

the **OECD** **OBSERVER**

THE PROBLEM OF PRICES AND PROFITS
AN EXPERIMENT IN STEPPING UP THE
RATE OF ECONOMIC GROWTH. SOLUTIONS
TO FARMERS' LOW INCOME PROBLEMS
JAPAN-THE NEW MEMBER OF OECD. THE
COORDINATION OF DEVELOPMENT AID



the OECD OBSERVER

N° 10

JUNE 1964

Published bi-monthly in English and French by
THE ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT

EDITORIAL OFFICES

OECD Information Service, Château de la Muette,
Paris 16^e.

Individual articles not copyrighted may be reprinted providing the credit line reads "Reprinted from the OECD Observer", plus date of issue, and two voucher copies are sent to the Editor. Signed articles reprinted must bear author's name.

The Organisation cannot be responsible for returning unsolicited manuscripts.

Signed articles express the opinions of the authors and do not necessarily represent the opinion of OECD.

Annual Subscription Rates : F 10.00, FS 10.00, DM 8.30,
15 s., \$ 2.50.

Single copies : F 2.00, FS 2.00, DM 1.70, 3 s., \$ 0.50.

EDITOR : Anker Randsholt

ASSISTANT EDITOR : Peter Tewson

PRODUCTION AND LAYOUT : Marc Delemme

All correspondence should be addressed to the Editor.

PHOTOS : Cover : Japanese Government; Page 9 : Bord Failte Photo; Page 11 : Tony O'Malley Pictures; Page 17 : Presse- und Informationsamt der Bundesregierung, Bonn; Page 29 : Almasy; Page 26 : Japanese Government; Page 29 : Photo CCM - Agence Rapho.

GRAPHIC ILLUSTRATIONS by the OECD Drawing Office.

CONTENTS

3 THE COORDINATION OF FOREIGN AID

6 PRICES AND PROFITS

Non-wage incomes in creeping inflation

9 STEPPING UP THE RATE OF GROWTH

An Irish experiment and its results

12 TEN YEARS OF PROGRESS IN THE ENERGY SECTOR

14 TOWARDS THE LIBERALISATION OF INSURANCE IN EUROPE

19 JAPAN : THE NEW MEMBER OF OECD

27 THE PROBLEM OF LOW INCOMES IN AGRICULTURE

34 OIL : FUEL FOR GROWTH

36 RESOURCES OF SCIENTIFIC AND TECHNICAL PERSONNEL IN THE OECD AREA

42 RECENT OECD PUBLICATIONS

The coordination of FOREIGN AID

by Ernest PARSONS
OECD Director
of Technical Co-operation

...“It is the policy of the United States to seek...much closer coordination of its capital and technical assistance with that supplied by other nations and by international organisations”.

(United States : Agency for International Development : “Principles of foreign Economic Assistance” - 1963).

“In the past three years we have broadened the geographical distribution of our aid to non-Commonwealth countries, and a number of countries are receiving financial assistance from us for the first time”.

(United Kingdom : White Paper on “Aid to Developing Countries” - September 1963).

“La coopération avec l’Afrique doit rester prioritaire, mais non exclusive”

(France : Report of the Jeanneney Commission : “La Politique de Coopération avec les Pays en voie de Développement” - October 1963).

NOT only has the amount of foreign aid been increasing over the past decade; its geographical pattern has also become much more complex. The traditional links between some of the major aid-providing countries and various groups of developing countries still account for large parts of the total aid flow — for example, the United States in Latin America, the United Kingdom in the Commonwealth, and France in Africa. But their programmes extend well outside these areas — the United States is currently assisting more than 80 countries, the United Kingdom 64 countries (of which 49 in the Commonwealth) and France 38 countries (of which 28 are in Africa or are dependent overseas territories) (1).

This is not the place to argue the pros and cons of concentration or dispersion of bilateral aid programmes (2). But if we add to the efforts of these main traditional aid donors those of the “newer” donors such as Germany and Japan (respectively aiding about 65 countries and about 35 countries), together with the smaller bilateral programmes and the large multilateral programmes (IBRD/IDA, the United Nations, the EEC’s European Development Fund, and the Inter-American Development Bank) the growing need for co-ordination at the recipient country level becomes apparent. It may be noted also that some aid-receiving countries (for example Yugoslavia, Israel, the United Arab Republic) are also themselves providing certain types of help (normally technical assistance) to other countries. In addition, the Eastern European countries are currently providing major assistance to at least 24 countries.

The impact of these trends on many underdeveloped aid recipients has been dramatic. The information which the OECD’s Development Assistance Committee collates shows that, in 1960, there were 40 countries receiving aid from four or more sources (3) (not including Eastern Europe). By 1962, the number of such countries had risen to 44; it seems certain that 1963 will have seen a further increase. This tendency towards multiple sources of aid in particular countries seems to have been most marked in Africa; not only have more donors become involved, but those with relatively small programmes have increased their financial commitments. In one African country, for example, where there were — until independence a few years ago — only two sources of external assistance, aid is now being provided on a substantial scale by five members of the DAC, by the United Nations, and by four other bilateral programmes. This is not an isolated instance.

