	344099
2	0012	13338	1224	760	0	15322
3	0013	131993	836	31148	0	163977
4	0014	1276492	0	9475	0	1285967
5	0015	510409	0	483	0	510892
6	0016	182422	239	2120	0	184781
7	0017	3988	0	129	0	4117
8	0020	0	0	0	0	0
9	0211	0	0	0	0	0
10	0212	28232	0	823	0	29055
11	0220	1304264	0	158	0	1304422
12	0410	222824	1388	14440	0	238652
13	0430	27128	0	1210	0	28338
14	1101	1010305	0	0	0	1010305
15	1210	784834	0	0	0	784834
16	1220	817607	0	1	0	817608
17	1301	12011445	0	144673	352847	12508965
18	1302	1015240	0	0	0	1015240
19	1410	41707	0	0	0	41707
20	1420	29587	0	0	0	29587
21	1990	193166	0	135	0	193301
22	2011	473579	1442	47412	0	522433
23	2012	36327	319	3444	0	40090
24	2020	63823	507	10296	0	74626
25	2030	126335	376	20626	0	147337
26	2040	514530	1013	28492	0	544035
27	2050	13484	1156	1099	0	15739
28	2060	41373	1467	9682	0	52522
29	2070	326468	0	88391	51	414910
30	2091	192602	2159	19243	8212	222216
31	2092	6096	0	332	0	6428
32	2110	104886	33791	26880	71731	237288
33	2140	7333	299	1841	118	9591
34	2200	75715	3362	6016	0	85093
35	2301	54350	0	3585	0	57935
36	2302	43738	0	1391	0	45129
37	2303	23025	0	114	0	23139
38	2304	4076	0	316	0	4392
39	2305	290	0	24	0	314
40	2306	10328	0	836	0	11164
41	2311	59697	0	5891	0	65588
42	2312	57222	0	3105	0	60327
43	2313	26999	0	1453	0	28452
44	2314	30690	0	3197	0	33887
45	2315	7418	0	1093	0	8511
46	2316	0	0	0	0	0
47	2320	139047	0	17216	0	156263
48	2390	90581	960	6431	0	97972
49	2410	16267	463	4084	0	20814
50	2430	229893	15893	28870	0	274656
51	2510	515491	0	4460	0	519951
52	2520	36271	0	1550	0	37821
53	2600	61271	600	2183	911	64965
54	2711	256635	0	20	0	256655
55	2712	56462	0	4301	0	60763
56	2720	57923	280	3454	0	61657
57	2800	44602	886	32	0	45520

Input row	Output code	Input-Output (9411)	Imports direct	customs	taxes	total
58	2910	25478	0	1910	0	27388
59	2930	44922	37432	4912	1080	88346
60	3000	94737	33	8120	0	102890
61	3111	3277	0	174	0	3451
62	3112	206654	0	10234	0	216888
63	3113	145331	0	4048	0	149379
64	3115	1116	0	52	0	1168
65	3116	29706	0	2520	0	32226
66	3117	90012	0	6040	0	96052
67	3118	104589	0	3055	0	107644
68	3119	202468	0	9563	0	212031
69	3130	17092	0	405	0	17497
70	3191	243996	259	12173	0	256428
71	3192	291758	17787	16793	5018	331356
72	3210	2164260	1084	14487	32562	2212393
737	3291	7944	0	86	0	8030
74	3310	3063	0	200	0	3263
75	3320	30787	0	1774	0	32561
76	3330	14447	0	570	0	15017
77	3340	363	0	13	0	376
78	3390	90175	0	1236	0	91411
79	3411	27354	0	147	0	27501
80	3412	114944	0	0	0	114944
81	3413	81012	0	2924	0	83936
82	3414	777	0	16	0	793
83	3415	80561	0	703	0	81264
84	3416	4410	0	138	0	4548
85	3417	2633	0	87	0	2720
86	3418	9073	0	220	0	9293
87	3421	1328658	0	23770	0	1352428
88	3422	1530	0	138	0	1668
89	3423	29957	0	1204	0	31161
90	3429	124634	0	1402	0	126036
91	3501	19802	0	819	65	20686
92	3502	92379	492	4925	0	97796
93	3601	52133	0	998	145	53276
94	3602	61430	0	2978	0	64408
95	3603	215257	0	10512	0	225769
96	3604	114784	0	4096	432	119312
97	3605	30822	0	1381	0	32203
98	3606	119977	0	4992	119	125088
99	3701	99104	0	2970	0	102074
100	3702	89860	1032	2494	3284	96670
101	3703	218169	0	23356	0	241525
102	3704	435368	52	20046	215	455681
103	3705	9546	0	512	0	10058
104	3810	123290	0	46	102	123438
105	3820	10159	0	573	0	10732
106	3830	132427	801	709	16333	150270
107	3840	0	302	0	0	302
108	3850	9872	50	393	291	10606
109	3860	326751	0	230	0	326981
110	3890	3562	0	75	0	3637
111	3910	137039	0	5957	0	142996
112	3920	79944	71	5132	1578	86725
113	3930	56743	10535	1562	3132	71972
114	3990	381376	111091	19118	5853	517438
115	4001	0	0	0	0	0
116	4002	0	0	0	0	0
117	4003	0	0	0	0	0
118	4004	0	0	0	0	0

