Prospects of Development in Western Europe, 1955 - 1975

by

Ingvar Svennilson

FOREWORD

In the Industrial Institute for Economic and
Social Research we have long been studying long-term
economic development. It seems natural for us to
consider the question of how development in Western
Europe may be expected to affect the economy of Swe-
den. The following paper is a result of this work.
As the author explains in his preface, the aim of the
investigation was restricted, but it is hoped that
the data presented here will provide a starting-point
for a more detailed study of the possible development
in different spheres of the economic life of Sweden.

The investigation has been carried out by Pro-
fessor Ingvar Svennilson. Mr. Per-Olov Boman, B.A.,
of the Institute, is responsible for the statistics
and technical calculations. The translation has been
done by Mr. Alfred Read.

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Jan Wallander

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PREFACE

This paper has been designated a preliminary study, for
a deeper penetration into the subject would demand a more dif-
ferentiated and detailed analysis. The problems of economic
development are so many-sided and complicated that we can never
solve them all. It is my hope, however, that this study will
be the starting-point for a discussion of certain European
problems of development.

I have called the study "Prospects of development in
Western Europe", thereby avoiding the word "forecast", which
suggests a belief in the realization of the conclusions ar-
rived at. A "prospect" as I understand the term, suggests
what direction development will take under certain conditions
which are placed in an economic development model. The study
may be criticized on the ground that the model is not logi-
cally accurate, or that another model would have been a better
starting-point for a more realistic investigation. If the
model is accepted, however, the question of the value of a
forecast will be a problem of the degree of probability of
the conditions at every single point. I have endeavoured in
this respect to isolate what I regard, in view of historical
evidence, to be feasible. Others may differ, for they may,
for example, have other views on saving, training, technical
development, or their effect on the rate of progress. Such
factors are in their turn dependent on economic policy, which
is difficult to forecast, and on which one can really only
have views as to what the nature of the policy should be.
Further work on the study may aim, among other things, at
placing it more definitely in relation to different sides of
the political development of Western Europe. But this would
require a more thorough analysis.

The study has really no value except as statistical
material, arranged from certain economic viewpoints, which
may be rearranged without great difficulty. I cannot prevent
others from using it as the basis of forecasts— to have some-

one else to blame if development does not agree with the study.
But it would naturally be irresponsible to lead others into
this temptation had I myself not entertained a private convic-
tion that the study might at least serve as a starting-point
for a forecast of the possibilities of the European market.

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Ingvar Svennilson

THE EUROPEAN MARKET AND SWEDISH FOREIGN TRADE

However economic co-operation develops in Europe, the economic life of Sweden will be greatly dependent on the development of the economy of Western Europe. The OEEC group is responsible for about 60 per cent of Sweden's imports and 70 per cent of her exports. Foodstuffs, raw materials and fuel come mainly from other parts of the world, but as regards industrial goods, the share of the OEEC area in our import amounts to about 80 per cent. On the export side the situation is almost the reverse. About 80 per cent of the export of agricultural products and raw materials— e.g. ore and forest products— goes to OEEC countries, while for such an important group of commodities as engineering works products, the share of these countries is almost as low as 50 per cent (Table A).

It is clear that when estimating the commercial political situation of Sweden, it is not enough only to consider the present distribution of trade. International markets change rapidly, not only as a consequence of new conditions of trade inside Europe. A general economic development in different parts of the world will increase the demand for goods. At the same time the economic structure of the individual countries changes both as regards production and consumption; the general industrialization of the world is a dominant feature of this development. The export capacity and import needs of the individual countries are changed, both totally and as regards the different classes of goods exchanged.

Owing to Sweden's geographical position, the economic development of Western Europe must always be of prime importance for our trade. This investigation is intended to provide some hints for a study of the problem, but nothing more than hints.

A number of market studies, confined to the European market, have been made for certain goods. They are based on the assumption of the general economic expansion of Western Europe, expressed in national product, income per ca-

pita, industrial production and so on. An attempt has been
made in the following study to give, in the light of certain
considerations, a couple of alternatives which have been deem-
ed to isolate the development that can be anticipated.

Just as the Soviet Union has taken the United States as
the pattern of its own development, there is reason to place
American conditions in a European perspective. Such a com-
parison has been made in this study. It is true that con-
sumption habits and social development may be quite different
in Europe when we approach America´s present level of develop-
ment. Nor must we forget that such a future European develop-
ment will take place according to technical conditions differ-
ent from those that have hitherto prevailed in the United
States. For a forecast of the future situation of the market,
however, conditions that we can now observe in the United
States must always be an important starting point.

In the first place, the basic figures presented here are
used to judge the growth of the demand for various goods, that
is to say, as a basis for the calculation of Sweden´s possibi-
lities of export. But it is only natural that conclusions re-
garding the growth of needs cannot be drawn only from the ge-
neral economic expansion within a certain market, for the con-
sumption of individual goods within such a market is connected
in a complicated way— elasticity of prices and incomes, and
input-output combinations— with the expansion, in sectors and
totally. Further, our export to this market is influenced not
only by the growth of the needs but also by the competition
conditions with regard to foreign countries—the results of
which in their turn will depend on variations in costs in the
importing and exporting countries, and on commercial policies,
customs unions, for example. It is, therefore, a long step
from the assumptions of growth presented here, to a market
forecast for a single Swedish export article.

As regards the development of our import, the economic
expansion abroad will be of more indirect significance. Atten-
tion must be paid mainly to the transformation of the economic
life abroad, which accompanies the expansion. If it is a
question of products based on exhaustible natural assets

(soil, forests, ores, etc.), the question arises of the changes
in the export capacity of foreign countries as a consequence
of their internal expansion. A similar argument may be applied
in a more dynamic variant; it may be asked how the development
of production capacity in other countries will be related to
the increase of their consumption of the same goods, and how
far tendencies towards over or under capacity, reflected in
export or import, will arise.

I. METHOD OF STUDY

Forecasts of the kind carried out here are always more
or less arbitrary. If they are of any value it is mainly be-
cause one is compelled to make a systematic collocation of
various primary statistical data. The main value of the fore-
cast itself may be— in so far as the technique is reported ex-
plicitly— to provide a starting point for a more thorough stu-
dy of the possibilities of development. In certain points,
the development of population, for example, tendencies may be
determined with a tolerably high degree of certainty. In
other items,the assumptions on which the forecast is built
will be more arbitrary, even if they take into account histo-
rical experience as far as possible. Uncertainty regarding
future tendencies may, as has happened to a certain extent in
this study, be reflected in alternative assumptions, by which
it is sought to isolate various possibilities. But this tech-
nique can only be applied to a certain extent, otherwise the
account would become too diffuse. Freedom for the individual
reader to exercise his own judgment can only be assured if each
supposition is reported in as great detail as possible. If the
reader cannot agree with them, the calculations should be pre-
sented in such a way that he can revise them without too much
difficulty.

The process of long-term economic expansion has by no
means been fully investigated. We know that it is infinitely
complicated both as regards its economic course and variations
in the structure of the system. In a survey covering several
countries with varying, and to a certain extent closed national
economic structure, one is compelled to start from relatively
coarse aggregates of labour, capital or production. From this
it follows that one must start with a very simplified model as
regards the economic factors that govern development. The ana-
lysis is thus rather unsatisfactory as regards degree of rea-
lism. Its purpose, therefore, is perhaps primarily to present
the problem for a more thorough analysis. And at the same time
also for economic policy since development is not a natural
phenomenon, but can at every point be affected by the measures
taken in order to influence saving, consumption habits, profes-

Table A. Sweden's foreign trade 1956, millions of dollars fob

Goods	Export to:			In per cent of world total		Import from:			In per cent of world total	
	World total cif	OEEC	"The 6"	OEEC	"The 6"	World total cif	OEEC	"The 6"	OEEC	"The 6"
Foodstuffs (SITC 0, 1 &4)	73	57	41	78	56	326	103	52	32	16
Raw materials and fuel (SITC 2 and 3)	806	672	369	83	46	610	226	147	37	24
Chemicals (SITC 5)	51	35	16	69	31	146	102	61	70	42
Machines and means of transport (SITC 7)	447	242	79	54	18	473	392	233	83	49
Semi-finished and finished products (SITC 6, 8 and 9)	563	342	153	61	27	651	519	329	80	51

Source: W. Paues: Europamarknaden och företaget, Stockholm, 1958

sional activities, technical development, the modernization
of the economic life, or foreign trade. Efforts towards in-
tegration form one side of this economic policy, whose influ-
ence on economic development is open to discussion. .

1. Choice of period

For statistical reasons (census etc.) the year 1955 has
been chosen as a basis for the forecasts. The object has
been to give the relatively long-term development tendencies.
According to the plans for the establishment of a common mar-
ket, a transition period of fifteen to twenty years is allow-
ed for. The year 1975 has therefore been taken as the end of
this forecast.

According to available forecasts, the development of po-
pulation in the OEEC countries will continue at a relatively
even rate during the coming five-year periods. Otherwise the
possibilities of judging development are within such wide mar-
gins of error, that they will not be exceeded if, for the
years between 1955 and 1975, a simple interpolation is resort-
ed to; this may be done for example by substituting annual re-
lative increase figures for the growth over the whole period.

2. Countries and groups of countries

The object of this investigation has been to give a ge-
neral survey of development within the OEEC area. The count-
ries included in the study, and the groupings made of these
countries are given in the appendix of tables. Of the seven-
teen OEEC countries, only Iceland and Turkey have been exclud-
ed. Iceland is too small a unit to make a study of its spe-
cial problems worth while, and Turkey has been excluded for
geographical and other reasons.

It would have been too ambitious to attempt to make fore-
casts with any pretentions to independent value for individu-
al countries. This would have required consideration to spe-
cial national circumstances to a degree that would not have
been practically possible in this connection. Such forecasts
must be the task of national institutions. We have had to be

satisfied with relatively schematic assumptions in connection
with the special circumstances of the different countries, e.g.
the growth of population and the general position of the econo-
mic development.

A forecast of economic series will, as mentioned above,
never be worth more than the assumptions on which it is based.
We have striven to make these assumptions so technically simple
that they can be surveyed easily by the reader; his assessment
of the final result will depend on his evaluation of these as-
sumptions. In accordance with this no attempt has been made
to differentiate to any great extent between the assumptions
for the individual countries. Instead they have been chosen
to illustrate the average development in groups of countries.

By counting with several alternatives in certain points,
it has been possible by different combinations of hypotheses
to make a forecast fitting more closely to the judgement of a
particular country arrived at by a detailed study of its spe-
cial circumstances. By reorganizing the primary material for
individual countries, we can thus arrive at other sums for
groups of countries. This primary material can be made avail-
able for more intensive market investigations. In view of the
relative superficiality of the judgements for each individual
country, only the sums for groups of countries are given.

The countries have been grouped with regard to the cur-
rent integration plans. "The Fifteen" OEEC countries included
are mainly equivalent to the planned free trade zone. Backward
Portugal and Greece occupy a special position, as is recognized
in the current negotiations, and after excluding them a sum
has been calculated for "The Thirteen" more advanced countries
of Western Europe.

The Common Market on the Continent is a fact, and "The
Six" countries composing this group have therefore been report-
ed separately. Among these six, Italy occupies a special posi-
tion, and a sum has been calculated for "The Six, excluding
Italy".

"The Other Seven" of "The Thirteen", that is to say the
countries outside the Common Market for "The Six", have also
been represented by a sum, even if this group as regards com-

mercial policy etc., is very heterogeneous. Following the
principle of not giving results for individual countries, the
remaining seven have been divided into three subordinate
groups, Great Britain-Ireland, DaNoSve, and Austria-Switzer-
land (see appendix of tables).

3. Sector distribution

The basic plan of the forecast for each individual country
has been a three-sector model.

Labour and production in the initial year, 1955, have
been divided into the following sectors:

1. Agriculture and ancillary industries
2. Industry and building
3. Transport, distribution and other services (called
   the service sector).

Sectors 1 and 2 represent together "production of goods"
as opposed to the services performed by sector 3. (In compari-
son with official production figures of the Soviet Union, it
should be observed that the latter comprise only production of
goods.)

Sectors 2 and 3, on the other hand, may be combined under
the heading "urban occupations". Their development should il-
lustrate the tendencies for the growth of aggregations— im-
portant from, among other things, the point of view of con-
struction, building and transport.

The choice of sectors has been determined partly by sta-
tistical considerations; the grouping of the three sectors can,
without any considerable difficulty, be applied statistically
in a similar way for different countries. The grouping, how-
ever, will be dependent on the criteria used in the national
statistics. This must always be borne in mind when working up
and interpreting the material. It is particularly important
to ensure that the basis of the statistical measurement is the
distribution of the economic activities into economically or
structurally relatively independent production units. As an
element of the economic development may now be included a drift
towards an economic or structural integration or distintegra-
tion of various links in the process of production. From

"agriculture", for example, may be extracted the manufacture
of implements and the refining of agricultural produce, and
transport and distribution. In the same way various services
may be separated from "industry" (inversely they can also to
a greater extent be integrated with the industrial production
of goods).

Overlapping between the three sectors must therefore be
dealt with without losing sight of the statistical implications.
The result, naturally, gives no information on changes in the
total volume of the service functions, only on changes in the
parts distinguished, according to the statistical definitions,
from the production of goods. This circumstance influences all
figures and their interpretation. Production per person em-
ployed in agriculture may thus rise statistically if production
is measured in volume of goods, tons of wheat and the like,
because in the course of development, industrial treatment of
produce, transport and distribution services have been separated
from agriculture.

4. Economic development and changes in structure

The forecast of production has been built up on a combi-
nation of employment and production per employed within the
three sectors mentioned. The different items in this calcula-
tion are as follows:

1. Growth of total labour force
2. Distribution of labour among the three sectors
3. Increase of production per employee in each sector
4. Growth of production by sectors
5. Growth of national production (a) total and (b) per
   capita.

From the point of view of calculations the forecast may
be built up in the order given, from Items 1 to 5. We must,
however, allow for a connection between the items in the oppo-
site direction. The growth of the total production, Item 5,
affects the consumption of goods from the different sections,
Item 4, which in its turn, at a given increase in productivity,
influences employment in each sector, Item 2. If we confine
ourselves to a closed economy (no foreign trade) the connection

between the different items may be given in principle in the following way.

At a given technical development, total production demands certain investments. The remainder of the production is available for consumption. Between total consumption and the demand for the final products of the different sectors there exists a relation which may be expressed with the help of income elasticities. When changes occur in relative prices, consideration must also be paid to the price elasticity of the demand.

The sectors deliver raw materials and semi-finished products to each other. Agricultural products are turned into consumption goods in the industrial sector. Inversely, industrial products are used in agriculture. A similar situation exists between transport, distribution and other services on the one hand, and the production sectors on the other. These "input-output" relations determine how the demand for finished consumption and capital goods is shared among the three sectors.

Assuming full employment, there must be, in the last analysis, a balance between the total supply of labour and the demand for labour due to the development of production in the different sectors. This adaptation will be achieved by fixing prices of production factors and different goods and services.

As a consequence of these relationships between total production, demand for various goods, and employment, economic development will be accompanied by structural changes. The object of this study is to illustrate the transformation that may occur in the economic life of Western Europe under the influence of its general economic development.

Such a study of the structure should, if it is to be realistic, go into details as regards the individual spheres of goods. In the survey presented here, however, it has been necessary, as already mentioned, to simplify considerably. This has chiefly been done by distinguishing only among the three sectors dealt with above— agriculture, industry, and services. But even within this limited framework it has been necessary to work with a number of simplified approximations.

The reasons for this have been partly attempts to make the account lucid, and partly the limitations of the statistical material on which the study is based.