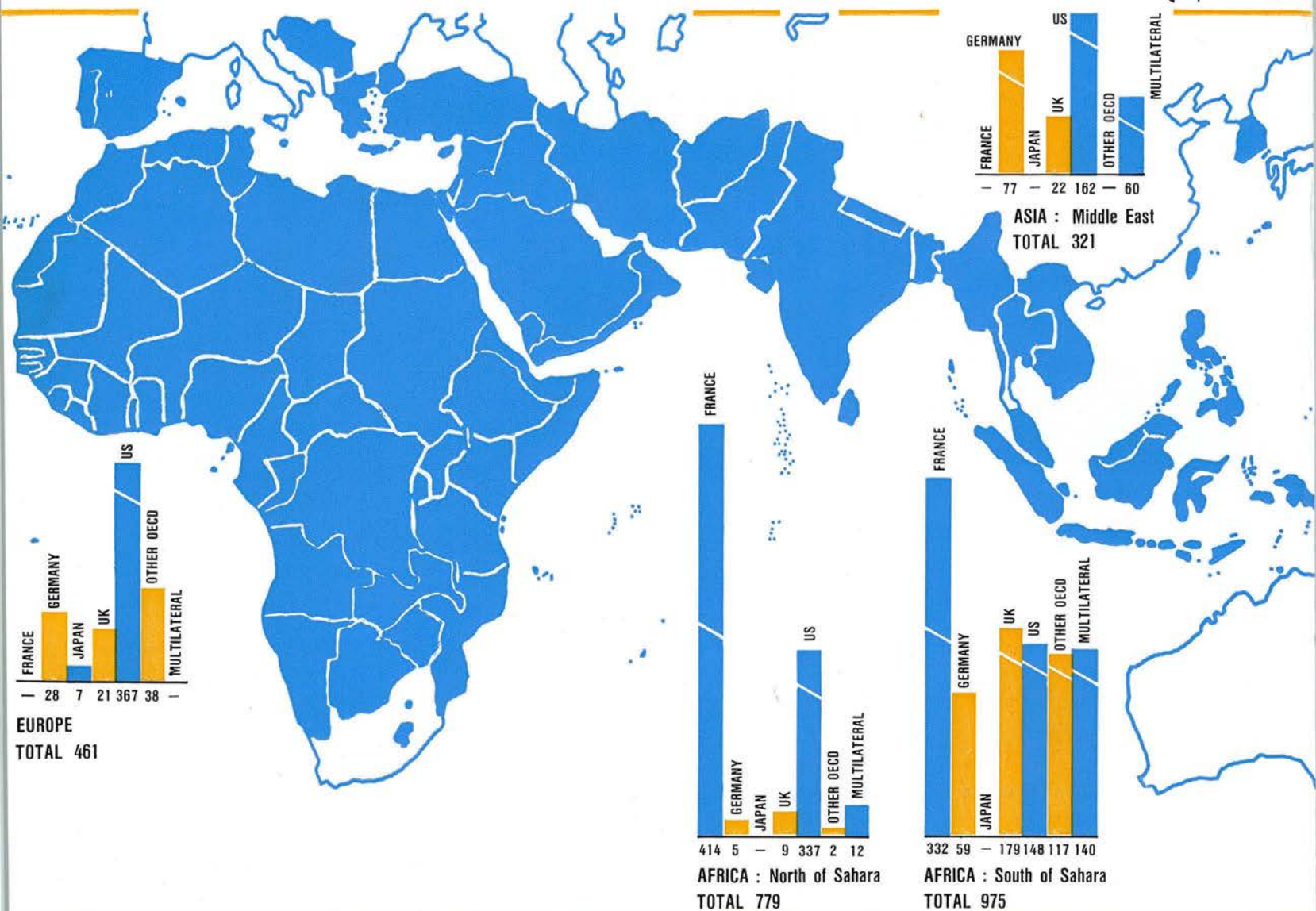
The simplest argument for aid coordination at the country level is that of administrative convenience. The already overburdened administration of certain under-developed countries may face a very heavy task in dealing separately on all aid matters with each of the missions of the donors. In the African case quoted above, the situation is aggravated by the fact that many of the expatriate officials who were formerly responsible for administration have now returned home, with a limited number remaining under

(1) In the case of the United Kingdom and France, the amounts of aid are much more heavily concentrated on countries with which they have been traditionally linked.

(2) See, for example, the admirable summary of arguments in the Jeanneney Report (pp. 75-76).

(3) Counting all multilateral aid organisations as a single source.

GEOGRAPHICAL DISTRIBUTION OF FOREIGN AID, 1962 (\$ million)



technical co-operation arrangements. In point of fact, an important form of technical assistance in many countries is the provision of key staff who can advise and assist in the handling of external aid.

But the case for coordination goes well beyond the administrative area. There is at least the possibility that efforts of the various donors may overlap or may leave major gaps in the aid effort which weaken its overall impact on development; in certain cases, they may even work at cross purposes. Too much effort may be going, for example, into starting superficially attractive industrial projects and not enough into agricultural development, resulting in a waste of resources and, perhaps, unforeseen social tensions.

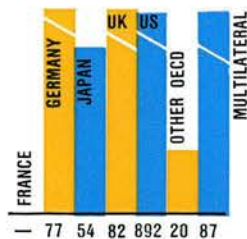
The ultimate judge of what is best for a developing country must be the government of that country. But it is a very frequent corollary of under-development that the government needs the active help and support of outside bodies in deciding what is best. It is too easy to accept aid for individual projects just because it is offered. The lack of adequate central machinery in the recipient country for handling aid may encourage individual ministries to promote their own schemes without much regard to the development priorities.

Many developing countries have watched with great interest the activities of the financial consortia which have been established in India and Pakistan (under IBRD leadership) and Turkey and Greece (under OECD), involving regular consultations on the financing of the respective programmes of development. Some of them have approached donor governments in order to establish similar consortia for their own countries. In certain cases, this may be desirable. But, in others, more flexible arrangements may be preferred.

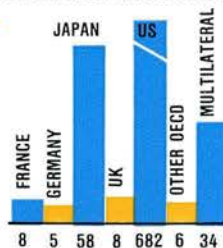
Where the major development needs of a country are relatively easy to define and where there are only a few sources of aid, informal methods of consultation may be adequate — for example, through normal diplomatic contacts. Even here, however, there may be something to be gained from a fuller exchange of information on the spot among the donors and the recipient. Where the situation is more complex, it may be necessary to set up a standing group of representatives — including those of the recipient country — which can systematically pull together the information available on aid efforts and attempt to take an overall view of the most urgent needs for assistance.

A group of this latter type has been functioning,

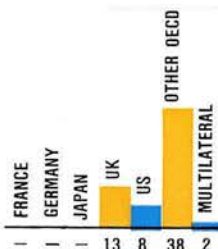
disbursements of official funds, DAC countries and multilateral bodies (IBRD, IFC, IDA, IDB, EEC and UN Agencies).