| Input-Output | | Input – Output Imports | | | | |
| row | code | | in millions of yens | | | |
		(9411)	direct	customs	taxes	total
119	4009	0	0	0	0	0
120	5110	0	1209	0	0	1209
121	5120	0	930	0	0	930
122	5130	0	0	0	0	0
123	5200	215	338	0	0	553
124	5300	0	0	0	0	0
125	6110	632246	0	0	0	632246
126	6120	0	0	0	0	0
127	6200	238471	0	0	0	238471
128	6300	70065	661	0	0	70726
129	6401	0	0	0	0	0
130	6402	0	1586	0	0	1586
131	6403	0	0	0	0	0
132	7110	19915	18652	0	0	38567
133	7120	0	0	0	0	0
134	7121	0	0	0	0	0
134	7122	25348	35419	0	0	60767
136	7123	0	0	0	0	0
137	7131	0	0	0	0	0
138	7132	0	0	0	0	0
139	7142	0	0	0	0	0
140	7150	1065635	0	0	0	1065635
141	7160	268476	1318	0	0	269794
142	7170	353039	7410	0	0	360449
143	7190	26952	16884	0	0	43836
144	7200	0	0	0	0	0
145	7300	18000	1005	0	0	19005
146	8101	0	0	0	0	0
147	8102	0	0	0	0	0
148	8210	0	0	0	0	0
149	8211	0	0	0	0	0
150	8212	0	0	0	0	0
151	8213	0	0	0	0	0
152	8214	0	0	0	0	0
153	8220	0	781	0	0	781
154	8250	0	0	0	0	0
155	8290	0	0	0	0	0
156	8300	114122	0	0	0	114122
157	8302	0	0	0	0	0
158	8400	41622	20891	0	0	62513
159	8410	0	115	0	0	115
160	8501	99168	143702	0	0	242870
161	8509	153332	151049	0	0	304381
162	8600	0	0	0	0	0
163	8700	0	0	0	0	0
164	9000	1062987	27028	416	1692	1092123
Total	9099	36381003	678659	806328	505771	38371761

SOURCE: 1980 Input-Output Tables for Japan, Output Table.

Table 15: Japanese Imports in 1980
Number of SITC Items and ISIC References

SITC	Number of Subgroups	Items	Total	Number of ISIC References on SITC Level one	two	three	four etc
0	66	60	126	74	38	8	6
1	7	5	12	10	2		
2	73	87	160	77	46	14	23
3	9	10	19	11	5	1	2
4	16	8	24	16	4	4	
5	30	141	171	139	23	6	3
6	85	264	349	254	64	24	7
7	43	92	135	82	25	14	14
8	18	152	170	102	34	21	13
9	3	6	9	5	2	1	1
Total	350	825	1175	770	243	93	69
Share	30	70	100	66	21	8	6