In the following the simplified model used for the forecast will be described. In a later section methods and hypotheses will be discussed sector by sector. It should be observed that the calculations and hypotheses for each individual sector presume that the functional relationships valid for each sector have been included in the general increase model, and development has been determined simultaneously. The development in the individual sectors is responsible for the total production, whose development in its turn, according to our assumptions, decides the development of the sectors.

5. Forecast model

a. Foreign trade, production and supply of goods

The forecast of Western European production has, as touched upon earlier, been built up as a sum of the development in the individual countries. This has been done to make possible a flexible grouping of countries. Changes may now occur between production and supply of goods by alterations in the balance of exchange in the respective countries. Seen relatively, however, surpluses and deficits in the balance of exchange are not of great significance. We have therefore considered it possible to start from the simplified assumption that in each country a surplus of deficit in the balance of exchange is constant in relation to the national product. Terms of trade are further assumed to remain unchanged, i.e. foreign trade is assumed in this respect to have an unvaried productivity. We may then calculate that the consumption of goods and services will increase at the same rate as the total production.

All forecasts of production are made with constant prices. Thus they are in the nature of volume index figures. This does not prevent us, in the calculation of the consumption of various goods and services, from taking into consideration certain variations in the relative prices in connection with economic

development. It is therefore implied in the calculations that
services may increase in price in relation to the production
of goods. The character of the calculations as volume index
figures must imply that the distribution of value of produc-
tion among different sectors will, in the final year, be un-
realistic in our calculations. This must be taken into con-
sideration in the interpretation of the results.

As regards the individual sectors, various assumptions
of the balance of foreign trade have been made; these assump-
tions are accounted for below.

b. Savings quota, investments and consumption

The savings quota of Western Europe has been on a rela-
tively high and stable level since the war. If repairs and
maintenance are excluded, gross investments have amounted to
about 20 per cent of the gross national product. We have as-
sumed that this proportion will remain constant. The consump-
tion of different goods and services may with advantage be
placed in relation to the total consumption. Since the sav-
ings quota has been assumed to remain unchanged, the growth
of total consumption may be represented by the increase of to-
tal production.

These assumptions clearly imply that investments will
increase at the same rate as total production. How far this
will also imply that production of capital goods will increase
at the same rate is an open question. It may be that the pro-
duction of capital goods in Western Europe will increase more
rapidly than consumption, if the net export of capital goods
is relatively increased. This will influence the composition
of production in the industrial sector, which we assume will
alone be responsible for the production of capital goods. But
such shifts in the industrial sector fall outside this ana-
lysis.

The assumption that the savings quota will remain un-
changed should, as mentioned earlier, be placed in relation
to the growth of productivity in the three sectors. It may
be said that we did so by choosing the assumption of the growth
of productivity based on experience since the war, since the
savings quota has been at a level that we have assumed will be

permanent. But future development of productivity is also influenced by the simultaneous technical development, which may be accelerated or retarded. Little is known about this. A more detailed analysis of the accumulation of capital and its influence on productivity has therefore not been considered worth while. We have been content to give at the end the capital coefficients (i.e. the relations between the growth of capital and the increase of production), which are equivalent to our various assumptions of productivity, in order to provide a basis for discussion of the validity of the forecast.

c. Production and employment by sectors

The methods of calculating the total supply of labour are described below. It will be assumed that this labour force is fully employed in the same relative sense as during the first and last years, which does not exclude possibilities of changes in the volume of employment during the years between. A combination with the assumptions of productivity gives the equivalent full production in the final year.

Since the sum of employment and production in the three sectors will be equal to the total supply of labour and the total production respectively, we can clearly confine ourselves to a direct determination of the development of production and employment in two of the sectors. For this we have chosen the agricultural and service sectors. Employment and production in the industrial sector will then be a residual item. The question will then be how much labour will be available for industry after agriculture and the service occupations are supplied, and what growth of industrial production there will be on the basis of this labour.

For statistical reasons the calculations for the service sector and agriculture have been performed in different ways, even if the process has been the same in principle.

d. The service sector

Employment in the service sector is devoted mainly to transport and the distribution of goods. Unless the distribution and transport ways become longer, this dominant part of service occupations should develop in volume parallel with the production of goods. There is, however, reason to calculate

with the possibility that the length (in a quantitative and qualitative sense) will change as a consequence of the economic development. In any case, this may occur in a statistical sense, in so far as transport and distribution are separated from production of goods (cf. above). Otherwise the service sector includes personal services, public works, and various other services (banks, insurance etc.). The development of these services may be treated partly as private consumption i.e. it is connected with the development of the total private consumption and the relative prices of services. It may also be assumed that the development of public services is related to the trend towards higher production and income per capita.

It is evident that in a more detailed analysis than has been attempted here, different parts of the production of the service sector must be isolated, and their development made the object of a special analysis. It would thus be possible among other things to consider the special input-output relations between agricultural and industrial goods and services. It would also be possible to take up the question as to what extent services will be industrialized e.g. by the industrial packing of goods.

We have chosen only to include the resultant of all these changes, and to place the service activities in relation to the development of population and total production and thus (according to our assumption) also to the total consumption. We assume that changes in relative costs of services and changes in the input-output relations between production of goods and services are correlated with the growth of production per capita.

The basic statistics for the output of the service sector rest as a rule, however, on very uncertain and stereotype evaluations. Information on employment in the service sector is more reliable. We have therefore chosen to base our hypotheses on historical comparisons of production per capita and the share of the service sector in employment. The development of employment in the service sector thus arrived at has then been converted into an equivalent increase of its production volume with the help of assumptions of the growth of

production per person employed. This method implies that we
reckon with the development of productivity in the service
sector being correlated with the growth of production per ca-
pita. The connection between the national product per capita
and the relative employment in service, from which we started,
is thus not an expression of a simple demand but of a compli-
cated economic-technical development process.

A comparison of the service sector's relative extent in
different European countries reveals rather great variations
even at a given development stage, measured in national product
per capita. This is partly explained by the fact that the in-
dividual countries have a surplus or deficit in their exchange
of services with other countries, e.g. as regards foreign ship-
ping, tourism etc. In our forecasts we have assumed that
equivalent surpluses or deficits in services within the indi-
vidual countries will remain at the same relative degree as in
the initial year.

e. The agricultural sector

Rather extensive studies have been made of the elastici-
ty of the demand for agricultural products. These studies have
formed the basis of our estimate of the total consumption of
agricultural produce in Western Europe. Western Europe has,
however, a rather large net import of agricultural produce from
other parts of the world. Future agricultural policy will de-
cide how this import will develop. In this point we have (for
reasons given below) assumed that Western Europe's import sur-
plus will remain unchanged. This provides a basis for a cal-
culation of the future development of agricultural production
in the whole of Western Europe. How this production will be
distributed among different countries has been judged with the
help of development trends in different spheres.

The method implies that we have not gone into the details
of the equilibrium between consumption, production and foreign
trade in the individual countries. Instead we have assumed
that the national balances between consumption and production
will be maintained by the distribution of the net import from
transoceanic countries and a levelling off of the surplus and
deficit between different European countries. The assumptions

on this point are naturally schematic and the account needs to
be complemented with more detailed investigations.

f. General remarks

It has already been mentioned that the arrangement of the
forecast model is very schematic in many respects. Thus the
fixing of prices has only partly been included. This is also
true of the whole question of the substitution of capital for
labour, which in its turn influences the development of produc-
tion per employee. A source of error may be the treatment of
the industrial sector as a residue. The labour available for
industrial production in combination with the increase of pro-
ductivity must provide goods equivalent to the demand for these
goods. If this is not the case, prices of industrial goods may
increase, for example, which will be reflected in a shortage
of labour with consequent rises in wage rates. This in its
turn, if it becomes general, may influence price relations and
lead to a greater production of capital goods with a view to
economizing on labour, and make possible a larger volume of
industrial production than the forecast shows. These relations
will require a more detailed study than it has been possible to
make in this connection. The problem can only be touched upon
slightly.

A few general remarks must also be made regarding the
assumption of elasticity of demand and production per worker,
which has been made the basis of the forecast.

The assumptions regarding demand are based on compari-
sons with the contemporary situation in different Western Euro-
pean countries and the United States. Such "cross-section"
comparisons may, of course, be misleading, for one cannot di-
rectly assume that the differences between countries in dif-
ferent stages of development at the same time are the same as
for a country between different periods of a historical deve-
lopment process. This should be borne in mind while inter-
preting the results of the investigation.

The development of production per capita in the different
sectors, on the other hand, has been assumed to agree with the
experiences observed in the time series in different countries.
Owing to uncertainty regarding the technical development, an

attempt has been made to isolate the possibilities of development by counting with three different alternatives. In each alternative production per capita has been assumed to increase somewhat more rapidly in the industrial sector than in the agricultural sector, where it is anticipated that per capita production will increase rather quicker than in the service sector. At the same time in each of the alternatives, it has been assumed that the three sectors will run parallel in a quicker or slower increase. This may be taken as an expression of a general quicker or slower "technical development"; there are reasons to believe that a more rapid technical development within a sector will cause similar trends in the other sectors. An increasingly rapid general development of productivity should thus be the consequence of the augmented rate of growth of capital stock, which according to our hypotheses will follow in the wake of a more rapid development of production. The assumptions of the increase of productivity have been made in each of the alternatives for all the fifteen countries. There exists a possibility, as mentioned above, of making other combinations on the basis of the primary national statistics, for example, implying that productivity increases more rapidly in the more backward countries.

6. Problems of rates of exchange

In order to obtain a survey of the economy of Western Europe, it has been necessary to convert the production of the individual countries expressed in the currency of the country, into a common unit. All the production values in the initial year, 1955, have been converted to dollars. The individual European currencies were, however, to different degrees over- or under-evaluated in relation to each other, and in relation to the value of the dollar in the United States. An attempt has therefore been made to adjust their values in order to attain purchasing-power parity.

According to investigations made by OEEC[1], the 1955 price level in Europe, converted into dollars according to the rate

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1) <u>Milton Gilbert and ass.</u>: Comparative National Products and Price Levels, OEEC, Paris, 1957

of exchange, was considerably lower than in the United States.
The differences in internal price levels varied, however,
between the European countries included in the investigation.
The under-evaluation of the European currencies according to
the current rate of exchange proved to be greater, as was to
be expected, if European consumption (European quantities) was
used as a basis instead of American. In the same way, in a
conversion of European and American production according to
mean European prices, European production was relatively about
20 per cent lower than if American prices were used as a basis.
The difference between these two calculations was proportional-
ly about as great for each of the individual European countries;
for Italy, however, it amounted to almost 30 per cent. For mu-
tual comparisons between the different European countries, the
choice of prices was thus of subordinate importance.

In this study the 1955 production in the individual Euro-
pean countries has been converted into dollars according to
American prices in accordance with the OEEC investigation. The
prices therefore refer to factor prices. The converted Euro-
pean production has been compared with the actual American pro-
duction values. An average of a calculation on the basis of
American and European prices would, according to the above,
give a 10 per cent lower result for Europe.

As regards the six smaller countries included in the OEEC
investigation, a somewhat arbitrary extrapolation has had to be
made. The currencies of Ireland and Sweden have been assumed
to be under-evaluated to the same degree as that of Great Bri-
tain; Austria´s to the same degree as Germany´s; Portugal´s and
Greece´s to the same degree as Italy´s; Switzerland´s somewhat
less under-evaluated than Sweden´s.

Such a calculation of volume in American prices may be
compared with the relative production values according to the
rate of exchange. The ratio between these calculations gives
the price-index figure, which gives the relation between Ameri-
can prices and national European prices converted into dollars
according to the rate of exchange. These index figures have
been collated in Table B; assumptions for the six countries,
for which OEEC made no calculations, have been given in paren-
theses.

Table B. Index figures for American factor prices;
          national European prices converted into dol-
          lars according to rate of exchanges = 100
                (National European quantities)

Country	Index	Country	Index
France	119	Denmark	151
Western Germany	166	Norway	149
Italy	184	Sweden	(152)
Belgium-Luxemburg	132	Switzerland	(145)
Netherlands	171	Austria	(166)
Great Britain	152	Portugal	(184)
Ireland	(152)	Greece	(184)

II. POPULATION AND LABOUR FORCE

1. Development of population

The growth of population in Europe during the period 1955 to 1975 will, as far as can be judged, proceed at a steady pace. It has therefore not been considered necessary to describe the development of population during short intermediate periods. The errors attendant upon this are probably of subordinate importance. Available population forecasts extended as a rule only to 1970; development from 1970 to 1975 has been calculated by a simple extrapolation[1]. Now the growth of population is relatively restricted in comparison with the anticipated increase of production. Small errors in population forecasts, therefore, should not, as compared with other sources of error, affect seriously the results of the forecast.

The changes in the total population during the period under consideration, and the changes in the section of the population in economically active ages, 15-64 years, are shown in Table C (cf. Tables 1 and 6 in the appendix of tables).

Table C.   Changes in total population 1955-1975

	1955		1975		1975	
	millions Total	15-64 yrs	millions Total	15-64 yrs	Index: 1955=100 Total	15-64 yrs
"The Fifteen"	259.4	171.0	280.9	183.4	108	107
"The Six"	161.1	106.8	175.6	114.9	109	108
United States	165.3	103.2				

Great differences exist in the rates of increase of population in the individual countries, as is shown in Table D.

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1) For Great Britain and Sweden, however, national forecasts extending to 1975 have been used. Population statistics in other cases are from OEEC: Demographic Trends in Western Europe 1951-1975.

Table D. Deviation of population in different countries

Index figure for 1975 1955 = 100	Country	
	Total population	Population aged 15-64 years
≠100	Ireland (99) Austria (99)	Austria (96), Belgium-Luxembourg (99), Ireland (100)
101-105	Belgium-Luxembourg (104), Great Britain (104)	Western Germany (103), Great Britain (104)
106-110	France (107), Sweden (107), "The Fifteen" (108), Western Germany (109), Italy (110)	Sweden (106), "The Fifteen" (107), Italy (110), Switzerland (110)
111-115		Norway (114), Portugal (114), Denmark (115)
116-120	Denmark (116),Norway (116), Portugal (116), Netherlands (119)	
121-	Greece (122)	Greece (121), Netherlands (124)

A comparison between the different countries also shows that the section of population aged 15-64 years varies only slightly from country to country. In all the countries it amounts to 63-67 per cent of the total population.

2. Migration

Consideration has been paid to immigration and emigration in six of "The 15", as shown in Table E. These assumptions have been made on the basis of the population forecasts published by OEEC. As regards Great Britain, the assumptions are included in the national forecast.

Table E. Immigration and emigration in six of "The 15"

Western Germany	net immigration	100,000 per annum
Italy	net emigration	75,000 " "
Netherlands	" "	20,000 " "
Great Britain	" "	32,000 " "
Ireland	" "	(4,000) " "
Portugal	" "	35,000 " "
"The Fifteen"	net emigration	66,000 per annum
"The Six"	net immigration	5,000 " "

3. Labour force

A number of difficulties arise when attempts are made to calculate and compare the number of people employed in different countries. This is particularly true as regards female labour, especially in agriculture. To avoid this difficulty, the number of professionally active males in relation to the total number of males between the ages of 15 and 64 has been calculated first (Table F).

Table F. Economically active males in percentage of males aged 15-64 years

1956	Country
-90	United States
90-95	Greece, Belgium-Luxembourg, Netherlands, Western Germany, Great Britain
95-100	France, Austria, Sweden, Norway, Italy, Denmark, Switzerland, Portugal, "The Fifteen", "The Six"
100-	Ireland

Judging from this table there is no reason to expect any great change in the number of people employed during a period of economic expansion; comparison with the United States, however, suggests a possible slight decrease with a higher stand-

ard of living. Certain general considerations also favour this view.