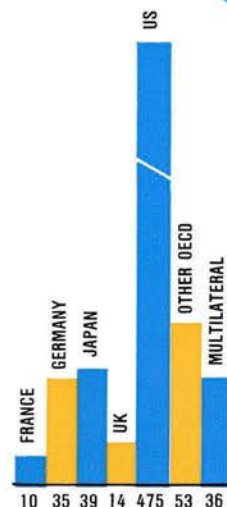
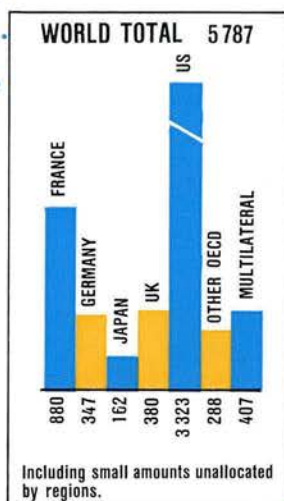
ASIA : South
TOTAL 1212



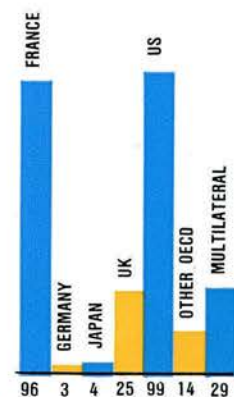
ASIA : Far East
TOTAL 801



OCEANIA
TOTAL 61



AMERICA : South
TOTAL 662



AMERICA :
North & Central
TOTAL 270

Source : OECD : «The Flow of Financial Resources to Less Developed Countries, 1956-62».

under the DAC's aegis, in Thailand for the past eighteen months. During this period, it has met frequently and has kept in contact with the parent Committee in Paris. Its main attention has been given to the coordination of technical assistance activities, though it is also concerned with feasibility surveys and studies of basic resources. The group has established, for the first time, a complete picture of the great range of technical assistance activities in Thailand and is now looking at the major needs for further activities of this kind stemming from the new Thai development plan. The DAC has also established arrangements, covering both financial and technical assistance, for continuing consultation between aid donors and the governments of Kenya, Tanganyika and Uganda. It is exploring the need for similar arrangements in other developing countries.

There is great scope for better coordination of technical assistance operations. Greater stress is now being given to such activities, which are designed to build up the skills and knowledge of the developing countries in order to speed their growth and, incidentally, increase the impact of external capital aid. The units of technical assistance — experts, operational staff, and trainees — are small, their administration is complex, and they

are widely dispersed. The administrative arguments for coordination are, therefore, strong. But, in addition, there needs to be a close study of the relationship between the total effort which a country itself is making — primarily through its educational system — to build up its human resources, and the help which it is receiving from abroad. Studies of this kind, which are currently proceeding in two Member countries, Greece and Turkey, benefiting from OECD's own technical co-operation activities, may also be extended to certain non-member countries. In some cases, it may even be desirable to establish a kind of technical assistance "consortium", analogous to those which have been set up on the financial side.

Coordination admittedly raises difficult issues of policy. The attempts which have so far been made should be regarded as largely experimental and a great deal more work has to be done before satisfactory solutions can be reached. The aid receiving countries must feel that they are full participants in these efforts, the long-term results of which will greatly assist their development. In the rapidly evolving relationships between the under-developed and the developed world, the methods and approaches which are used in this respect will be of major importance.

PRICES

and

One of the latest fashions in economic policy is incomes policy or price and wage guidelines as this is known in North America. Some believe that this new departure may provide the answer to "creeping" or "cost" inflation; others feel that it can have little influence on the working out of the underlying economic forces at work in the economy. Ever since the publication of a controversial report on The Problem of Rising Prices, the OECD has been a forum where these views have been confronted, and where governments have tried to assess, in the light of experience in other countries, whether there is anything in all this for them.

The first report of the group charged with this work, Policies for Price Stability, published in November 1962, dealt primarily with the application of incomes policy to wage and salary incomes. At that time, the group noted that "most governments will have to give more thought to the question of complementing guidance on wages with guidance on other incomes". This is the subject of its second report, The Problem of Prices, Profits and Other Non-Wage Incomes, to be published shortly.

This report discusses many highly complex and politically charged questions :

- What is the difference between wage and non-wage income? Why are different policies needed for each?
- How much competition is there in our economies? If wage increases are moderated can prices and profits be left to look after themselves?
- If wage-earners ask for some quid pro quo in return for accepting restraint, what form should it take?

- What are the advantages and disadvantages of an active price policy? What is the most appropriate guide-post for non-inflationary price behaviour? What has been the experience of those countries which have used techniques of general price control and supervision? (An Annex describes these techniques in some detail).
- What are the advantages and disadvantages of formulating policy directly in terms of profits and other non-wage incomes? Can changes in profits taxes, social security benefits, etc. be used in such a way as to contribute to reducing the pressures of cost inflation?
- Do governments possess enough information about prices, profits and other non-wage incomes to enable them to implement such policies?
- Would such policies have undesirable effects on the distribution of income, or on economic growth and efficiency?

The report does not try to give definitive answers to all these questions. In most countries the increased interest in these questions is of quite recent origin. The development of policy is in a formative stage, and it is still much too early to say whether the fashion has come to stay: whether new policy initiatives along the lines under discussion can make a significant contribution to the reconciliation of the objectives of price stability, and full employment and satisfactory economic growth. But it is hoped that the report will help to clarify the issues, and help to provide a wider understanding of the problems involved.

*OECD Report on the Role of Profits and other Non - Wage Incomes
in Creeping Inflation. An Examination of New Policy Moves.*

PROFITS

EXTRACTS FROM THE REPORT

Competition

"... Though a degree of competition is undoubtedly a common feature of our economies, there are many sectors where prices are in some sense "administered"... It would seem more particularly in sheltered industries that, whereas cost increases tend to be passed on immediately and fully in higher prices, cost reductions are often only passed on incompletely or after some delay. This may well be a significant part of the process by which costs and prices are levered up under conditions of cost inflation."

"Among the various types of specific restrictive agreements, one that has been receiving a good deal of attention recently is resale price maintenance. The experience of countries where such agreements are not legally enforceable tends to support the view that their abolition could contribute to price stability."

Price Policy

"... Prices should fall where productivity is increasing faster than the national average and should rise where productivity is increasing more slowly, subject to the qualification that prices should also reflect changes in costs other than labour costs... (Although guidance in this form is relatively simple, it is likely to be much more difficult to determine whether it is being followed in practice than is the case for the comparable guidance for wages...)"

"There is a large measure of agreement that a comprehensive and detailed system of price control, in the strict sense, is neither practicable nor desirable (except perhaps as a temporary measure to meet particularly difficult situations...). But ... this does not mean that governments must appear indifferent or helpless with respect to the behaviour of prices. It may well be possible to find means whereby governments can ensure that they are well informed about price and cost developments, and that industry is aware that the government — and ultimately public opinion — is actively interested in the behaviour of prices."

Tax Policy

"The alternative to a policy formulated in terms of prices is one formulated directly in terms of incomes. A direct policy for non-wage incomes might be considered to comprise, first, watching the development of the major categories of non-wage incomes; second, obtaining general agreement as to what should be regarded as the appropriate behaviour of these incomes; and, third, correcting any disproportionate movement by tax changes or other means."