Country	Year	SITC Imports Thous.US $	System	Conversion Factor	Imports in units of national currency SITC	Imports in units of national currency IO	Share of SITC in percent
Algeria	1974	4035547	s	0,23991	168211	192051	87,59
Argentina	1970	1688566	s	0,26399	639633	1176101	54,39
Australia	1974	11086520	g	1,43841	77075	100052	77,03
Austria	1976	11523227	s	0,05592	206066	212774	96,85
Belgium	1970	11362298	s	0,02000	568115	603200	94,18
Brazil	1970	2844640	s	0,22080	12883	13660	94,31
Canada	1975	33953888	g	0,98311	345372	411857	83,86
Chile	1977	1906265	s	0,04645	41040	96250	42,64
Colombia	1970	842954	s	0,05449	15470	19292	80,19
Czechoslovakia	1977	11186614	G	0,17697	632119	1559837	40,52
Denmark	1970	4384569	g	0,13333	328851	366044	89,84
Denmark	1973	7713966	g	0,16611	46439	49451	93,91
Denmark	1975	10326492	g	0,17367	59460	63392	93,80
Denmark	1980	19324532	g	0,17763	1087909	1178033	92,35
Ecuador	1972	324980	g	0,03890	8354	9032	92,50
Ecuador	1975	984609	g	0,04000	24615	35221	69,89
Egypt	1973	917222	s	2,54001	361110	1011357	35,71
Finland	1970	2637345	g	0,23810	110766	117866	93,98
France	1970	18922440	s	0,18000	105125	116816	89,99
France	1972	26715086	s	0,19827	134741	149491	90,13
France	1973	37054513	s	0,22558	164263	185497	88,55
France	1975	53606081	s	0,23346	229616	259165	88,60
Germany F.R.	1970	29813977	s	0,27322	109121	122852	88,82
Germany F.R.	1974	68975275	s	0,38779	177868	224541	79,21
Germany F.R.	1975	74207750	s	0,40657	182521	236023	77,33
Germany F.R.	1980	187469664	s	0,55071	340414	364920	93,28
Greece	1970	1958345	s	0,03333	5875623	5547984	105,91
Guatemala	1971	303283	s	1,00000	3032830	3032830	100,00
Haiti <1>	1975	201064	g	0,20000	1005320	1286991	78,11
Hungary	1972	3153862	g	0,09251	340921	1290890	26,41
Hungary	1976	5516793	g	0,02403	2295794	2243540	102,33
India <2>	1973	3146136	g	0,12895	243981	295000	82,71
India <2>	1979	9114014	g	0,12312	740255	879000	84,22
Indonesia	1975	4769717	s	0,00241	1979433	2369505	83,54
Iran	1973	3659439	s	0,01456	251335	345130	72,82
Israel	1972	1973160	s	0,23810	82873	128976	64,25
Israel	1975	4172542	s	0,15649	266625	444466	59,99
Italy	1970	14939209	s	0,00160	933701	1043143	89,51
Italy	1972	19282089	s	0,00171	1127608	1297856	86,88
Italy	1973	27792765	s	0,00171	1625308	1809987	89,80
Italy	1974	40681842	s	0,00154	264168	290529	90,93
Italy	1975	37927843	s	0,00153	2478944	2783208	89,07
Ivory Coast	1972	452836	g	0,00397	114064	145650	78,31
Ivory Coast	1976	1296262	g	0,00416	311601	403807	77,17
Japan	1970	18882678	g	0,00278	6792330	7725334	87,92
Japan	1975	57864536	g	0,00337	1717049	2009160	85,46
Japan	1980	139891581	g	0,00439	31865964	37059662	85,99
Kenya	1976	971840	g	0,11948	406696	504126	80,67
Korea	1970	1983263	s	0,00321	6170526	6330702	97,47
Korea	1975	7271004	s	0,00207	3519166	3930339	89,54
Korea	1978	14971929	s	0,00207	72464136	77939987	92,97
Korea	1980	22242704	s	0,00165	13510886	15115704	89,38
Kuwait	1977	4845038	s	3,49344	1386896	1807912	76,71
Madagascar	1973	202930	s	0,00450	45096	96179	46,89
Mexico	1970	2460727	g	0,08000	307591	324640	94,75
Mexico	1975	6571632	g	0,08000	821454	850210	96,62
Morocco	1975	2547287	s	0,24695	103150	106897	96,49