It seems reasonable to assume that no great changes are likely to occur as regards the centre part of the 15-64 section of the population as far as employment is concerned; significant changes may be anticipated among the highest and lowest age groups. Continued economic progress and a higher standard of living should make it possible to reduce the retirement age. On the other hand, it may be maintained that a higher standard of living will be accompanied by better physical condition, which will tend to increase the relative number of economically active people in the highest age groups. These rival tendencies make it difficult to forecast the net effect of the changes occurring at the "top" of the age group 15-64 years. It should be observed, however, that the size of an age group at the "top" is considerably smaller than that of the youngest section of the actively employed age group. No consideration, therefore, has been taken of the degree of employment in the highest age groups.

In the fifteen countries there exist very great differences in the educational systems, but common for them all is the tendency towards longer compulsory education. It must be assumed that not only the compulsory school period will be longer in the future, but that it will be made possible for an increasing number of young people aged 15-20 years to continue their studies, and thus the age at which they become economically active will be higher.

How great the influence of a rise in the school-leaving age may be is illustrated by Swedish conditions. Diagram 1 shows how great a proportion of the young people of Sweden in each age group was studying in 1955.

If it is assumed that the nine-year comprehensive school had been established all over Sweden in 1955, the young people indicated by the shaded field would also have been at school. They numbered 175,000, divided almost equally between the sexes. In 1955 the percentage of gainfully employed males in the age group 15-64 was 97.1; if the school reform had been fully applied this figure would have been 3.7 per cent lower. This figure should perhaps be reduced somewhat; for certain

Diagram 1.

Young people at school and gainfully employed in Sweden 1955.

Percentage of population
in each group
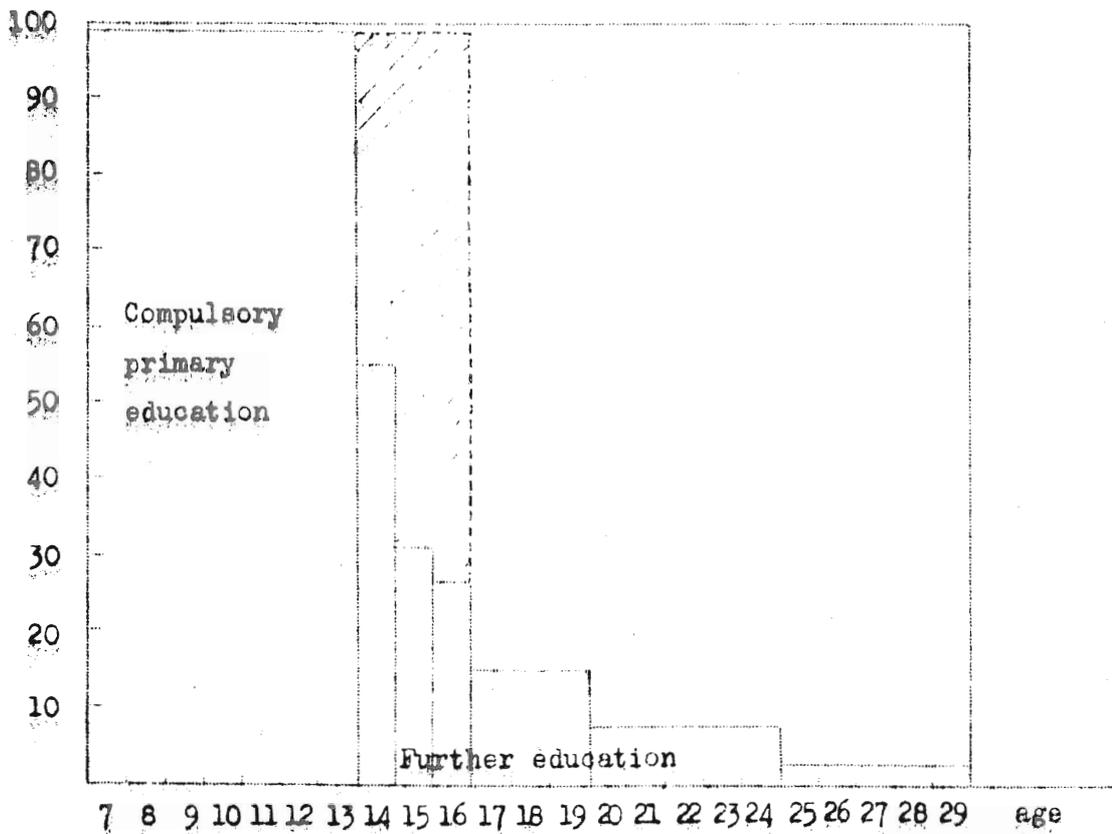
young people aged 14-16 years economic employment is not the
only alternative to being at school. On the other hand, an
extension of compulsory education should be accompanied by the
expansion of higher education. Even if variations in each an-
nual âge group are smaller the higher up the age scale they
get, the changes in these ages have a relatively greater ef-
fect, since the alternative occupation for a twenty-year-old
person who is studying is almost exclusively some form of eco-
nomic activity.

A study of the effects of the expansion of the education-
al system in each individual European country would take us too
far and would probably be of very little value. One thing is
clear, however; an extension of compulsory and further educa-
tion will take place, and to a certain extent reduce the degree
of economic employment of the population. Consideration has
been taken to this factor in our calculations by the assumption
that the number of actively economically employed in percen-
tages of males aged 15-64 years will decline by 0.5 per cent
for each five-year period, so that by 1975 it will be 2 percent-
age units lower than in 1955. This implies that this factor
has been deemed to be of relatively subordinate quantitative
importance to the development of production. Qualitatively it
should be of far greater significance by its influence on the
productivity of labour.

As regards female labour, we have chosen to attach our
hypotheses to the relation between males and females in various
branches of the economic life, as shown in the following.

III. EMPLOYMENT AND PRODUCTION

1. Agriculture

European agriculture is dispersed over a number of relatively isolated national markets. Only countries with a large export surplus, such as Denmark, have a home market that is in free contact with other markets. The various countries, however, exchange certain quantities, which are equivalent to surpluses and deficits in the national markets. Exports go to a certain extent to countries outside Western Europe. Calculated in products of European agriculture, this export is of subordinate importance. Imports of agricultural products from other parts of the world are, on the other hand, rather important. Thus in 1955, the consumption of agricultural produce in the OEEC area was covered to about one fifth by net import from other parts of the world.

It is a well-known fact that the income elasticity of the consumption of foodstuffs varies with income levels. Various investigations have shown that even in a country with a relatively high income level, such as Sweden, the elasticity of the demand for foodstuffs may be rather great, if it is derived from time series in which the tendency towards highly developed industrial treatment and lengthening of the distribution distances is apparent. Of interest in this connection, however, is the consumption measured in volume of agricultural products that leave agriculture either for direct consumption or for further treatment within other sectors. If one restricts the study to this volume of production, it will be found that elasticity of income declines rather quickly with higher income levels. According to investigations made by Juréen, based on a comparison of consumption in different countries, income elasticity declines from a value of 0.5 in the less advanced countries to 0.1 in a country on the same level as the United States[1]. This implies that with a parallel increase of income

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1) <u>Lars Juréen</u>: Long-term Trends in Food Consumption: A Multi-Country Study, Econometrica 1956. These calculations probably include the implied effects of the relatively more expensive services or, on the contrary, a cheapening of the final products of agriculture, which is a consequence of an increase of the national product per capita, and of wages. It is difficult, however, to say in what direction this factor will lead, since agricultural products reach the consumer

levels in different European countries, the demand for agricultural produce will increase much more rapidly in backward countries than in countries where the initial income level is already high. In view of national agricultural policies, now pursued, this circumstance will naturally affect the relative development of production and employment in agriculture in different parts of Europe. Another feature of the least developed countries is that their populations are increasing at a relatively rapid rate, and that the urban occupations are comparatively less developed. Thus there is reason to assume that in such countries at a given productivity in agriculture, the section of the population engaged in agriculture will not decline in the same way as in the more highly developed countries.

We have taken these circumstances into consideration in the forecast in the following way, which naturally implies a greatly simplified schematic account of development in different spheres of European agriculture.

The development of the total consumption of agricultural produce in Western Europe has been estimated on the basis of the national product per capita, which is obtained in our three alternative forecasts. The assumption of elasticity of income has been chosen on the basis of income per capita, which for the whole area is attained in the middle of the forecast period. By applying Juréen's findings, this elasticity has been determined at about 0.3.

As far as trade with other parts of the world is concerned, the assumption has been made that the net import of the OEEC area will remain constant. The reason for this assumption is that with the estimated development of productivity and consumption, tendencies towards surpluses will arise if they are not neutralized by a reduction of the agrarian population.

Mathematically these assumptions of the consumption and production of agricultural goods may be summarized as follows:

b = annual relative increase of total population

v = annual relative increase of national product per capita

ξ = elasticity of income in demand for agricultural produce

O_t = agricultural production year t

Y_t = net import of agricultural produce year t

D_t = O_t + Y_t = consumption of agricultural produce year t

Consumption of agricultural produce year 20 (i.e. 1975) will then be

$$D_{20} = D_0 (1 + b)^{20} \cdot (1 + \xi \cdot v)^{20}$$

or approximately

$$D_{20} = D_0 (1 + b + \xi \cdot v)^{20}$$

If we assume that the net imports remain constant, than

$$O_{20} = D_{20} (1 + b + \xi \cdot v)^{20} - Y_0.$$

These assumptions of consumption and foreign trade are the basis of the increase figures for the growth of agricultural production in the whole of Western Europe, given in Table G. Starting from the increase in the total production that our forecast has led up to, one can only count on a margin for a growth of the production of agricultural goods of 1 to 1.5 per cent per annum. On the evidence of earlier experience we have calculated with a relatively rapid growth of production per worker; this development has, as mentioned earlier, been divided into three alternatives which—as for the other sectors— is related to the general rate of progress. Since this increase of productivity, estimated on final products, has been determined at 2 to 3 per cent, employment in agriculture will decline by 0.7 to 1 per cent per annum in the whole of Western Europe.

It is, however, as pointed out above, hardly feasible to assume that this decline will run parallel in all countries. In the less advanced ones, Portugal, Greece and Italy, population is growing so rapidly that it is unlikely that the relatively restricted urban occupations can absorb more than the increase of population. In these countries, too, the demand for agricultural produce is increasing rather rapidly. For this group (A) we have therefore assumed that the agrarian population will remain constant, which, in accordance with our general assumptions of productivity, means that their production of agricultural produce will increase by 2 to 3 per cent a year. This is in keeping with the trends in these countries during recent years. The Netherlands, with its rather rapidly increasing population, cultivation policies and emphasis on fruit, vegetable and flower growing, has been assigned to this group (A).

The burden of a reduction of the agrarian population,
therefore, falls on the other countries (group B), with their
relatively slow groth of population, rather considerable urban
occupations and on the whole comparatively slow growth of the
consumption of agricultural products. To achieve equilibrium
in the agricultural market of Western Europe requires that the
production of final consumer goods increases by a maximum of
0.5 per cent per annum. According to our assumptions of pro-
ductivity, on the other hand, there will be a decline in em-
ployment in agriculture by 1.5 to 2.5 per cent per annum. As
a comparison it may be mentioned that the annual decrease in
the agrarian population of group B during the period 1920-1950
was about 0.5 per cent. Since the war, however, the decline
has been much more rapid, and agrees rather closely with our
calculations.

Table G. Growth figures for agriculture according to
the forecast alternatives

	Annual increase % Alternative		
	C	B	A
Population "The 15"	0.4	0.4	0.4
National product per capita, "The 15"	1.7	2.2	2.7
Agricultural production per worker in agriculture, all countries			
gross calculation	2.0	2.5	3.0
net calculation	1.5	2.0	2.5
Employment in agriculture			
Group A	0	0	0
" B	-1.7	-2.1	-2.6
"The 15"	-0.7	-0.8	-1.0
Agricultural production			
gross calculation			
Group A	2.0	2.5	3.0
" B	0.3	0.4	0.5
"The 15"	1.0	1.25	1.5
net calculation			
Group A	1.5	2.0	2.5
" B	0.0	0.0	0.0
"The 15"	0.5	0.8	1.0

Group A: Portugal, Greece, Italy, Ireland, Netherlands
Group B: The remainder of "The Fifteen".

We must now assume, as touched upon earlier, that the
value added of agriculture will decline in relation to its
production of final products, partly on account of an in-
creased use of industrial raw materials, partly owing to a
continued disintegration of the treatment of products, and
of transport and distribution from agricultural enterprises.
We have therefore calculated that net productivity (value
added per worker in constant prices) will increase 0.5 per
cent less per year than the gross productivity. The assump-

tion is somewhat arbitrary. This implies that the contribu-
tion made by the agrarian population to the national product
increases by only 0.5 to 1 per cent per annum for the whole
of Western Europe, and ceases completely in group B.

The increase in the agricultural production of Western
Europe, illustrated in Table G, seems to be of the same magni-
tude as during the period between the wars. It is consider-
ably lower for more advanced countries (group B). If such
a development is to take place, there is no doubt that a more
rapid reduction of the area of agricultural land and a change
to more extensive farming than formerly are needed. The result
of the calculation is also due partly to the fact that it has
been assumed that the import surplus of the OEEC area will re-
main constant. Alternatively one might count with an agri-
cultural policy that reduced the area's import surplus and
gave scope for a somewhat more rapid increase of production.
But the relative magnitude is so restricted that it cannot
fundamentally change the picture.

2. Urban occupations

a. Total employment

The above account shows how future employment in agri-
culture has been calculated. Presuming that full employment
prevails, the remaining labour force will be divided among the
other enterprises, the so-called urban occupations.

In our treatment of agriculture we have not dealt in de-
tail with how employment will be distributed according to sex.
Available statistics do not make it possible to estimate to
what extent the women take part in actual agricultural work.
Owing to the symbiosis between the farmers' households and
agriculture it is very difficult to distinguish between the
two. We have made the comparatively simple assumption that
no distinction is made between male and female tasks in agri-
culture. This may be assumed to be the same when, with a
decline in employment in agriculture, men and women usually
move together during a migration to urban occupations.

Bearing this in mind, the distribution of gainfully em-
ployed men in agriculture and urban occupations is as shown
in Table H.

Table H. Number of men employed in "The Fifteen" countries
1955-1975

	1955 mil-lions	1975					
		millions			Index: 1955 = 100		
		Alternative			Alternative		
		C	B	A	C	B	A
Agriculture	19.0	16.4	15.9	15.5	87	84	81
Urban occupations	60.1	68.5	69.0	69.6	114	115	116
Total	79.1	84.9	84.9	84.9	107	107	107

With a decline in the number of men employed in agriculture by 13 to 19 per cent up to the year 1975, the number of men engaged in urban occupations would increase by 14 to 16 per cent, at the same time as the total male labour force increases by 7 per cent.

The reason why the different hypotheses of the reduction of labour in agriculture cause such relatively small variations in the increase of men engaged in urban occupations is simply the fact that agriculture employs a smaller proportion of the male labour force. (See further Tables 2a and b, and 3a in the appendix of tables.)

How then will the employment of women in urban occupations vary? For family reasons, as mentioned above, we count on women accompanying the men during migration from rural to urban occupations. The extent of female employment in urban occupations can, contrary to what is the case in agriculture, be determined statistically with about the same degree of reliability as for male labour. Compared with men, the frequency of women workers in the urban occupations is relatively low, and variations in this frequency must be regarded as an essential potential variable in the development. Such variations may originate from the supply or demand side. On one hand the tendency of woman to leave housework for professional employment changes. This latter type of change is connected in the first place with the general expansion of employment in urban occupations as reflect-

ed in the number of men employed. But change may also take
place in the use of male and female labour, either in a cer-
tain branch of industry or as a consequence of changes in dif-
ferent urban occupations which to a greater or smaller extent
employ female labour. Naturally, supply and demand have a
reciprocal effect on each other. We have here chosen to con-
sider the question primarily from the angle of demand. Thus
we have related our assumptions to the proportion women/men
in urban occupations. In doing so, it would have been desir-
able to take into consideration the distribution of urban
occupations in different categories in greater detail, and
thus, for example, distinguish between different spheres of
industry. In this respect, however, as in others, we have
restricted ourselves to a three-sector analysis, in which ur-
ban occupations have been divided into industrial and service
enterprises.