"There are serious objections to a system of direct controls on dividends. (The elaboration of an appropriate set of criteria... is even more daunting than in the case of price control. Perhaps more important, even if these difficulties could be overcome, it is doubtful whether in the longer run the desired objective would be achieved)."

"... In this wider view, questions such as the taxation of capital and capital gains, the treatment

(Continued on page 8)

(continued from page 7)

of business expense allowances and measures to promote a wider distribution of wealth... may legitimately fall within the compass of a policy for non-wage incomes."

Distribution of Income

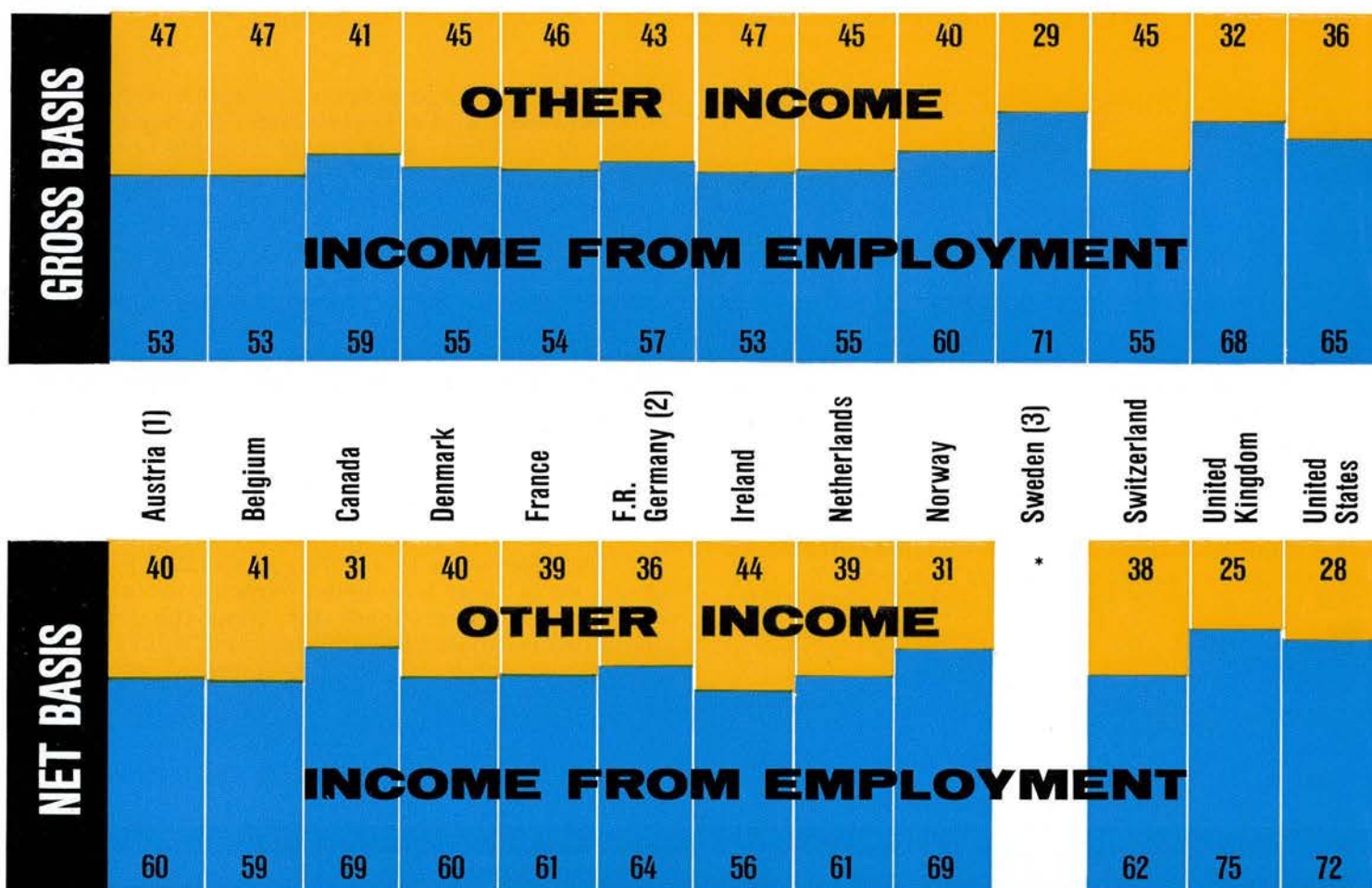
"... In a number of countries there has been an increase in the share of wages over the last decade or so; insofar as there has also been an increase in the propensity to save out of personal incomes, and a greater willingness on the part of enterprises to rely on external finance, this process has not had an adverse effect on investment. There seems no good reason why this process should be obstructed, so long as it remains within the limits consistent with price stability."

"Shifts in the distribution of national income brought about by... these forces seem likely, however, to be slow. The effect of incomes policy seems unlikely to be so precise that it would inhibit such gradual changes from taking place."

Conclusion

"... Since this can hardly be a popular subject with those whom it most directly affects, we should conclude by drawing attention once again to the positive side of the equation. By a due restraint over the growth of money incomes, it should be possible to ensure that the growth of *real* incomes is not only more regular, but, over time, both more rapid and more equitable."

INCOMES SHARES IN CERTAIN OECD COUNTRIES - 1962 (Percentages)



The figures on a net basis show income shares in net national income, that is, after allowing for the depreciation of capital assets. The figures on a gross basis treat depreciation charges as part of non-wage incomes and hence show income shares in gross national product at factor cost.

CAUTION: Inter-country comparisons of income shares are particularly hazardous

- the methods used to make the estimates varies greatly, especially with regard to depreciation
- income shares are strongly influenced by economic structure; generally, the share of non-wage incomes will be higher in countries with a high proportion of small or very small enterprises (e. g. in agriculture, distribution, etc...)

(1) 1960 (2) Excluding Berlin (3) 1961 (*) not available

stepping up the rate of growth



an IRISH experiment and its results

The five years 1959 to 1963 witnessed the fastest growth in twentieth-century Irish history. How Ireland managed this achievement is explored by the OECD's Economic and Development Review Committee in its newly issued study of the Irish economy.