Country	Year	SITC Imports Thous. US $	System	Conversion Factor	Imports in units of national currency SITC	IO	Share of SITC in percent
Netherlands	1970	13392982	s	0,27624	48483	53706	90,28
Netherlands	1972	17226139	s	0,31152	55297	62125	89,01
Netherlands	1973	23752661	s	0,36046	65895	77760	84,74
Netherlands	1975	34393793	s	0,39582	86893	97626	89,01
Netherlands	1980	76889034	s	0,50314	152818	178628	85,55
New Zealand <3>	1972	1524251	g	1,19500	12755	14979	85,15
Nicaragua	1974	559005	g	0,14255	3921466	3506561	111,83
Norway	1975	9704784	g	0,19202	505405	721391	70,06
Papua N.Guinea	1973	292647	g	1,42166	205849	311947	65,99
Philippines	1974	3467625	g	0,14717	2356182	2539959	92,76
Singapore	1973	5069689	g	0,41136	123242	94755	130,06
South Africa	1975	7565087	g	1,36280	555114	805108	68,95
Spain	1970	4714387	s	0,01429	329908	413438	79,80
Spain	1975	16100418	s	0,01742	92425	102012	90,60
Sri Lanka	1970	386607	g	0,16801	2301	2521	91,28
Sweden	1975	18066720	g	0,24137	74851	81503	91,84
Tanzania	1970	271489	g	0,14000	19392	26070	74,38
Thailand	1975	3279415	g	0,04907	668314	793561	84,22
Turkey	1973	2049372	s	0,07067	28999	34189	84,82
United Kingdom	1970	21723687	g	2,40000	90515	107250	84,40
United Kingdom	1972	27859542	g	2,49740	111554	131230	85,01
United Kingdom	1975	53188129	g	2,21685	239927	284144	84,44
United States	1972	55563365	g	1,00000	55563	76199	72,92
United States	1977	147862419	g	1,00000	147862	184154	80,29
Yugoslavia	1974	7519852	s	0,05882	1278452	1482555	86,23
Yugoslavia	1976	7366723	s	0,05882	1252418	1606295	77,97
Zambia	1973	532044	s	1,54205	3450	5290	65,22

SOURCE: Yearbook of International Trade Statistics, various issues, and the relevant Input-Output Tables. Own calculations.

REMARKS: s means special, g means general trade.

SITC Imports for Chile, Colombia, Indonesia, Israel, Korea, and the Philipinnes are compiled in US Dollar. Therefore, the par value, period average (the so-called r-line) is taken from the IFS Statistics of the IMF.

<1> The input-output table is for 1975/76. SITC imports of 1975 are taken.
<2> The input-output tables are for 1973/74 and 1979/80, resp. SITC imports of 1973 and 1979 are taken, resp.
<3> The input-output table is for 1971/72. SITC imports of 1972 are taken.

Country	Year	Input-Output Imports national currencies			Services Imports in %	Additional duty in %
		total	services	commodit.		
Algeria	1974	192051	16428	175623	8,55	
Argentina	1970	1176101				
Australia	1974	100052	6178	93874	6,17	
Austria	1976	212774	8699	204075	4,09	
Belgium	1970	666748	49584	617164	7,44	10,54
Brazil	1970	13660	755	12905	5,53	
Canada	1975	411857	19739	392118	4,79	
Chile	1977	96250	8634	87616	8,97	
Colombia	1970	19292	2706	16586	14,03	
Czechoslovakia	1977	1559837	101888	1457949	6,53	
Denmark	1970	415411	13537	401874	3,26	13,49
Denmark	1973	59925				21,18
Denmark	1975	75460	2095	73365	2,78	19,04
Denmark	1980	1299958	50956	1249002	3,92	10,35
Ecuador	1972	9032	315	8717	3,49	
Ecuador	1975	35221	2694	32527	7,65	
Egypt	1973	1011357	113200	898157	11,19	
Finland	1970	117866	5432	112434	4,61	
France	1970	134785	10467	124318	7,77	15,38
France	1972	173296				15,92
France	1973	210911				13,70
France	1975	262491	26344	236147	10,04	1,28
Germany F.R.	1970	141720	11386	130334	8,03	15,36
Germany F.R.	1974	224541	15490	209051	6,90	
Germany F.R.	1975	236023	17734	218289	7,51	
Germany F.R.	1980	378370	26724	351646	7,06	3,69
Greece	1970	6590925	479549	6111376	7,28	18,80
Guatemala	1971	3032830				
Haiti	1975	1286991	13633	1273358	1,06	
Hungary	1972	1290890	33300	1257590	2,58	
Hungary	1976	2243540				
India	1973	295000	8700	286300	2,95	
India	1979	879000				
Indonesia	1975	2369505	230659	2138846	9,73	
Iran	1973	345130	75075	270055	21,75	
Israel	1972	128976	18538	110438	14,37	
Israel	1975	444466	53044	391422	11,93	
Italy	1970	1161326	107286	1054040	9,24	11,33
Italy	1972	1412829				8,86
Italy	1973	2022167				11,72
Italy	1974	323378				11,31
Italy	1975	2882950	283764	2599186	9,84	3,58
Ivory Coast	1972	145650	16964	128686	11,65	
Ivory Coast	1976	403807	66971	336836	16,58	
Japan	1970	7725334	860185	6865149	11,13	
Japan	1975	2009160	256978	1752182	12,79	
Japan	1980	37059662	4216406	32843256	11,38	
Kenya	1976	504126	58226	445900	11,55	
Korea	1970	6330702	52565	6278137	0,83	
Korea	1975	3930339	76473	3853866	1,95	
Korea	1978	77939987	2424626	75515361	3,11	
Korea	1980	15115704	773670	14342034	5,12	
Kuwait	1977	1807912	95000	1712912	5,25	
Madagascar	1973	96179	13076	83103	13,60	
Mexico	1970	324640	13890	310750	4,28	
Mexico	1975	850210	24410	825800	2,87	
Morocco	1975	106897	2960	103937	2,77	