As shown in Table I, there exists in the whole of Western
Europe a great difference as regards the proportion of women in
the industrial and service sectors. Thus the number of women
in proportion to men is about twice as great in the service
occupations as in industry.

Table I. <u>Women employed in proportion to men</u>

<u>Industrial sector</u>

%	Country
19-23	Netherlands, Norway, Sweden
23-27	Belgium-Luxembourg, Ireland, USA
27-31	Western Germany, Italy, Denmark, Switzerland, Austria, Portugal, Greece
31-35	Great Britain
35-39	France
29.5	"The Fifteen"

Service sector

%	Country
20-30	Greece
30-40	-
40-50	Italy, Netherlands
50-60	Belgium-Luxembourg, Portugal
60-70	France, Western Germany, Great Britain, USA
70-80	Norway, Austria, Ireland
80-90	Sweden
90-100	Denmark, Switzerland
61.7	"The Fifteen"

The tendency is almost the same in each individual country, only Greece being an exception— probably due to eastern influence. At the same time very great variations are found between different countries regarding the degree of female labour, in both the industrial and service sectors. These differences may be partly connected with the division of industry and services into separate branches. But they may also be the result of national habits and social conditions. No tendency towards an increased proportion of female labour can be observed with a rising standard of living; the United States occupies a central position in both sectors. This may possibly be interpreted to mean that the emancipation of women, which accompanies economic development, is counteracted by the reduced economic necessity to work outside the home. Nor does a retrospective survey of development in the individual countries during recent years give reason to anticipate an increase of the proportion of female labour in the two sectors.

We have therefore assumed that the proportion women/men in the industrial and service sectors will remain constant in each individual country. Since the frequency of woman in the service sector is on an average twice as great as in the industrial sector, the shift towards employment in the service

sector that is to be anticipated will cause a greater increase
of the labour force in urban occupations than is equivalent to
the growth of the number of men employed in urban occupations.
It can be shown, however, that within the limits that are valid
for the trend towards the service sector, the relative increase
of the labour force due to the greater number of women employed
will be only a few per cent.

b. The service sector's share of employment

The assumptions of the development of the service sector
on which the forecast is based may be summarized as follows.

The demand for the services supplied by the service sec-
tor are assumed to be determined by

        a. growth of the national product per capita,

        b. the relative increases in prices of services.

Increases in prices are assumed to be determined by

        c. rises in wage levels (services are assumed to
           require a relatively large amount of labour), and

        d. the relative increase of production per worker
           (productivity in the service sector in relation to
           the production of goods).

The price-determining factors, c and d, are also assumed
to be determined by the national product per capita. This
means that the demand for services may be regarded as a func-
tion of the national product per capita.

The possibility we have to determine this relationship
empirically has been to compare the sector's share of the to-
tal employment in different countries for the initial year,
1955, with the national product per capita. Such a comparison
has been made in Diagram 2 between the fifteen Western Europe-
an countries and the United States. The scattering of the
various observations has not given us reason to assume that
the relation between employment in the service sector and the
national product per capita in the interval in question is to
be approximately regarded as other than linear. This relation-
ship has been derived so that a line has been plotted in the
diagram to connect the mean for the fifteen European countries
with the United States. The line is equivalent to the equation

Diagram 2.

Distribution of labour and the gross national product (GNP) per capita.

$$\sigma = \frac{L_s}{L_a - L_i}$$
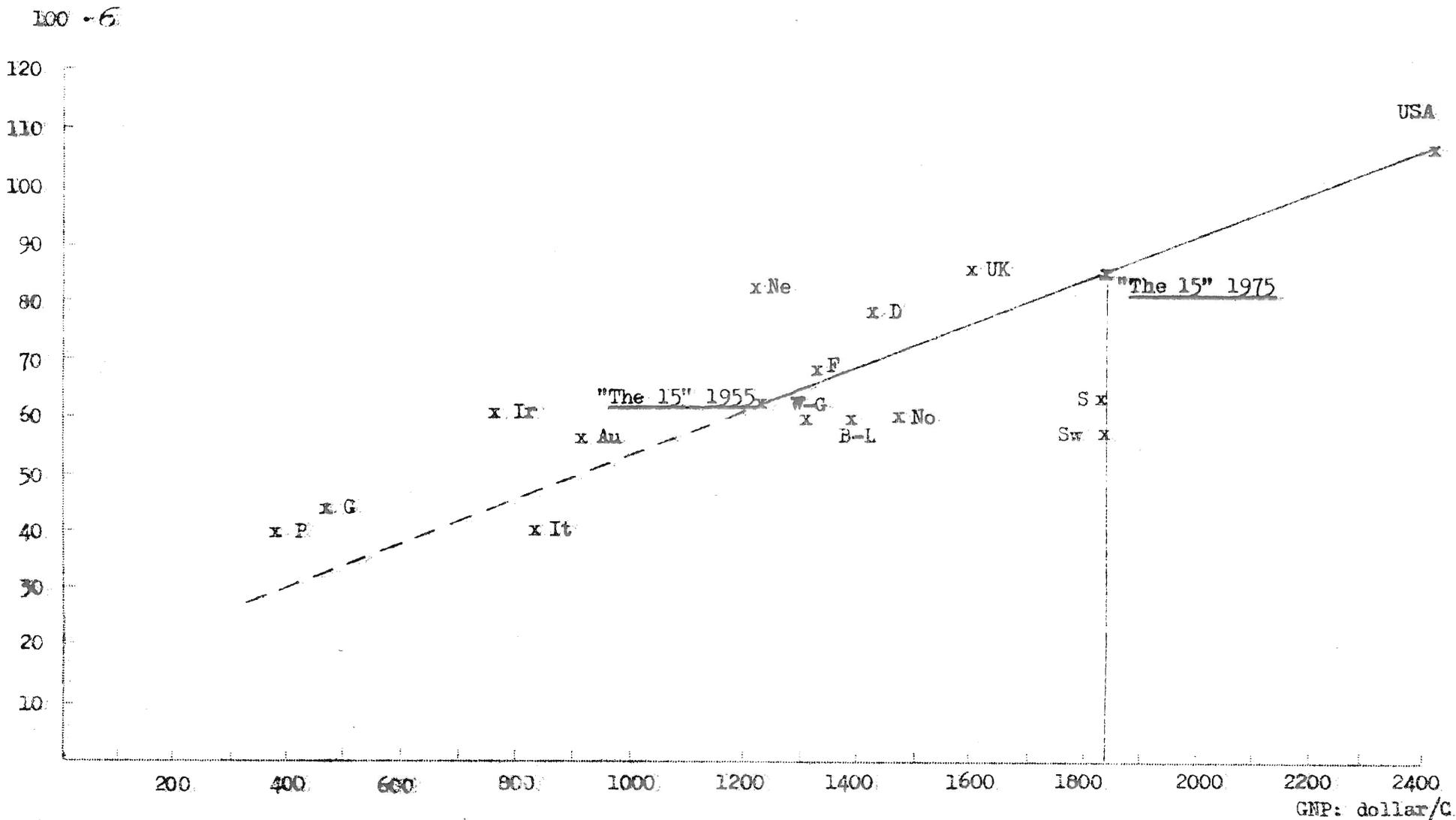
L_s = labour in the service sector
L_a = labour in agriculture (only men)
L_i = labour in industry

Gross national product at market prices

$$100 \cdot \mathcal{b} = 0.041 \cdot \text{GNP}/c - 18,$$

where $\mathcal{b} = \dfrac{\text{employment in the service sector}}{\text{employment in the production of goods}}$[1]

and $\text{GNP}/_c$ = the gross national product per capita.

In 1955 the value of $100 \cdot \mathcal{b}$ was 62 for "The Fifteen" and 107 for the United States.

As a basis of the forecast has now been added the assumption that the $\mathcal{b}$-values for the invidual European countries in 1937 have been attained by a parallel shift along the given Europe-USA line. The countries which in the initial position have a relatively high $\mathcal{b}$-value will thus in 1975 be rather high in relation to the trend line.

It is obvious that these assumptions are somewhat arbitrary. There are reasons to anticipate a slower or more rapid development in some countries. The greatest arbitrariness, however, is in the fact that the result of a comparison at a certain point of time has been applied to a development in time. This implies that the relationship has been assumed to be the same in both these dimensions. Thus the new technical circumstances, and so on, which may change conditions as regards the relative extent of the independent service sector by 1975, have been ignored. Since the USA has been taken as the line of direction, the procedure implies that the differences in wage levels and relative productivity in the service section between the United States in 1955 and Europe in 1955 will arise between Europe in 1975 and Europe in 1955 if Europe in 1975 attains the national product per capita that the USA had in 1955. As regards the wage level, this should not be an unreasonable assumption. Further, we have satisfied ourselves that the assumptions made in this study of the development of the relative productivity in the service sector are not contrary to available data on the relative productivity of the service and goods sectors of the United States, compared with Western Europe.

The results obtained by this method are given in Tables 2a, 2b and 3a in the appendix of tables. In our middle alter-

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1) Only men in agriculture

native (B) Great Britain and Ireland, and DaNoSve will have in 1975 the same proportion of employment in the service sector as the United States had in 1955, the six countries in the Common Market will remain at a considerably lower level, while Austria-Switzerland will arrive at an intermediary position. The forecast method implies, however, that the scattering between the individual countries in 1975 will be as great as in the initial position.

3. Productivity and production

When estimating future increases in productivity, consideration must be paid to such factors as technical development, changes in the level of education and craftsmanship, investments and changes in the market. Changes in these factors are, however, extremely uncertain, as are their influence on productivity and production. The relationship is complicated and there is, therefore, really only one possible method to arrive at a plausible guess, namely to study development up to date and to find out in what respects the conditions will be changed favourably or unfavourably in the future. The difficulty with this is that earlier periods have in several respects been so essentially different that the support they give to future forecasts is rather weak.

This is naturally more the case the further back in time our experiences are. Pre-war conditions differ mainly as regards the economic situation before the full employment period. The war has also disturbed the trends. As a background to this it might be worth while to recapitulate experiences in Europe during the period 1913-1939[1].

Then agriculture was developing very slowly. Production was increasing by only about 1 per cent per annum, and, since the agrarian population was stagnant, this also represents an increase in productivity (here and in the following in the meaning of production per worker). One or two more progressive countries, Denmark and Sweden, attained an increase in productivity of 2 per cent a year or rather more; in France the figure was perhaps 1.5 per cent.

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1) The figures are taken from "Growth and Stagnation in the European Economy", Geneva, 1954. The information in the text refers to the whole of Europe at that time, except Russia.

The development of European industry during the same
period, which is illustrated by the following figures (in per
cent), was not much greater:

Industrial production	1.4-1.7
Employment	0.4-0.8
Production per worker	1.0
Production per working hour	1.8

During the pre-war years employment grew more rapidly in
the service sector than in industry, while productivity probably
increased more slowly.

The conclusion arrived at regarding the growth of total
production in Europe during the period 1913-39 is that it did
not exceed 1.5 per cent per year, and that the growth of
production per head of population in active working age did
not much exceed 0.5 per cent. Development in the three largest
countries, England, Germany and France, seems rather to have
been slower.

It is clear that the period 1913-39 was in many respects
extremely unfavourable, and as regards trends should be con-
sidered as a slump period; first the World War, depressions
with large-scale unemployment, a growing national protectionism,
a conservative regulation of agriculture. There were, natural-
ly, also periods between the wars when development was more
rapid. But they had largely the character of periods of reco-
very from war and depression, and it is difficult to judge them
from the point of view of trends. There were also plus-variants
among the individual countries; Sweden and Finland were two of
them. Sweden had an annual increase of the national product of
almost 2.5 per cent per year, or almost 1.5 per cent per person
in the active working age; Finland had an even more rapid in-
crease.

During the post-war years development in Europe outside
the Soviet countries has in the main been more rapid than be-
fore the war. The national product in the OEEC countries as a
whole increased during this period by 4.7 per cent per annum,
but as the growth of employment was relatively rapid, production
per worker increased by only 3.3 per cent. This relatively
favourable development can partly be ascribed to factors that
may be permanent; a high degree of employment, freer trade in

Europe, and a higher investment quota than before the war. The
high degree of employment must then be accorded decisive im-
portance. Competition for labour, resulting in migration to
towns, has accelerated the mechanization and rationalization of
agriculture. Investments have been kept at a high boom level,
and the attitude of the economic life to the prevailing expan-
sion has made possible a more purposeful planning of enterprises.
At the same time as this may become a permanent feature of
European economy, it must, however, be assumed that the transi-
tion to full employment economy has led to an extraordinary deve-
lopment of a non-recurrent kind. During the years up to 1955,
there has also remained a strain of recovery after the war, not
least in the countries in which development has been most rapid,
primarily in Western Germany. It is undoubtedly significant
that in Sweden, which remained neutral, the growth of the nation-
al product during this period did not exceed 3 per cent per year,
or 2.7 per cent per annum and worker; at the same time Sweden's
investment quota was somewhat higher than the average for the
whole OEEC region.

A comparison of European development with that of America
is of interest, not least from the angle of the efforts towards
European integration. The economic development of the United
States during recent decades has been comparatively uneven. The
two world wars were accompanied by a very rapid increase of
production, which was neutralized, however, by a slower develop-
ment during peace. The long-term increase of production in
America has not exceeded 3 per cent per year. The growth of
population has also been rather rapid, and the increase of
production per worker has therefore been about 1.5 per cent
per annum. It has been estimated that between 1909 and 1950
it rose by 2.1 per cent a year[1]. During recent years the mean
growth has possibly been somewhat more rapid. Development has,
however, been considerably slower than in the OEEC group. In

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1) Cf. D. MacDougall: The World Dollar Problem, London, 1957, and
John W. Kendrick: National Productivity and its Long-Term
Projection, in Studies in Income and Wealth, Vol. 16, Prince-
town, 1954

round figures a comparison for the period 1950-55 is as follows
(the figures refer to annual growth in per cent):

	OEEC	USA
National product	4.7	4.0
Employment	1.4	1.5
National product per worker	3.3	2.5

As the following figures show, there are similar variations
in the progress of American industry:[1]

	Annual increase in per cent	
	per worker	per working hour
1907-37	1.8	2.9
1937-55	2.4	2.2
1907-55	2.0	2.6

American agriculture developed rather slowly during the
decades from the turn of the century to World War II. Calcul-
ations of the growth of production per worker vary from 1 per
cent to 2 per cent a year. As in Europe, a period with a very
rapid increase of production has followed, and according to
one estimate production per worker increased by about 4 per cent
a year between 1946 and 1955[2].

How then do our assumptions appear in the light of these
historical experiences?

These assumptions and their equivalent results regarding
the national product per worker may be summarized as follows:

Annual growth of net production
per worker

Alternative:	C	B	A
Industry	2	2.5	3
Agriculture	1.5	2.0	2.5
Services	1	1.5	2
Total production	1.5	2.1	2.6

It should be observed that the total increase of producti-
vity is a result partly of development in each sector, partly of
overlapping between the sectors.

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1) M. Frankel: British and American Manufacturing Productivity,
University of Illinois, Bulletin, Vol. 54, 1957.