The five years 1959 to 1963 witnessed the fastest growth in twentieth century Irish history. An economy that had been growing at the rate of only one per cent a year suddenly began to

expand at an average rate of more than four per cent. At the same time unemployment fell and fewer people were forced to seek jobs abroad. Even more important, there was a remarkable transformation of public attitudes towards

growth. Whereas in 1959 many people considered a 2 per cent growth rate too ambitious, to-day it would be difficult to persuade the public that the growth target for the next five years should be anything less than what has been achieved during the last five. Chief credit for this achievement is given by OECD's Economic and Development Review Committee to Ireland's first Programme for Economic Expansion, launched in 1959.

Getting off dead centre

Ireland's problems at the end of the 1950's were of long standing. Despite one of the highest birth rates in Europe, population was on the decline as a result of continued emigration which had a doubly depressing effect. On the one hand it kept the domestic market from expanding; on the other it deprived the labour force of its most active members, since the emigrants were for the most part young people. In this generally unfavourable economic climate, there was little stimulus to invest in new plant or to raise productivity.

Then, in 1959, the Government took the initiative with its first Programme for Economic Expansion. This set the modest growth target of two per cent a year, less than half what was actually achieved; but it aimed specifically at releasing a "dynamic of progress".

The objective was not only to increase the level of domestic investment but to attract capital from abroad and to channel funds into production of goods that could be exported. Industrial exports were given particular importance so as to reduce Ireland's heavy dependence on the sale of agricultural products.

To spur private investors, the Government itself began investing more capital in productive facilities, both to expand capacity and to modernise equipment. Electrical generating capacity has been increased, steel and turf production augmented, new airport runways built, jet planes purchased,

and railroad branch lines closed and replaced by bus services. The State-owned Irish Sugar Co. has built plants to process food for export. Over the five years of the first programme, public capital expenditures have almost doubled, and the pattern of spending has been reshaped so that a much greater portion of it is devoted to productive investment. In agriculture a successful campaign has been waged against bovine tuberculosis.

As a further stimulus to domestic and foreign investment, the Irish Government instituted a wide range of grants, subsidies and loans to private industry. The first programme stated that "no soundly based industrial project will be allowed to fail or be prevented from starting solely through lack of capital".

In the first place, the resources of state-sponsored financial institutions were expanded and their facilities enlarged. For example, the capital of the Industrial Credit Co. Ltd. was increased; as well as granting medium and long-term capital loans, it can underwrite

or take up shares issued by private firms.

Private firms, both foreign and domestic, also have access to a wide variety of grants — for the acquisition and development of factory sites, for the purchase of plant and machinery, for engaging industrial consultants and training managers and workers. (For the latter two purposes up to 50 per cent of the cost can be obtained).

There are, also, tax incentives to invest. An initial tax allowance of 20 per cent is permitted for the construction of industrial buildings, and 40 per cent for the purchase of plant and equipment. If the new production is an industrial export, the profits are exempt from taxes altogether for a period of 10 years with a five year tapering-off period. In the free trade zone of Shannon Airport, profits from new industrial exports are exempt from tax until 1983.

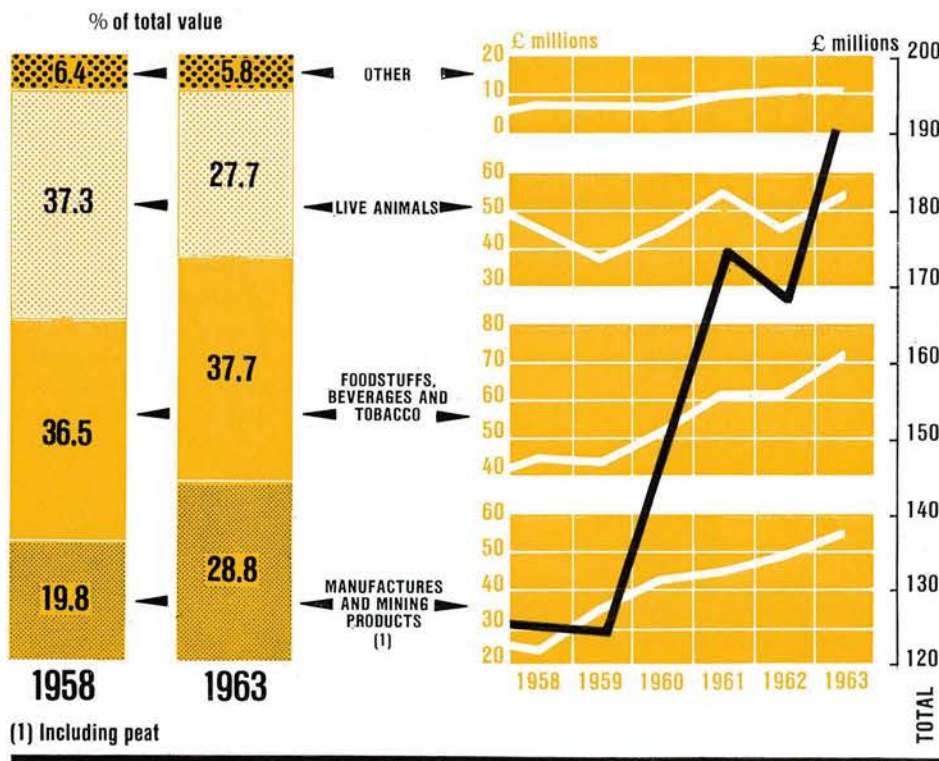
The Government has helped private enterprise in other ways — promoting Irish products, for example, and seeking foreign capital abroad.

Influenced by these incentives,

and by the increasing public conviction that more rapid growth was feasible, investors have been putting their money into Irish industry. They have, of course, also been encouraged by the other advantages that Ireland has to offer — a plentiful supply of well-educated manpower, and a good infrastructure, for example. Private investment has risen sharply. New firms, particularly in chemical and electrical products, have built up-to-date plants and established a market for their goods abroad. During the first five years of the Economic Expansion Programme, exports of goods and services have increased by an average of almost 7 per cent a year. Emigration has fallen from an average of almost 40,000 during the early 1950's to 20,000 a year. There is no way of measuring exactly how much of Ireland's economic growth has been the result of foreign investment (in 1962 the OECD survey of Ireland estimated the figure at about £ 10 million per year), but more than a hundred foreign firms have participated in Irish industrial ventures.

The growth has taken place without giving rise to conditions of excess demand or an adverse balance of payments. On the contrary, Irish reserves have mounted — partly because of the inflow of foreign capital, and partly because of a growth of tourism and other invisible exports. Moreover, though imports have been rising, the largest increase has been in capital goods destined for export industries.