Country	Year	Input-Output Imports national currencies			Services Imports in %	Additional duty in %
		total	services	commodit.		
Netherlands	1970	59872	4495	55377	7,51	11,48
Netherlands	1972	69513				11,89
Netherlands	1973	86861				11,70
Netherlands	1975	110852	6763	104089	6,10	13,55
Netherlands	1980	187811	24782	163029	13,20	5,14
New Zealand	1972	14979	2822	12157	18,84	
Nicaragua	1974	3506561	370952	3135609	10,58	
Norway	1975	721391	184273	537118	25,54	
Papua N.Guinea	1973	311947	77308	234639	24,78	
Philippines	1974	2539959	191107	2348852	7,52	
Singapore	1973	94755				
South Africa	1975	805108	70807	734301	8,79	
Spain	1970	413438	35381	378057	8,56	
Spain	1975	112574	7785	104789	6,92	10,35
Sri Lanka	1970	3404				35,03
Sweden	1975	81503	6043	75460	7,41	
Tanzania	1970	26070				
Thailand	1975	793561	32721	760840	4,12	
Turkey	1973	34189	2111	32078	6,17	
United Kingdom	1970	109741	18932	90809	17,25	2,32
United Kingdom	1972	134751				2,68
United Kingdom	1975	305397	26746	278651	8,76	7,48
United States	1972	76199	4892	71307	6,42	
United States	1977	184154	10121	174033	5,50	
Yugoslavia	1974	1482555	29363	1453192	1,98	
Yugoslavia	1976	1606295	75429	1530866	4,70	
Zambia	1973	5290	873	4417	16,50	

SOURCE: Calculated from Table 16 and the Input-Output Tables.

Remarks: A blank in the column services and commodities shows
that there is only an import row in the corresponding
Input-Output Table, either, or that no service imports
are reported.

A blank in the column 'Additional duty' indicates, that
the import figures are not split up in cif values and
import taxes, custom duties etc.