2) MacDougall and others

To get some idea of what the figures imply as regards development of production per working hour, we can assume that working hours will be reduced by 15 per cent between 1955 and 1975. This means that, with an unchanged number of working days a year, the working hours per week will be reduced from 47 to 40. Such an assumption does not seem unreasonable in view of the fact that according to our calculations Europe will be approaching the present American level of development by 1975. Our assumptions then imply that the national product per working hour will be increased by 2.3 to 3.4 per cent annually, and industrial production per working hour by 2.8 to 3.8 per cent per annum.

These assumptions of the rate of growth of productivity are clearly somewhat higher than both European and American experiences from the pre-war period. Even our minimum alternative (C) is on a level with American and Swedish longterm development before the war. Compared with experiences from later years the picture is more disintegrated. The general development in the United States during the first half of the 1950's is very close to our highest alternative. The development of productivity in American industry during the years 1937 to 1955 is near to our middle alternative, while the agricultural development of America since the war has been more rapid than our highest alternative (A). The general development of the OEEC region during the years 1950-55 was considerably greater than our highest alternative (A); the annual rate of increase of the total production per worker in the OEEC area has been almost 1 per cent higher than our A-alternative during this period. Swedish development during the same time is most nearly comparable with the American.

When choosing alternatives, consideration must be paid to the following circumstances:

a. The European countries have in general a higher investment quota than before the war. It is probably somewhat higher than the American, particularly at a net estimate. If it is assumed that it will be permanent, it should in itself give a more rapid increase of production.

b. The growth of population is almost twice as rapid in the United States. In Europe, therefore, a greater part of the

Diagram 3.

Gross national product (GNP) in dollars per capita 1955 & 1975.

GNP per capita 1975 according to alternative:

GNP per capita 1955

Labels on the right side of the chart:
- DaNoSwe
- "Other 7"
- Great Britain-Irela..
- "The 6" ex. Italy
- "The 13"
- "The 15"
- "The 6"

USA 1955
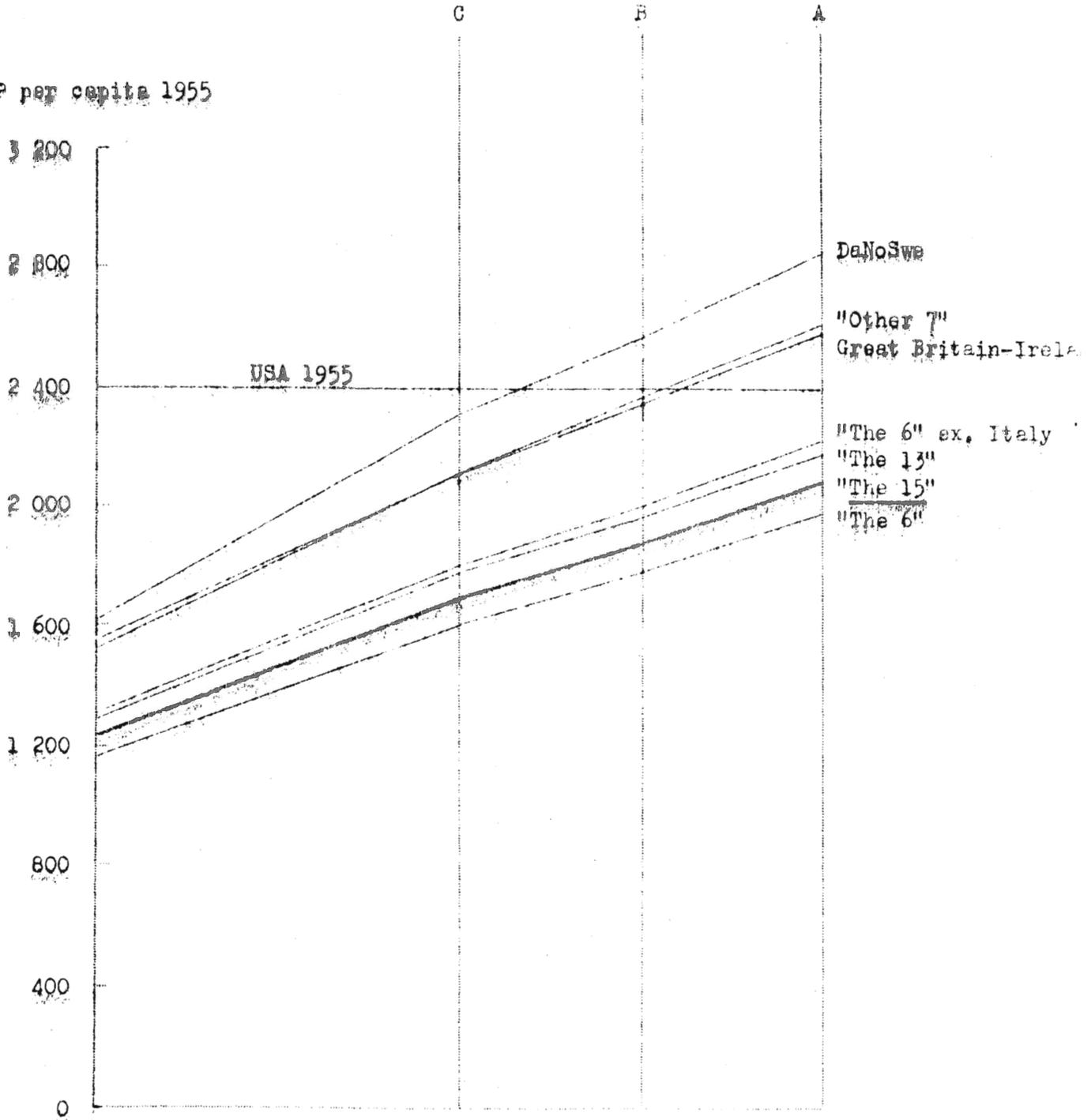
investments can be devoted to an increase of production per
worker.

c. European capital stock is still old-fashioned in many
branches. Investments should therefore imply a relatively ad-
vanced modernization. But the significance of this has already
declined greatly since the end of the war, and will probably
continue to decline. It is an open question as to whether the
difference in this respect is any longer very great between
Europe and the United States.

d. The Common Market of "The Six" creates scope for the
development of large-scale industry in American style. This
factor may accelerate development in this sphere. It is still
uncertain as to whether Europe will enjoy the same advantages.

e. Large parts of European agriculture are still irrational-
ly organized; increase of productivity in this branch is de-
pendent to a great degree on agricultural policy.

The relation between investment and increased productivity
is affected by all these factors, as well as by the rapidity of
the technical development, for which it is impossible to make
a long-term estimate. In view of this, a calculation of the
capital coefficients equivalent to the result of the forecast
can only give a certain general direction in order to estimate
whether the result is feasible. Such estimates also tend to-
wards an overworking of the statistical material, as regards
the statistical comparability of different figures. A calcul-
ation of the capital accumulation, which in given circumstances
is required to attain a certain increase of production, should,
in order to ensure a more reliable conclusion, be made by the
isolation of smaller sectors with structurally divergent capi-
tal intensity. For what it is worth, however, the following
capital coefficients have been calculated, giving the relation
between the net growth of capital stock and the increase of
production for the whole OEEC area between the years 1955 and
1975.

In this it has been assumed that the gross investments in
the OEEC area keep the same proportion of the gross national
product as the initial year, that is to say, the gross invest-
ment quota (repairs and maintenance not included) is almost
20 per cent. An interesting circumstance, which can hardly be

explained by different statistical methods of calculation, is now that net investments (i.e. gross with deduction for re-investments) represent a smaller proportion of gross investments in the United States than in Europe. It is possible that development in Europe is proceeding in the same direction. The proportion of net investments in the gross investments is at any rate statistically uncertain. We have therefore chosen to make use of three assumptions, namely that the 20 per cent gross investment is equivalent to 7, 10 and 13 per cent of the net investment quota.

	Alternative		
	C	B	A
Annual increase of production per cent	2.0	2.6	3.7
Capital coefficient assuming that the net investment quota is			
7 per cent	3.5	2.7	2.2
10 per cent	5.0	3.8	3.2
13 per cent	6.5	5.0	4.2

In view of the unknown factors which affect the size of the capital coefficient, and the difficulty of comparisons with historical experience, no more will be said except that these figures do not suggest that the forecast alternatives presented are incongruous from the point of view of the accumulation of capital.

If, on the basis of the above discussion, we should take the risk of judging the three alternatives, it would be as follows.

Alternative C represents, in spite of its being higher than the European and American long-term trend before the war, an absolute minimum, if one may say so, a failure of the expansion policy.

Alternative B implies also a cautious estimate of the possibilities of expansion.

Alternative A is, in view of post-war experience, not impossible to attain, presuming a favourable constellation of technical development, economic policy and external conditions. It may be exceeded.

All this, naturally, is only valid under normally peaceful international political conditions.

It must be stressed that what has been said hitherto refers to the OEEC area as a whole. To judge the relative position of the individual countries in the development would lead us too far in this connection.

IV. PROSPECTS OF DEVELOPMENT

1. European development in American perspective

As already mentioned, a forecast of development will
never be more reliable than the premises on which it is
founded, and the premises must be judged on their own merits.
The motives for the choice of these premises have been given
earlier. Now the course of development will be described
assuming that these premises are valid. The partial results
will be found in the appendix of tables, and have been elu-
cidated in Diagrams 4 - 7.

In 1955 the fifteen OEEC countries had a total population
of 260,000,000. If the underdeveloped countries Greece and
Portugal are excluded, this figure will be reduced to
240,000,000. Two thirds, or 160,000,000 of these lived in
the six countries which together form the Common Market. The
remaining 80,000,000 or one third lived in the other seven
more highly developed countries; 55,000,000 in Great Britain
and Ireland, and rather more than 25,000,000 in the five small
states, DaNoSve, Austria and Switzerland. From the angle of
population, therefore, the weight of the Common Market is over-
whelming. Its population is equal in numbers to that of the
United States.

Converted to dollars according to purchasing-power parity,
"The Fifteen" produced goods and services to the value of
$318,000,000,000; "The Thirteen" alone $310,000,000,000, i.e.
about three fourths of the production of the United States. Of
this the Common Market was responsible for 60 per cent; the
other seven countries for the remaining 40 per cent, of which
England alone produced 26 per cent and the small countries
DaNoSve and Austria-Switzerland 13 per cent.

The economic preponderance of the Common Market was thus
less than that of population. Economically it weighed less
than half as heavy as the United States; production per capita
was below $1,200 as against $2,400 in the United States. The
other seven countries had attained a production per capita of
more than $1,500, i.e. more than three fifths of the American
production standard. Among these Sweden and Switzerland had

Diagram 4.

Labour force 1955 -75.

Millions

Agriculture

USA   "The 15"   "The 6"   "The 6"   "Other 7"
                          ex. Italy

Millions

Industry

USA   "The 15"   "The 6"   "The 6"   "Other 7"
                          ex. Italy

Millions

Service

USA   "The 15"   "The 6"   "The 6"   "Other 7"
                          ex. Italy

1955

1975
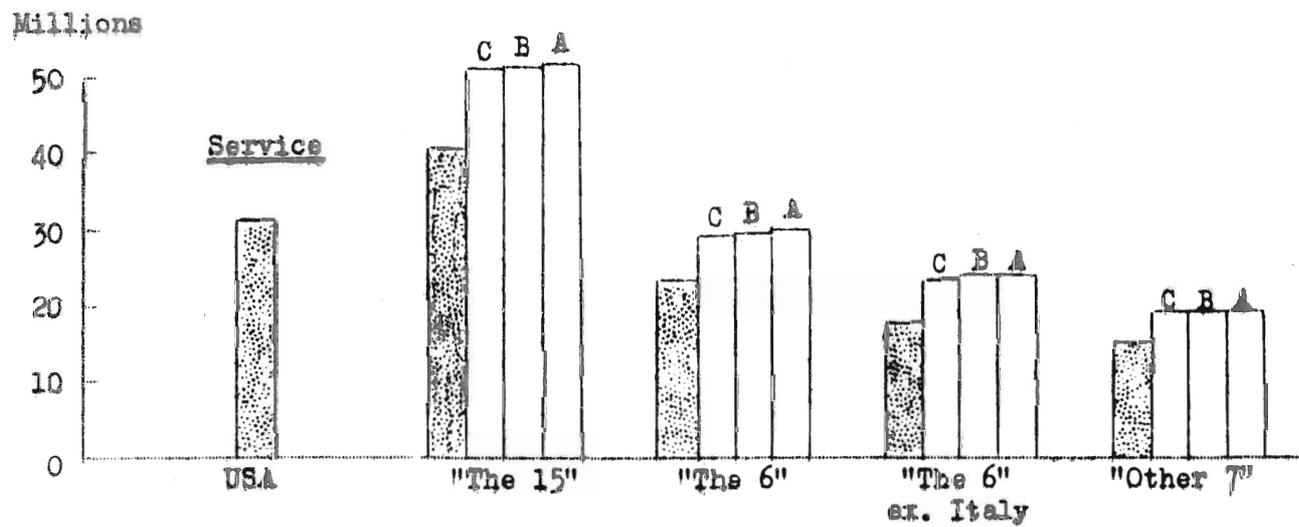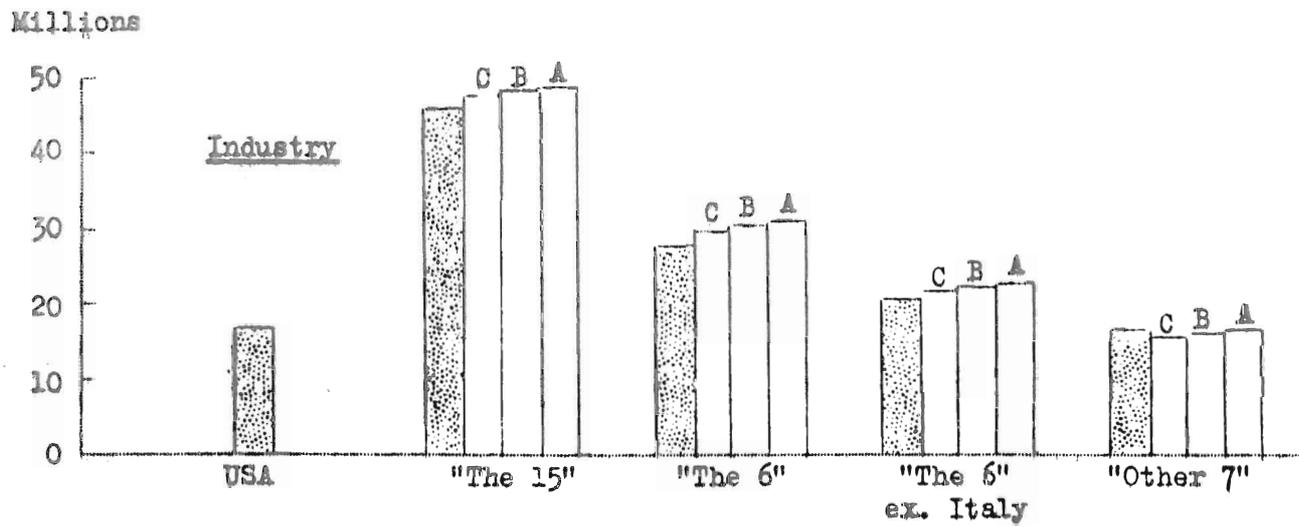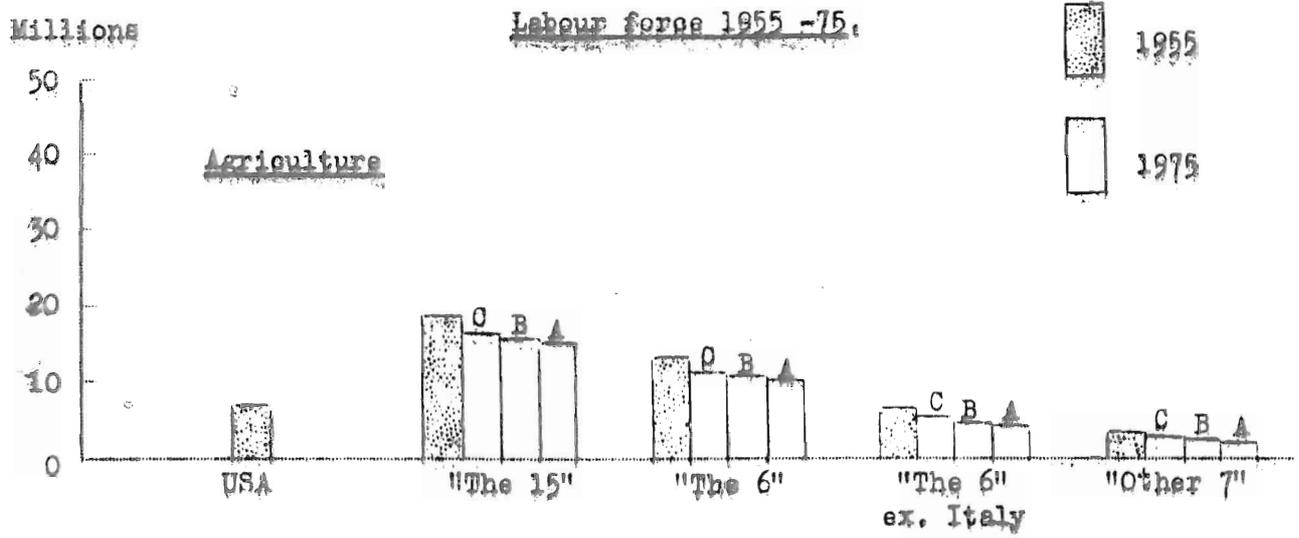
Diagram 5.