DISTRIBUTION OF EXPORTS BY COMMODITY



Growth : the next stage

The year 1964 marks the beginning of a new effort — the Second Programme for Economic Expansion which is to cover the years 1964-1970. Its aim is a continued growth of 4.3 per cent a year, a figure which is in line with the OECD collective target for the 1960's. The Economic and Development Review Committee considers the goal ambitious but attainable if the Government's recently

adopted growth policies are continued and barring any unfavourable developments in foreign markets on which Ireland depends for 40 per cent of her gross national product.

Growth plans emphasise industrial exports, which are slated to rise by 11 per cent a year; but the future for agricultural produce, which at present accounts for two-thirds of Ireland's sales abroad, cannot be ignored.

"With protective policies abroad preventing the full utilisation of productive capacity in Irish agriculture, rapid economic growth in Ireland depends to a large extent on the maintenance of a high rate of industrial expansion", the 1964 OECD study of Ireland notes. "Greater access to foreign markets for food products would greatly facilitate Ireland's development problem, but it is doubtful whether, under any conditions, agriculture could provide suitable employment openings for the future growth of the population. The objective of increasing the labour force at work in Ireland can only be achieved by creating jobs in non-agricultural pursuits; given the already high proportion of employment in service occupations the brunt of this burden must be borne by industry."

Sustained growth will require structural adjustments not only as between agriculture and industry but within industry itself, for much of the older Irish industry grew up in an atmosphere of protection which is now being abandoned. Protective tariffs on industrial imports have already been reduced by 20 per cent since the beginning of 1963 and are to be cut further in 1965; an assumption underlying the second programme is that Ireland will be a member of the Common Market by 1970.

The need to adapt the structure of industry to freer trading conditions has been given increasing weight in government industrial policy in recent years. The first major step was the setting up in 1961 of a Committee for Industrial Organisation (C.I.O.), a tripartite body representing management, labour and the public sector. This body is making a systematic survey of the problems and needs of each industry in the light of declining protective tariffs.

The C.I.O. has put out a num-



The interior of a modern Irish ropeworks.

ber of interim reports on industrial policy, and its recommendations regarding government action have been adopted. The scope of industrial grants has been widened so as to cover a switch from one type of activity to another. Loans for re-equipment in the same field of activity have been introduced, and firms have the choice of a loan or a 25 per cent tax grant towards the cost of re-equipment. Adaptation councils established in a number of industries have access to government funds. Groups have also been set up to study the implications of freer trade for certain agricultural commodities and processing industries.

The latest OECD survey of Ireland notes that labour problems will be involved in rapid structural change and that government policy has an important role to play in helping workers adapt themselves to the changes that will be necessary and in dealing with the social problems that may arise.

Continued growth will present other problems: the increase of

private consumption must be kept below that of gross national product if there is to be room for the higher investment projected in the Second Programme and if rises in costs and prices that would adversely affect exports and the overall balance of payments are to be avoided.

The OECD survey notes that "the ability of the authorities to pursue an ambitious expansionary policy untrammelled by the need to resort to stop-and-go policies can be seriously limited if money incomes are pushed up excessively. With unemployment and underemployment still relatively high, general excess demand conditions would seem unlikely to appear in the near future. But bottlenecks may arise in individual sectors before full employment has been reached". The survey suggests that tools for demand management be sharpened by more flexible use of the budget and a more active incomes policy to ensure that money incomes are kept in line with advances in productivity.

10 YEARS OF PROGRESS IN THE ENERGY SECTOR

The pattern of the overall consumption of energy may be seen from two different angles :

- a breakdown of overall consumption by the *primary* sources of energy (hard coal, brown coal, natural gas, crude petroleum, "primary" electricity, i.e. hydro-electricity, geothermal and nuclear electricity) : this breakdown corresponds to the initial stage of consumption;
- a breakdown of overall consumption among the various primary and secondary sources at the *end-use* stage by final consumers, i.e. after all converting has been completed.

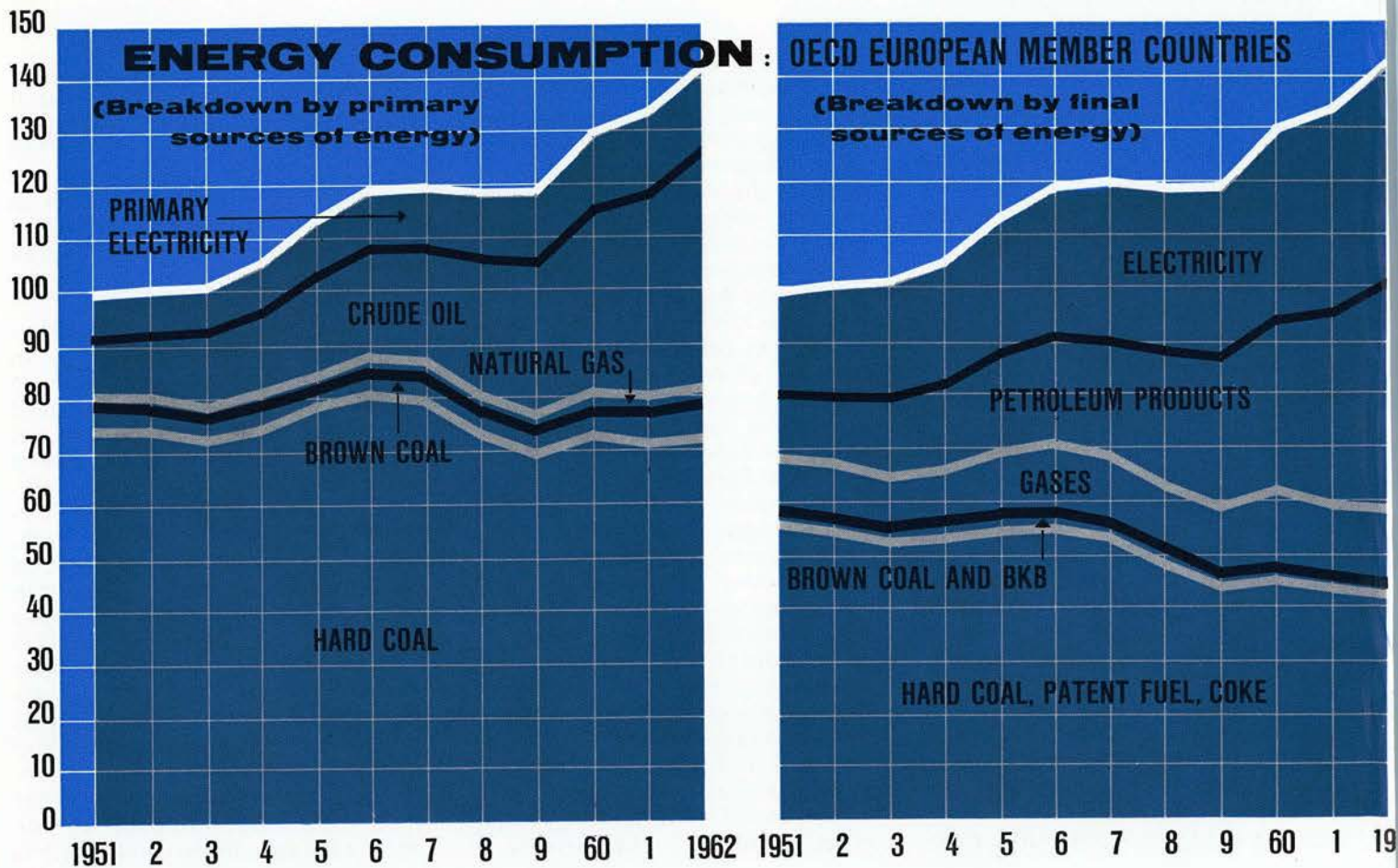
The accompanying graphs illustrate these two breakdowns for the European countries of OECD and for the United States respectively. If the two are compared, it will be found that at the end-use stage, hard coal, brown coal and, to a lesser extent, petroleum products occupy a smaller place than at the primary