Country	Year	Imports in national currencies		Share of SITC
		SITC	IO commod.	in %
Algeria	1974	168211	175623	95,78
Argentina	1970	639633		
Australia	1974	77075	93874	82,10
Austria	1976	206066	204075	100,98
Belgium	1970	568115	617164	92,05
Brazil	1970	12883	12905	99,83
Canada	1975	345372	392118	88,08
Chile	1977	41040	87616	46,84
Colombia	1970	15470	16586	93,27
Czechoslovakia	1977	632119	1457949	43,36
Denmark	1970	328851	401874	81,83
Denmark	1973	46439		
Denmark	1975	59460	73365	81,05
Denmark	1980	1087909	1249002	87,10
Ecuador	1972	8354	8717	95,84
Ecuador	1975	24615	32527	75,68
Egypt	1973	361110	898157	40,21
Finland	1970	110766	112434	98,52
France	1970	105125	124318	84,56
France	1972	134741		
France	1973	164263		
France	1975	229616	236147	97,23
Germany F.R.	1970	109121	130334	83,72
Germany F.R.	1974	177868	209051	85,08
Germany F.R.	1975	182521	218289	83,61
Germany F.R.	1980	340414	351646	96,81
Greece	1970	5875623	6111376	96,14
Guatemala	1971	3032830		
Haiti <1>	1975	1005320	1273358	78,95
Hungary	1972	340921	1257590	27,11
Hungary	1976	2295794		
India <2>	1973	243981	286300	85,22
India <2>	1979	740255		
Indonesia	1975	1979433	2138846	92,55
Iran	1973	251335	270055	93,07
Israel	1972	82873	110438	75,04
Israel	1975	266625	391422	68,12
Italy	1970	933701	1054040	88,58
Italy	1972	1127608		
Italy	1973	1625308		
Italy	1974	264168		
Italy	1975	2478944	2599186	95,37
Ivory Coast	1972	114064	128686	88,64
Ivory Coast	1976	311601	336836	92,51
Japan	1970	6792330	6865149	98,94
Japan	1975	1717049	1752182	97,99
Japan	1980	31865964	32843256	97,02
Kenya	1976	406696	445900	91,21
Korea	1970	6170526	6278137	98,29
Korea	1975	3519166	3853866	91,32
Korea	1978	72464136	75515361	95,96
Korea	1980	13510886	14342034	94,20
Kuwait	1977	1386896	1712912	80,97
Madagascar	1973	45096	83103	54,26
Mexico	1970	307591	310750	98,98
Mexico	1975	821454	825800	99,47
Morocco	1975	103150	103937	99,24

Country	Year	Imports in national currencies		Share of SITC in %
		SITC	IO commod.	
Netherlands	1970	48483	55377	87,55
Netherlands	1972	55297		
Netherlands	1973	65895		
Netherlands	1975	86893	104089	83,48
Netherlands	1980	152818	163029	93,74
New Zealand <3>	1972	12755	12157	104,92
Nicaragua	1974	3921466	3135609	125,06
Norway	1975	505405	537118	94,10
Papua N.Guinea	1973	205849	234639	87,73
Philippines	1974	2356182	2348852	100,31
Singapore	1973	123242		
South Africa	1975	555114	734301	75,60
Spain	1970	329908	378057	87,26
Spain	1975	92425	104789	88,20
Sri Lanka	1970	2301		
Sweden	1975	74851	75460	99,19
Tanzania	1970	19392		
Thailand	1975	668314	760840	87,84
Turkey	1973	28999	32078	90,40
United Kingdom	1970	90515	90809	99,68
United Kingdom	1972	111554		
United Kingdom	1975	239927	278651	86,10
United States	1972	55563	71307	77,92
United States	1977	147862	174033	84,96
Yugoslavia	1974	1278452	1453192	87,98
Yugoslavia	1976	1252418	1530866	81,81
Zambia	1973	3450	4417	78,11

SOURCE: Calculated from table 16 and table 17.

SITC	Imports in thousands of U.S. Dollars	References to ISIC Groups			
3214	4458347	2100			
3216	2055	2100	3540		
3217	2718	2909			
3218	5999	3540	3710	4102	
33101	51032719	2200			
3321	2226057	2200	3530		
3322	192486	3530			
3323	120990	3530			
3324	3945500	3530			
33251	92322	3530	3540		
33252	18506	3115	3529	3530	3540
33261	2587	3530	3540		
33262	6554	2909	3529	3530	3540
33292	379	3540			
33293	2060	3540			
33294	206356	3530			
33295	1080	3530			
33296	3285	3540			
3411	7671224	2200	3530		
3	69991226				

ISIC	Imports c.i.f. millions of yens	percent	SITC Imports millions of yens	percent	Unique Allocation share in ISIC in %
1	4048867	10,93	2735679	11,11	67,57
2	15903891	42,91	14285191	58,02	89,82
3	12488031	33,70	7400480	30,06	59,26
4	2692	0,01	0	0,00	0,00
5	0	0,00	0	0,00	0,00
6	875116	2,36	7984	0,03	0,91
7	1858053	5,01	0	0,00	0,00
8	424905	1,15	0	0,00	0,00
9	368092	0,99	574	0,00	0,16
0	1090015	2,94	191893	0,78	17,60
Total	37059662	100,00	24621800	100,00	66,44