Production 1955 – 75.

Thousand
million
dollars

Agriculture

Industry

Service
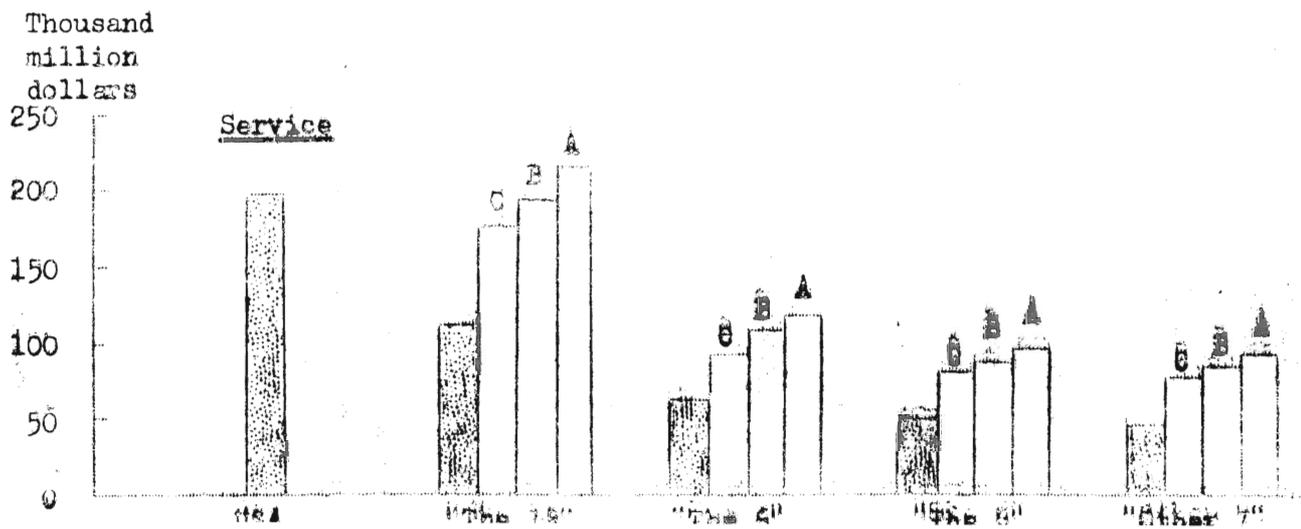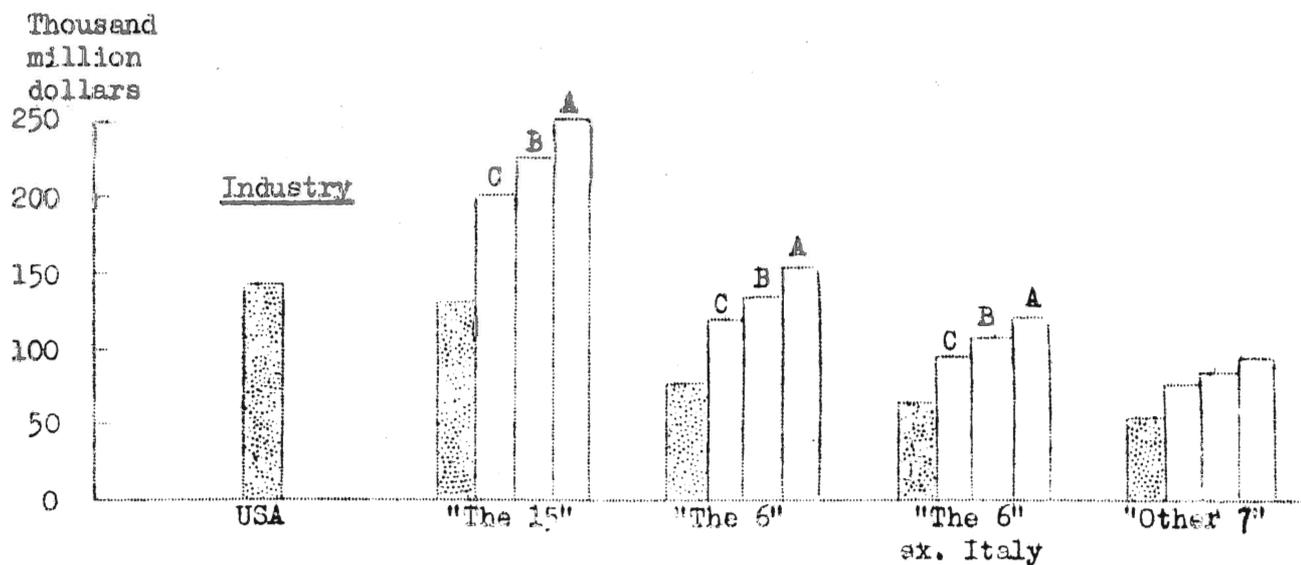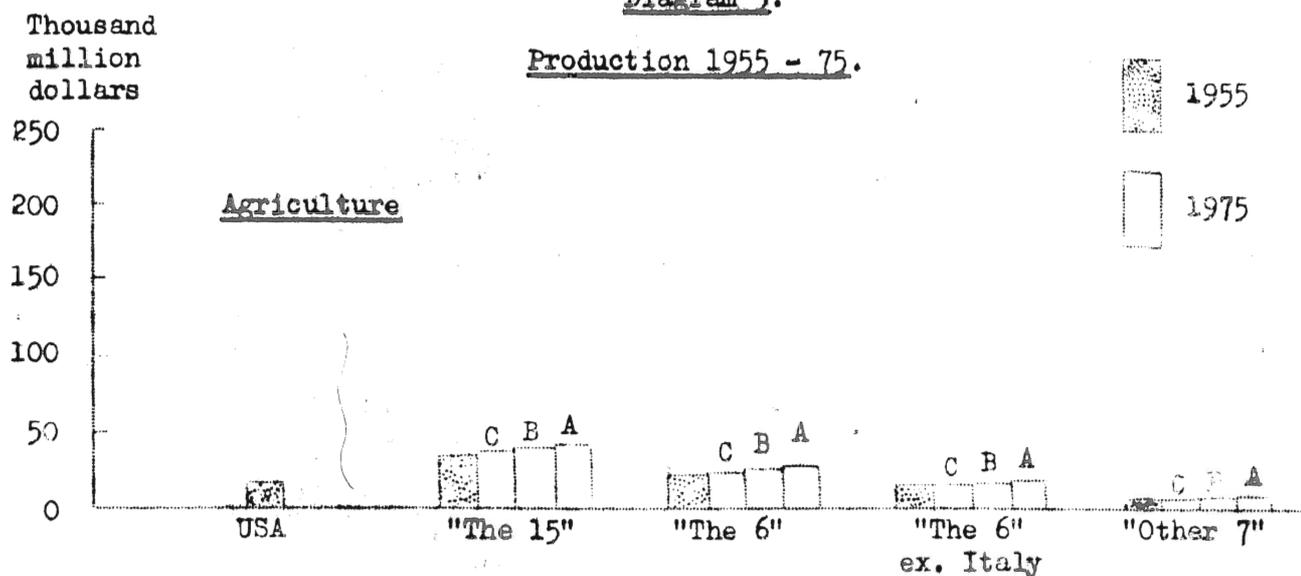
Diagram 6

Population and gross national product 1955 – 75.

Millions
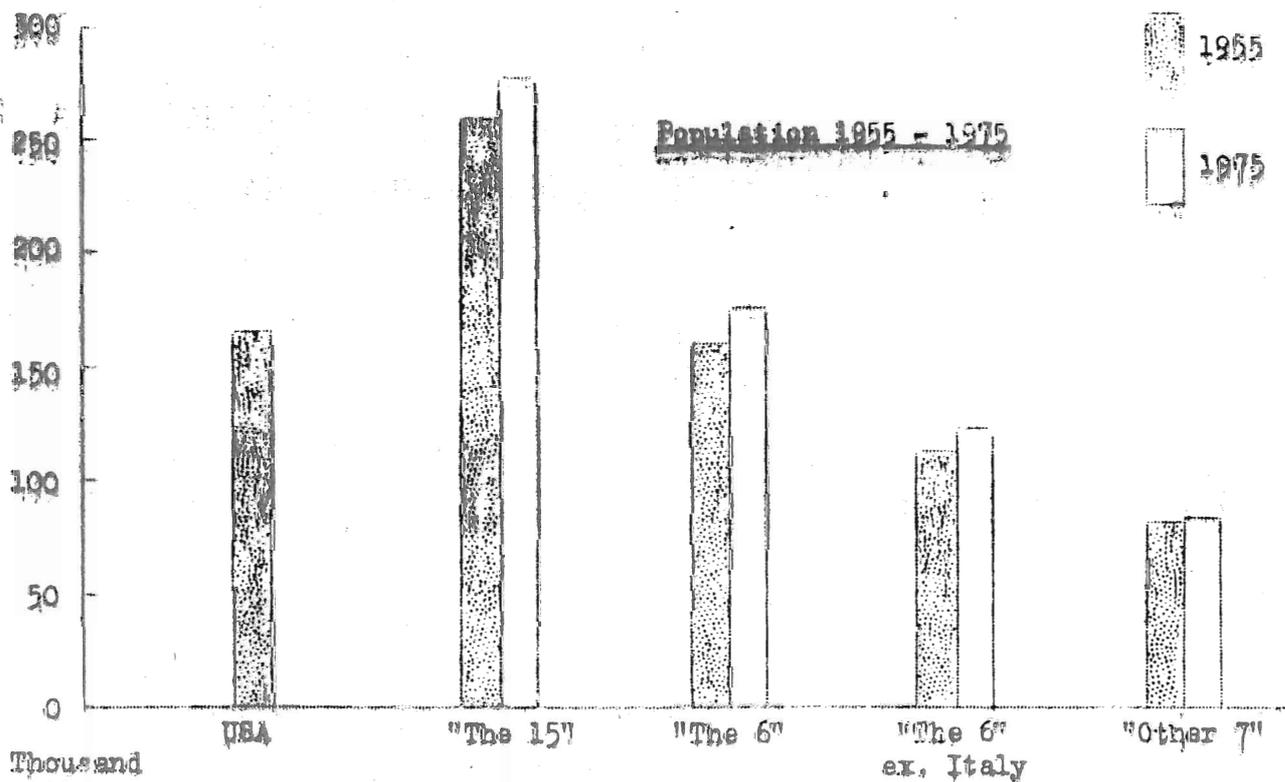
300

250

200

150

100

50

0

Population 1955 – 1975

1955

1975

USA   "The 15"   "The 6"   "The 6" ex. Italy   "Other 7"

Thousand million dollars

600

500

400

300

200

100

0

Gross national product 1955 – 1975

Alternatives: C, B and A.

A

B

C

USA   "The 15"   "The 6"   "The 6"   "Other 7"

Diagram 7.   57

Distribution of labour among the three sectors.

per cent

	1955	1955	1975	1955	1975	1955	1975	1955	1975
	USA	"The 15"		"The 6"		"The 6"ex.Italy		"Other 7"	