source stage, because hard coal, brown coal and petroleum products have been converted into gas and electricity. Conversely, gas and electricity represent a considerably higher proportion in the breakdown at end-use stage.

In 1951, total consumption of energy in the United States was 80 per cent higher than in the European countries of OECD, but between 1951 and 1962 it grew less quickly (by about 30 per cent compared with 42 per cent for the European countries). The divergence was therefore somewhat smaller in 1962. Yet United States consumption is still 65 per cent above consumption in the European countries of OECD.

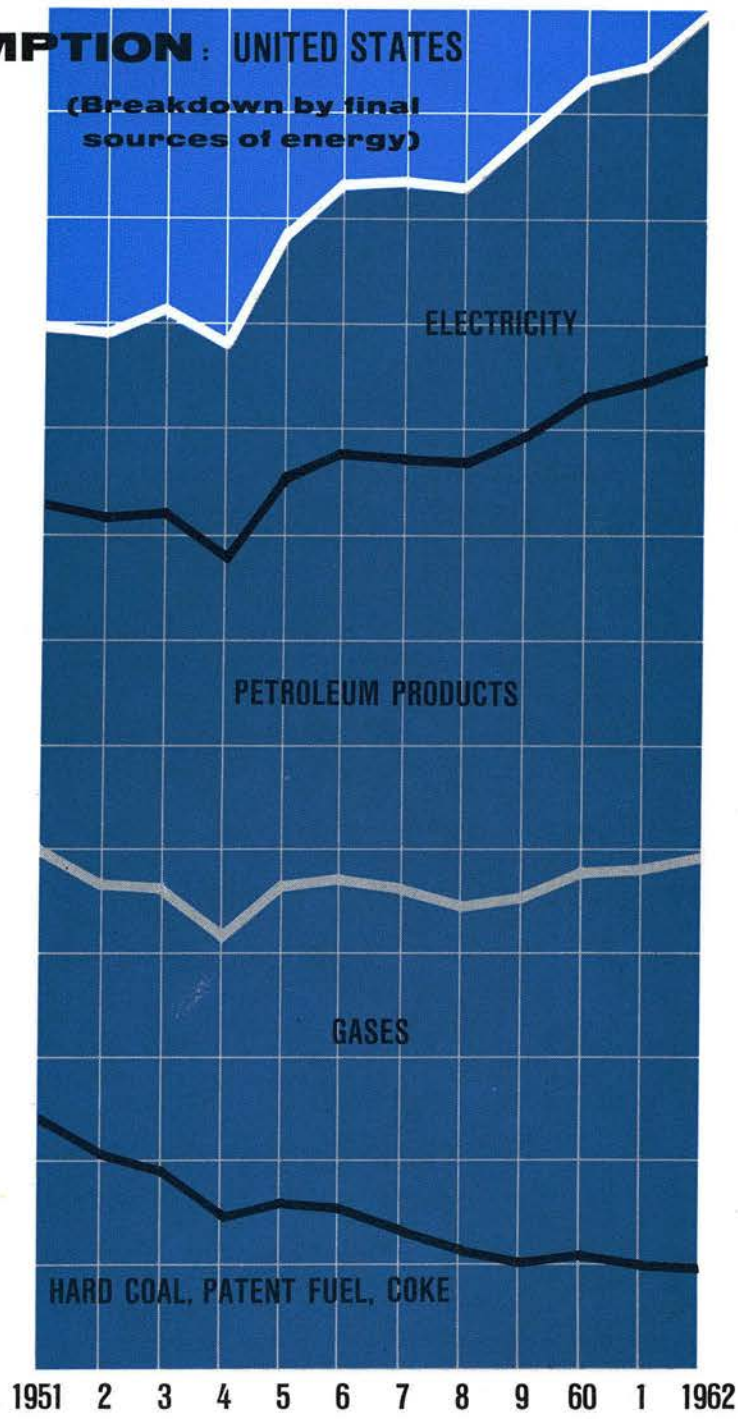
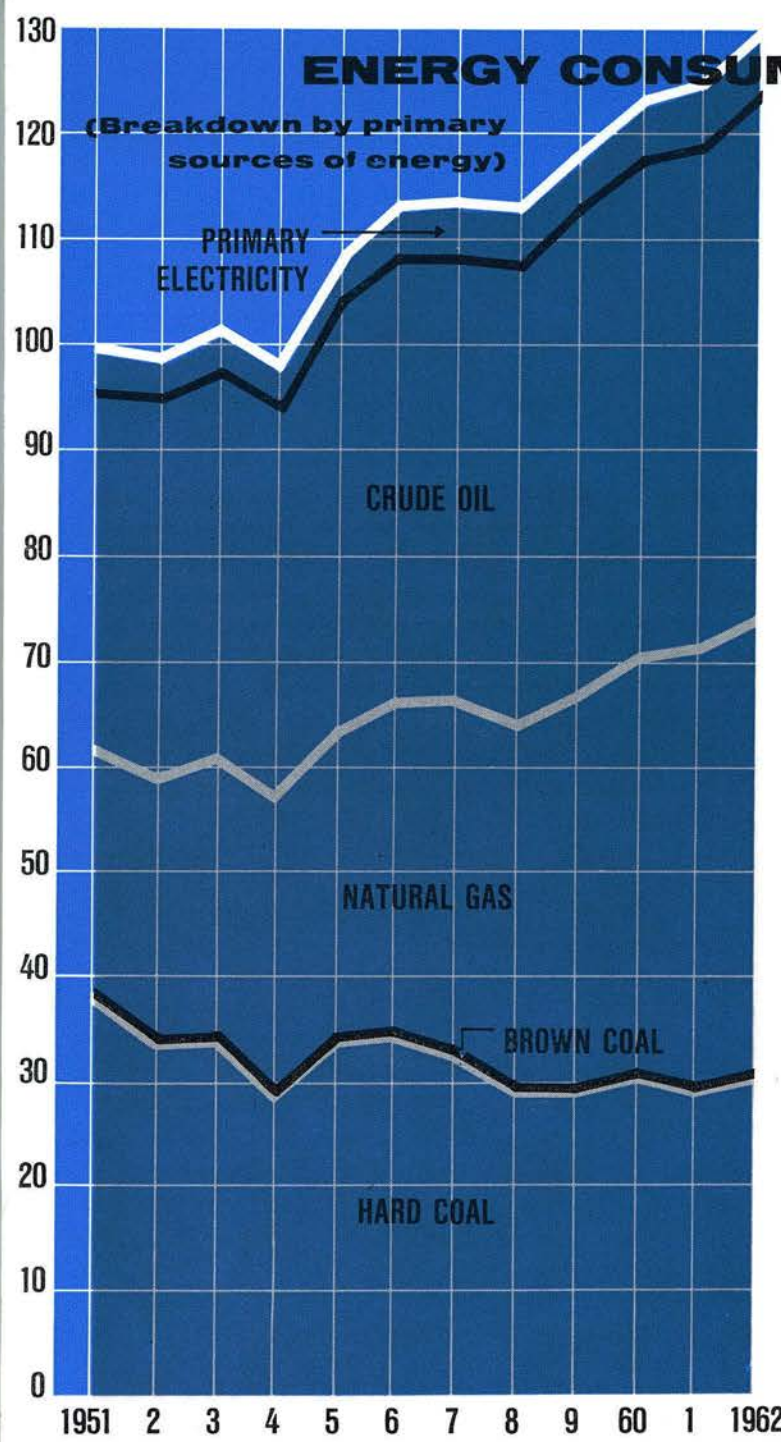
Both at the primary source and end-use stage, the proportion of hard coal is lower in the United States than in Europe, whereas the proportion of petroleum products, and especially of natural gas, is far higher.