Agricult
Industry
Service
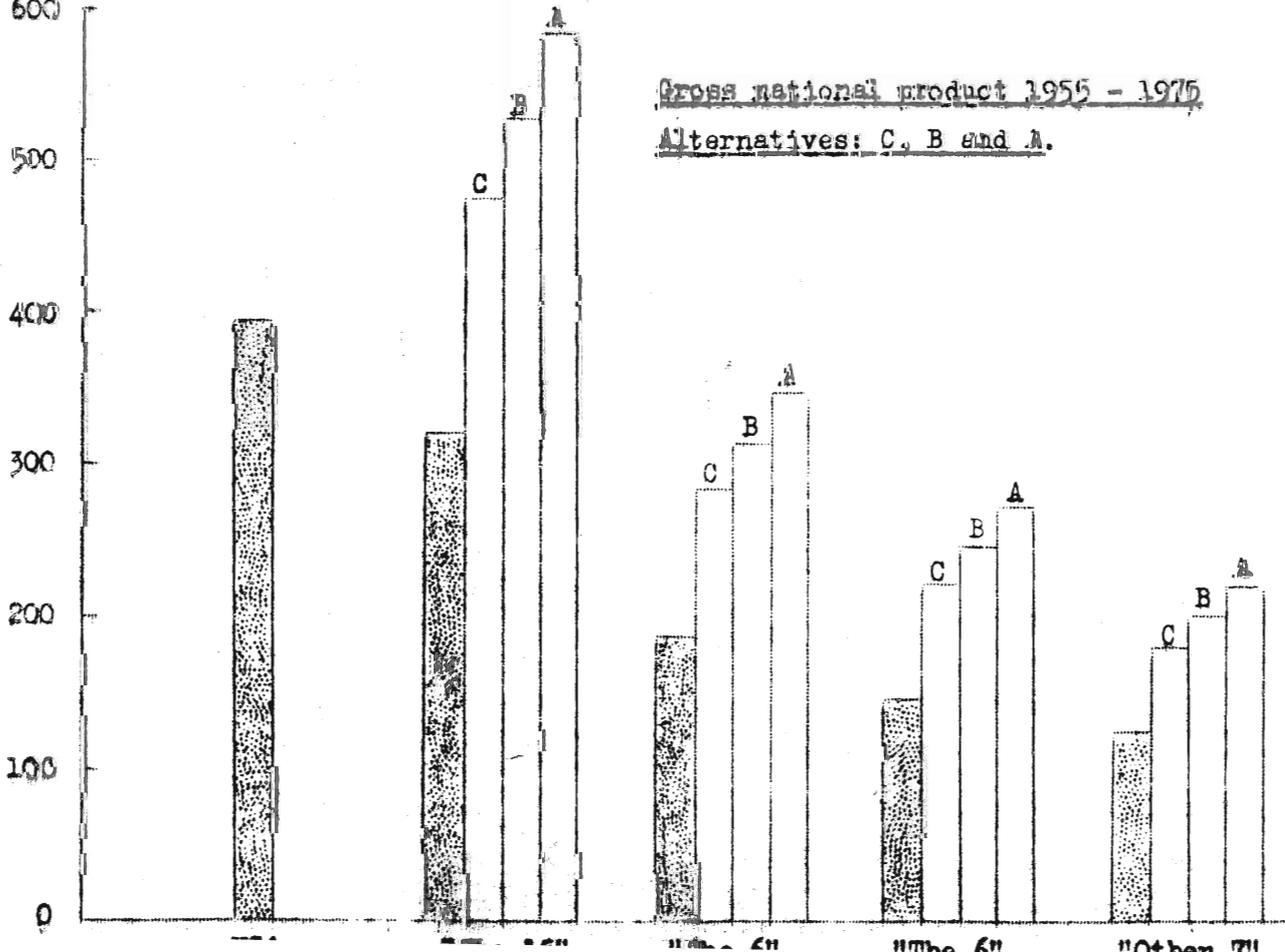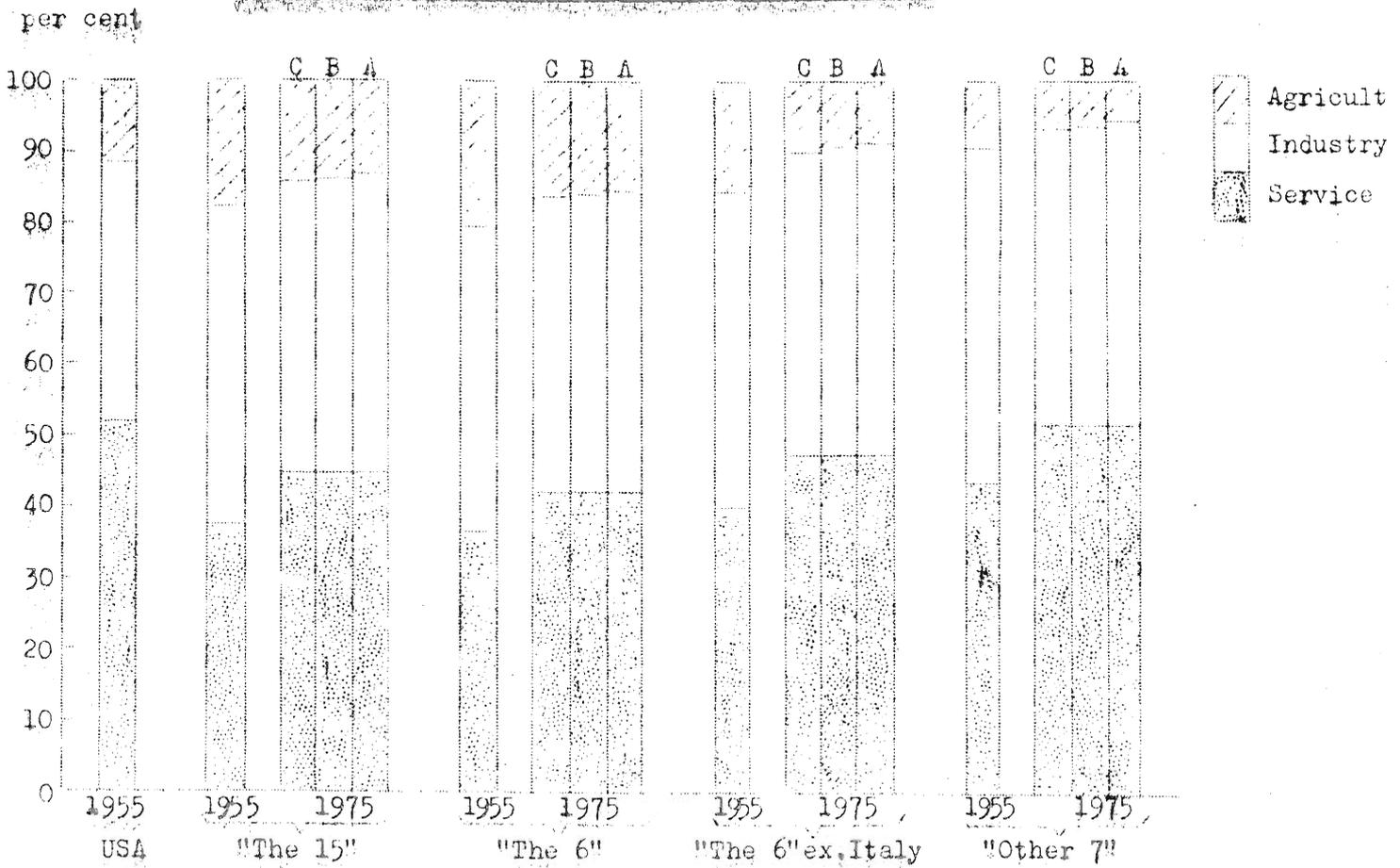
Distribution of production among the three sectors.

per cent

	1955	1955	1975	1955	1975	1955	1975	1955	1975
	USA	"The 15"		"The 6"		"The 6"ex.Italy		"Other 7"	
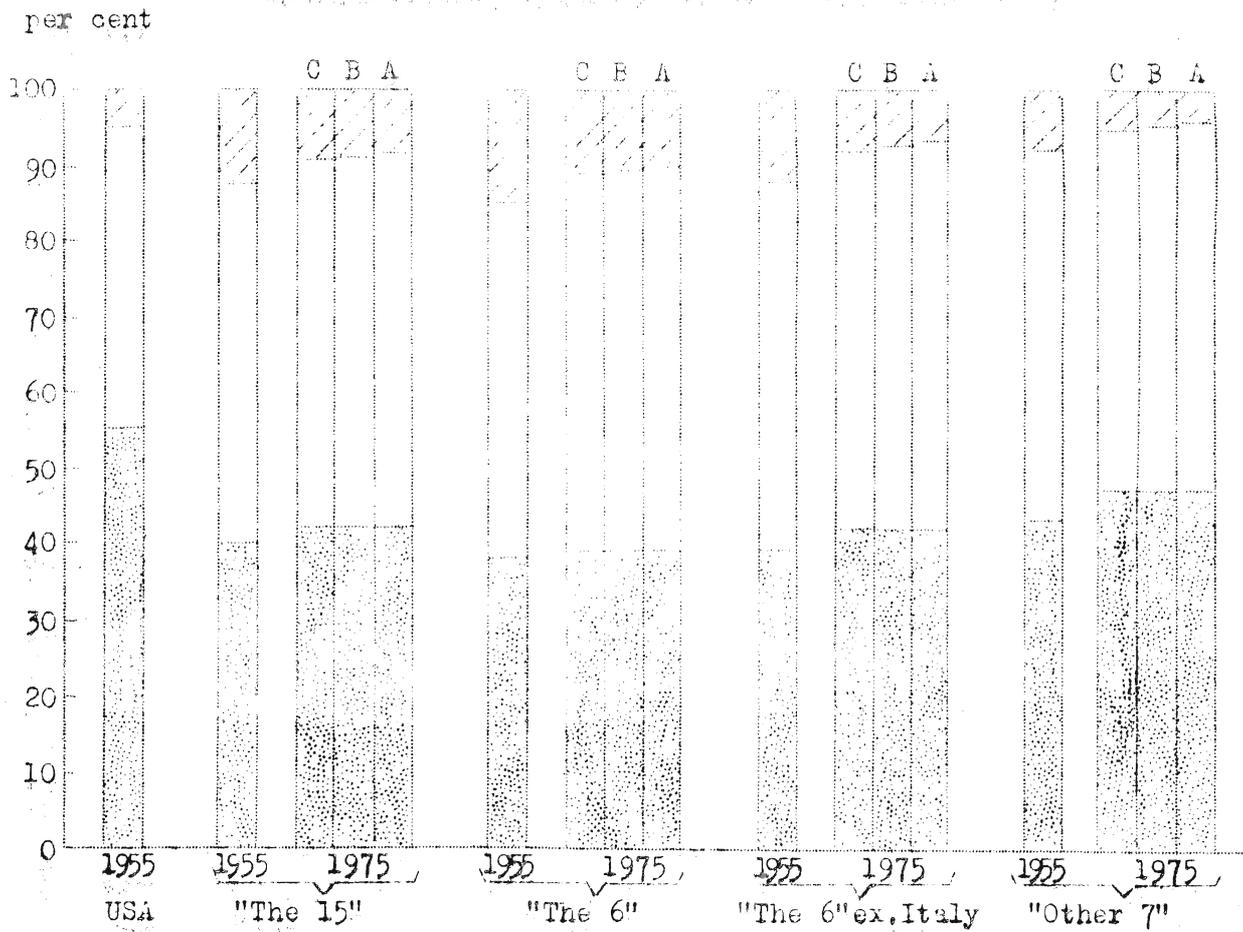
reached about $1,800, three fourths of the American level. If population remains unchanged, the Common Market must thus double production, the other seven countries only increase it by two fifths to reach the American level.

The growth of population in the whole area will be slow until the year 1975. In the Common Market, however, the increase will be somewhat greater (8 per cent) than among the other seven (5 per cent)[1]. The growth of the section of the population in active working age will be still slower. These growth figures indicate, however, an increase of the number of consumers by 18,000,000 in "The Thirteen" countries. At the same time 10,000,000 people, or an average of 0.5 million per year, will enter the labour market. The growth of population is not, in any case, a great factor in the future development as opposed to the United States, where population is growing at the rate of about one third in twenty years.

Nearly 100,000,000 people, or four out of ten of the population of Europe are engaged in the economic life[2]. Only 16,000,000 are engaged in agriculture (with women perhaps 25,000,000). The Common Market is largely agrarian in character, with 20 per cent of the labour force in agriculture as against only 10 per cent in the other seven countries outside the group; it is England that weighs down the percentage for the latter group.

Urban occupations absorb the remaining 82,000,000, whereof rather more than half in industry.

Our forecast points to considerable changes in this picture of the employment of the European labour force. Labour in agriculture will decline up to 1975 by 15 to 20 per cent in the Common Market countries, and by 25 to 35 per cent in the other seven countries. This means that the share of agriculture in the total labour force will be reduced to 15 and 6 per cent respectively. But employment in agriculture is

---

1) Only in the Netherlands, Norway, Denmark, Portugal and Greece is the population anticipated to rise by more than 15 per cent up to 1975

2) Portugal and Greece are excluded. Female labour in agriculture is not included.

already so small that this reduction will release only
3,000,000 men for work in the urban occupations; the women
who accompany the men from agriculture are not included.

The service sector employs the greater part of the
population increase and the migration from agriculture. Its
labour force will grow by almost 30 per cent, which implies
an addition of more than 10,000,000 men and women. To a certain
extent this addition is made possible by increased numbers
of female workers.

The possibilities for the industrial sector to attract
more labour will thereby be greatly restricted. An increase
of 10 per cent (2,500,000) is anticipated in the Common Mar-
ket states, while the other seven countries will have an un-
changed or slightly reduced labour force.

The relative increase of female labour in the urban
occupations is expected to depend wholly on the rapid expan-
sion of the service sector. In industry and the service
sector individually, the proportions have been assumed to
remain constant.

The different sectors will, to a greatly varying degree,
base their growth of production on increased employment and
higher productivity.

Europe has already an agricultural production about
twice as great as that of the United States. Production per
worker is estimated to increase almost as rapidly as in in-
dustry up to 1975. But this will be neutralized to a varying
degree by the drift from agriculture. The six countries com-
prising the Common Market will increase their agricultural
production by 10 to 25 per cent with a relatively slow reduc-
tion of the total agrarian population. In the other seven
countries agricultural production will increase by only 0 to
5 per cent simultaneously with a more rapid drift from the
country. Totally this means a growth of European agricultural
production ("The Thirteen") by $5,000,000,000 (calculated ac-
cording to factor costs).

Today the industrial production of Europe is approaching
that of the United States, but to attain this a labour force
almost twice as large as that of America is required. Thus in

round figures the productivity of European industry is only
slightly more than half as high as in America. The potential
possibilities of increasing production should therefore be
great, even if the amount of labour cannot be considerably
increased. On the basis of the assumptions of increased
productivity, European industrial production will increase
by at least 50 per cent, and according to the most favourable
alternative by 90 per cent up to 1975. The latter alternative
implies an increase of production from 1955 by more than
$10,000,000,000, or more than two thirds of the current in-
dustrial production of the United States. The distribution
of this increase among the different European countries de-
pends, among other things, on the development of the efforts
towards integration. It has been presumed here, rather arbi-
trarily, that development will be as rapid both inside and
outside the Common Market, even if integration is more advanced
in this group. The industry of "The Six" countries is favoured,
however, by a greater increase of the labour force (population
is growing faster there, and agriculture can supply more
people) and, in a favourable alternative, will double produc-
tion. As a consequence of this two thirds of the increase
of production will fall to the lot of the Common Market, which,
in the more favourable alternatives, will by 1975 equal or
exceed the industrial production of the United States in 1955.
The remaining seven will increase their industrial production
by 75 per cent in the best alternative, and thus equal the
1955 industrial production of the United States.

The value of the service sector in the United States
represented in 1955 no less than 60 per cent of the national
product; for Europe it was only 40 per cent; in the United
States the service sector's contribution was thus consider-
ably greater than that of industry, while the opposite was
the case in all European countries. A contributory cause of
this was probably the fact that the prices of services were
relatively higher in the United States than in Europe. The
result of the forecast is now a relative advance of service
production in Western Europe. But this is not in proportion
to the changes of occupation; production per worker has been

assumed to increase more slowly in the service sector than in
the production of goods. Two fifths of the production increase
in the service sector is due to increased employment. The trend
towards service production will not, however, lead to equality
between Europe 1975 and America 1955 as regards the share of the
service sector in the total production. For the whole of Europe
service production will be of the same magnitude in 1975 as the
United States had in 1955, while industrial production will be
at least 50 per cent greater. As a basis for this calculation,
however, is a forecast of European production in constant
relative prices. In so far as services become relatively more
expensive, the value of the European production may approach
the American level of 1955.

The consequences of all these changes will be that Europe,
whose total production in 1955 was 20 per cent below that of the
United States, will by 1975 have reached a production that is at
least 20 per cent greater, and in a more favourable (but not im-
possible) alternative almost 50 per cent greater[1]. The six
states in the Common Market alone will attain three fourths of
the national product of the United States in 1955.

Calculated per capita, however, the total European Pro-
duction, even in favourable cases, will remain at a lower level
than the 1955 figures for the United States. In Diagram 3,
page 49 , are illustrated the initial positions of different
groups of countries, and development according to the three
alternatives in the forecast. Only the DaNoSve group will, by
the year 1975, equal "USA 1955" according to the lowest al-
ternative, with the possibility of exceeding this level by 20
per cent (Sweden is clearly at the head of this group, together
with Switzerland). Great Britain-Ireland will reach the same
level in the middle alternative. "The Six", even in the "best"
case will be about 20 per cent below this level, but will reach
it if Italy is excluded. (Otherwise this group of countries is
relatively homogeneous as regards gross national product per
capita.) Even in favourable circumstances, Greece and Portugal
will lag far behind.

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1) Note that the comparison is made all through with the United
States in 1955. Only if one has, like Mr. Krushchev, a Marxist
theory of catastrophe, can one ignore the advances that the
United States should make up to 1975.

2. The study as a starting-point for further investigations

The present study is based on extremely simplified and relatively arbitrary assumptions. Its chief value is that it may serve as the starting-point for more detailed studies which in their turn may change our view of the general prospect. Let me examplify this by a few questions which may be taken up, but which are obscured in our greatly simplified model.

The problem of the effects of integration is concealed in our assumptions of productivity, but also in the assumptions of migration and relative sector development. If integration becomes a reality, it may lead to concentrations of productive power both in sectors and locally with great influence on the development of productivity. Capital and skilled labour may, at points where the advantages of large-scale production and specialization are especially marked, be concentrated in greater units than was formerly possible, which may lead to changes in structure, with increased productivity as a consequence; but the advantages may be unevenly distributed among the different countries. Migration of capital and labour may be stimulated, which will affect the development of production and the standard of living in different countries. These economic-geographical changes deserve a more thorough analysis.

The greater market may particularly influence the development in the service sector, which is dominated by transport and distribution, both generally and geographically. On the one hand, the importance of these service elements will increase with a more intense exchange of goods over greater distances. On the other hand, integration may here too be accompanied by extra productivity, dependent on the specifically developed forms of organization. For a more thorough study of these problems special consideration must be paid to individual branches of the service sector, such as motoring, railways, shipping.

The problem of European agriculture has been dealt with very sketchily. More light may be cast on this question by a more realistic study. Problems which emerge are, among others, the distribution of the different products, animal and vegetable. Further the connection with modern industrial treatment of foodstuffs. Further the possibilities of mechanization or

change to more extensive or intensive farming of the land. Such a differentiated study leads up to the question of the position of the various regions in a more integrated market. The local development of the modern foodstuffs industry will here be an essential link.

The questions of Europe's foreign trade have been ignored in this study. We have chosen the somewhat arbitrary assumptions of the foodstuffs import into Europe; foreign trade in industrial goods and service products, particularly as regards terms of trade, have been kept out of the picture. Development in these respects will naturally depend on a number of factors— the degree of integration, its effects on the internal economic situation of Europe, mentioned above, and development in the rest of the world, which is reflected, among other things, in terms of trade. These circumstances may accelerate or slow down economic development, both nationally and for the region as a whole.

The question of the accumulation of capital is a large one which has been kept in the background; among other things because the distribution of investments by sectors, even smaller ones, is as important to the general rate of progress as their relative total level. As already mentioned, general capital coefficients are too coarse an instrument for a meaningful analysis. The total investments have been assumed to increase parallel with the total production, i.e. the gross saving has been assumed to remain unchanged. A study of the distribution of investments between social and economic structure, or between agriculture and industry, might possibly lead to conclusions regarding the rate of progress by sectors. But technical development with its dependence on the human factor in research and development work must also be included. Perhaps one can approach the question of the connection between capital accumulation and production by such a more detailed study. The question is, however, how much the margin of uncertainty regarding the future can be reduced.

To create a background for a study of the development in the markets for individual goods has been given as the primary aim of this study. It is clear from the comments made here that the way to such markets is not very simple. If one ac-

cepts the general conditions of the study, it is the development
of production per capita in comparison with the United States
that provides a relatively simple starting-point. The present
consumption of goods in the United States should give us some
idea of the trend in the European market. At the same time,
however, we must not forget that when Europe or certain European
countries reach a comparable general standard of living, the
technical conditions will be quite different from what they are
at present in the United States, both as regards types of
products and costs of production, and consequently relative
prices, and in the question of the attitude towards different
kinds of private and collective consumption.

As regards market studies of individual goods, a study
like the one presented here can at the most function as a very
general background. Every market, whether textile or steel or
engineering products, has its special requirements, which may
be analysed to a certain extent from its own starting-points,
whereby development in general, or distributed over wide sectors,
is only one of many factors. It must therefore be assumed that
such studies of goods may just as well contribute towards a
formulation of a general development prospect as not. It is
such interaction that one may hope will provide us with the
better-founded forecasts we need when planning for the future.

APPENDIX OF TABLES

Countries included in the appendix of tables

1. France	7. Great Britain	12. Switzerland
2. Western Germany	8. Ireland	13. Austria
3. Italy	9. Denmark	14. Portugal
4-5. Belgien-Luxembourg	10. Norway	15. Greece
6. The Netherlands	11. Sweden	

Groups of countries

"The 15"	=	nos.	1 - 15
"The 13"	=	"	1 - 13
"The 6" ex. Italy	=	"	1 - 2 & 4 - 6
"The 6"	=	"	1 - 6
"Other 7"	=	"	7 - 13

Great Britain-Ireland
DaNoSve
Austria-Switzerland

Table 1. Population in Europe 1955-1975 millions

	Total							In productive age						
	1955			1975			Index 1975 (1955 = 100) Total	1955			1975			Index 1975 (1955 = 100) Total
	Men	Women	Total	Men	Women	Total		Men	Women	Total	Men	Women	Total	
The 15"	125.4	134.0	259.4	137.8	143.2	281.0	108	82.6	88.4	171.0	90.6	92.8	183.5	107
thereof: The 13"	117.0	125.2	242.3	127.9	132.7	260.6	108	77.3	82.6	159.9	84.2	86.1	170.4	107
thereof: The 6"	77.7	83.5	161.1	86.1	89.6	175.7	109	51.3	55.4	106.8	56.6	58.3	114.9	108
"The 6" ex. Italy)	(54.2)	(58.8)	(113.0)	(60.0)	(62.8)	(122.8)	(109)	(35.7)	(38.9)	(74.7)	(39.2)	(40.3)	(79.5)	(106)
Other 7"	39.4	41.7	81.1	41.7	43.2	84.9	105	25.9	27.2	53.1	27.6	27.8	55.5	104
thereof: Great Britain-Irland	26.3	27.9	54.2	27.4	28.5	55.9	103	17.3	18.1	35.5	18.3	18.4	36.7	103
aNoSve	7.5	7.6	15.1	8.5	8.3	16.8	111	4.9	4.9	9.8	5.4	5.4	10.8	111
Austria-Switzerland	5.6	6.3	11.9	5.9	6.3	12.2	103	3.7	4.2	7.9	3.9	4.1	8.0	102
SA	82.1	83.2	165.3					51.0	52.2	103.2				

Table 2 a. Distribution of labour in spheres of economy in Europe 1955-1975, millions

	1955				Forecast alternative B 1975			
	M Agriculture	M+W Industry	M+W Service	Total	M Agriculture	M+W Industry	M+W Service	Total
"The 15"	19.0	45.6	40.2	104.8	15.9	48.2	51.6	115.7
thereof: "The 13"	16.5	43.9	38.4	98.8	13.4	46.0	49.2	108.6
thereof: "The 6"	13.2	27.4	23.3	63.9	11.0	30.1	29.8	70.9
("The 6" ex. Italy)	(6.9)	(20.5)	(18.0)	(45.5)	(4.7)	(21.9)	(24.0)	(50.6)
"Other 7"	3.3	16.5	15.1	34.9	2.3	15.9	19.5	37.8
thereof: Great Britain-Ireland	1.3	11.5	10.7	23.5	1.0	10.7	13.1	24.8
DaNoSve	1.2	2.7	2.6	6.4	0.8	2.9	3.9	7.5
Austria-Switzerland	0.8	2.4	1.8	4.9	0.5	2.4	2.5	5.4
USA	7.1	22.3	31.5	60.9				

Table 2 b. Distribution of labour in spheres of economy in Europe 1955-1975, millions

	1955				Forecast alternative B 1975			
	M Agriculture	M+W Industry	M+W Service	Total	M Agriculture	M+W Industry	M+W Service	Total
"The 15"	18.1	43.6	38.3	100	13.7	41.7	44.6	100
thereof: "The 13"	16.7	44.4	38.9	100	12.3	42.4	45.3	100
thereof: "The 6"	20.6	43.0	36.4	100	15.6	42.4	42.0	100
("The 6" ex. Italy)	(15.2)	(45.1)	(39.7)	(100)	(9.3)	(43.3)	(47.4)	(100)
"Other 7"	9.5	47.2	43.3	100	6.2	42.2	51.6	100
thereof: Great Britain-Ireland	5.7	48.7	45.6	100	4.1	43.1	52.8	100
DaNoSve	18.3	41.3	40.4	100	10.5	38.3	51.2	100
Austria-Switzerland	16.0	47.6	36.4	100	9.7	43.5	46.8	100
USA	11.6	36.7	51.7	100				

Table 3 a. Employment according to spheres of economy in Europe 1975, alternatives C, B and A

	Index: 1955 = 100								
	Agriculture			Industry			Service		
	Alternative			Alternative			Alternative		
	C	B	A	C	B	A	C	B	A
"The 15"	87	84	81	104	106	107	128	129	129
thereof: "The 13"	84	81	78	103	105	106	128	128	128
thereof: "The 6"	87	84	81	108	110	111	128	128	128
("The 6" ex.Italy)	(75)	(69)	(64)	(104)	(106)	(108)	(133)	(133)	(133)
"Other 7"	76	70	65	95	97	98	129	129	129
thereof: Great Britain-Ireland	80	76	72	93	93	94	122	122	122
DaNoSve	72	66	61	105	108	111	148	148	149
Austria-Switzerland	72	66	61	98	101	103	141	141	142

Table 3 b. Assumptions of development of productivity

Alternative	Increase in per cent per annum of production per worker in		
	Agriculture	Industry	Service
C	1.5 (2.0)	2.0	1.0
B	2.0 (2.5)	2.5	1.5
A	2.5 (3.0)	3.0	2.0

Note: The figures in the table refer to the net production per worker at fixed prices. For agriculture has also been given (in parenthesis) the assumptions of the development of productivity, measured in volume of final agricultural products.

Table 3 c. Production according to spheres of economy in Europe 1975, alternatives C, B and A

	Index: 1955 = 100								
	Agriculture			Industry			Service		
	Alternative			Alternative			Alternative		
	C	B	A	C	B	A	C	B	A
"The 15"	111	116	122	153	171	191	157	175	193
thereof: "The 13"	109	114	119	152	171	190	157	175	193
thereof: "The 6"	112	119	125	159	179	200	156	173	192
("The 6" ex.Italy)	(100)	(103)	(105)	(155)	(174)	(196)	(161)	(179)	(199)
"Other 7"	100	102	104	142	159	177	159	177	195
thereof: Great Britain-Ireland	104	107	110	138	154	170	149	166	183
DaNoSve	97	99	99	154	175	197	181	200	221
Austria-Switzer-land	97	99	99	147	165	186	185	205	227

Table 4. Production[1] according to spheres of economy in Europe 1955-1975
thousand million dollars

	1955				Forecast alternative B							
					Production index 1975 (1955=100)				1975			
	Agri-culture	Industry	Service	Total	Agri-culture	Industry	Service	Total	Agri-culture	Industry	Service	Total
he 15"	34.5	131.7	112.6	278.8	116	171	175	166	40.1	225.4	196.7	462.3
ereof: he 13"	32.4	129.6	110.3	272.3	114	171	175	165	37.1	221.1	192.4	450.6
ereof: he 6"	23.8	76.3	62.5	162.6	119	179	173	168	28.2	136.3	108.0	272.5
The 6" ex. aly)	(15.6)	(61.5)	(50.2)	(127.2)	(103)	(174)	(179)	(167)	(16.0)	(107.1)	(89.8)	(212.9)
ther 7"	8.6	53.3	47.8	109.7	102	159	177	162	8.8	84.8	84.4	178.1
ereof: eat Britain eland	3.9	36.6	33.2	73.6	107	154	166	157	4.1	56.2	55.0	115.3
NoSve	2.9	9.9	9.4	22.3	99	175	200	176	2.9	17.4	18.9	39.1
stria-itzerland	1.8	6.9	5.2	13.9	99	165	205	171	1.8	11.3	10.6	23.7
A	16.9	142.8	200.0	359.7								

Production estimated according to factor costs

Table 5 a. Gross national product[1] (GNP) total and per capita in Europe 1955 - 1975, alternatives C, B and A

| | GNP Thousand million dollars | | | | GNP per capita dollars | | | |
| | 1955 | 1935 | | | 1955 | 1975 | | |
		C	B	A		C	B	A
"The 15"	318	474	527	583	1,230	1,690	1,870	2,070
thereof: "The 13"	310	463	513	568	1,280	1,780	1,970	2,180
thereof: "The 6"	187	283	313	347	1,160	1,610	1,780	1,980
("The 6" ex. Italy)	(147)	(222)	(246)	(273)	(1,300)	(1,800)	(2,000)	(2,220)
"Other 7"	124	180	200	221	1,520	2,120	2,360	2,610
thereof: Great Britain-Ireland	84	118	131	144	1,550	2,110	2,350	2,580
DaNoSve	25	39	43	48	1,620	2,310	2,560	2,840
Austria-Switzerland	15	24	26	29	1,290	1,940	2,140	2,380
USA	394				2,400			

1) Estimated according to market prices

Table 5 B.   Gross national product (GNP) total and per capita in Europe 1975 alternatives C, B and A

| | Index:1955 = 100 | | | | | |
| | GNP | | | GNP per capita | | |
	C	B	A	C	B	A
"The 15"	149	166	183	137	153	169
thereof: "The 13"	149	165	183	139	154	170
thereof: "The 6"	151	168	186	139	154	170
("The 6" ex. Italy)	(151)	(167)	(186)	(139)	(154)	(171)
"Other 7"	146	162	179	141	155	172
thereof: Great Britain-Ireland	141	157	173	136	152	167
DaNoSve	158	176	195	142	158	175
Austria-Switzerland	154	170	189	150	166	184

Table 6. Population in Europe 1955-1975, millions

| | Total | | | | | | Index 1975 (1955 = 100) Total | In productive age | | | | | | Index 1975 (1955 = 100) Total |
| | 1955 | | | 1975 | | | | 1955 | | | 1975 | | | |
	Men	Women	Total	Men	Women	Total		Men	Women	Total	Men	Women	Total	
France	21.0	22.4	43.5	22.9	23.7	46.6	107	13.8	14.2	27.9	15.1	15.1	30.2	108
Western Germany	23.2	26.3	49.5	26.0	27.8	53.8	109	15.6	18.3	33.9	16.9	18.1	35.0	103
Italy	23.5	24.7	48.1	26.1	26.8	52.9	110	15.6	16.5	32.1	17.4	18.0	35.4	110
Belgium-Luxemburg	4.5	4.7	9.2	4.7	4.8	9.5	104	3.0	3.1	6.1	3.0	3.0	6.1	99
Netherlands	5.4	5.4	10.8	6.5	6.4	12.9	119	3.3	3.4	6.7	4.2	4.1	8.3	124
Great Britain	24.8	26.4	51.2	25.9	27.1	53.0	104	16.4	17.2	33.7	17.4	17.5	34.9	104
Ireland	1.5	1.5	2.9	1.5	1.4	2.9	99	0.9	0.9	1.8	0.9	0.9	1.8	100
Denmark	2.2	2.2	4.4	2.6	2.5	5.1	116	1.4	1.4	2.8	1.6	1.6	3.3	115
Norway	1.7	1.7	3.4	2.0	2.0	4.0	116	1.1	1.1	2.2	1.3	1.3	2.5	114
Sweden	3.6	3.6	7.2	3.9	3.8	7.7	107	2.4	2.4	4.7	2.5	2.5	5.0	106
Switzerland	2.4	2.5	4.9	2.6	2.7	5.2	107	1.5	1.6	3.2	1.8	1.8	3.5	110
Austria	3.2	3.7	7.0	3.3	3.6	6.9	99	2.2	2.5	4.7	2.2	2.3	4.5	96
Portugal	4.2	4.5	8.7	4.9	5.3	10.2	116	2.7	2.9	5.6	3.0	3.3	6.4	114
Greece	4.1	4.3	8.4	5.1	5.1	10.3	122	2.7	2.8	5.5	3.4	3.4	6.7	121
"The 15"	125.4	134.0	259.4	137.8	143.2	281.0	108	82.6	88.4	171.0	90.6	92.8	183.5	107
USA	82.1	83.2						51.0	52.2	103.2				