NOTE : The figures from which the above graphs have been prepared were calculated from data published in "Basic Statistics of Energy, 1951-1962" for OECD countries. The data concerning the various sources of energy have been made homogeneous by applying the following coefficients : ● Hard coal and solid derivatives (million tons) 1 ● Brown coal (million tons) 0.3 ● Petroleum and petroleum products (million tons) 1.4 ● Natural gas in (cu. m at 4 200 kcal) (billion cu. m) 0.6 ● Electricity (billion kWh) 0.4



Energy consumption is both an indication and a condition of progress in the modern economy. Accurate knowledge of the subject is essential for forecasters and formulators of policies to meet future needs. Reliable statistics, not only for consumption, but also for production and trade, are therefore vital. The Statistics Division of OECD has endeavoured to meet this need by publishing, under the title of "Basic Statistics of Energy", a set of tables showing in detail the most significant figures for Member countries of OECD in Europe and in North America; the latest edition of this volume, covering the period 1951-1962, has just been issued.

The data published in this volume are expressed in the specific units of each of the sources of energy concerned. They do not therefore provide "energy balance sheets" in the strict sense, in which data for all sources of energy are expressed in terms of a common unit. But there are many different techniques for calculating such balance sheets, which can easily be drawn up from the data supplied in the new OECD publication. As an example, the reader will find hereafter four graphs of energy consumption in the European countries of OECD and in the United States respectively.



towards the liberalisation of

INSURANCE

in Europe

by J. BASYN

Chairman of the OECD Insurance Committee

Insurance is a major industry which has attracted the attention of governments both on the national and the international plane and caused them to lay down rules for its proper supervision. The risks covered, whether they involve certain forms of personal insurance or the insurance of goods in international trade and of vehicles, ships and aircraft, move all over the world; a highly-developed system of reinsurance enables such risks to be internationally shared.

Government rules regarding insurance fall under two heads: those through which the activities of the insurers are supervised; and those which restrict the freedom of the "buyer" of insurance to choose his insurer. Both groups have international implications; as a result, rules applying to them are the subject of international consultations and negotiations. The degree of liberty permitted by governments in this respect varies, as will be seen, from country to country, but certain basic similarities can be discerned.

Supervision of Insurers

It is economically and politically essential that insurers should always be in a position to meet their obligations; the very large sums received from the public, and which are accumulated in the form of reserves, must therefore be adequately safeguarded. In this context, the importance of life assurance as a vehicle of national savings is given full weight.

The scope of supervision designed to ensure these safeguards may embrace legal, financial and technical matters, accounts, and such economic factors as rules of competition. In some countries (France, Spain, Turkey) the manner in which supervision is exercised is very precisely defined by the law; in others (Austria, Belgium, Denmark, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland, United Kingdom) the supervisory authorities are allowed a certain discretion, which they use within the limits and in the spirit of the law.

In a number of seafaring countries certain forms of intervention in insurance matters existed as far back as the 13th century, though organised insurance supervision began in European OECD Member countries in the late 19th and early 20th centuries. In countries where such supervision has been instituted progressively it has generally been extended to all classes of business (Denmark, Italy), or practically all classes (France, Ireland, United Kingdom), though there are still countries where it applies to one class only (life assurance in the Netherlands) or a few classes only (life, industrial injury and motor third party in Belgium).

The nomenclature and extent of classes of insurance business vary considerably as between countries. In determining the scope of supervision in respect to these various classes, however, most countries agree in drawing a distinction between direct insurance and reinsurance; and in the former case between life or personal assurance and general insurance. In most countries, supervision covers all private insurance transactions, whether carried out by domestic concerns or by branches of foreign companies. Reinsurance, where it is operated by specialised concerns, is not subject to super-

For the first time, a detailed comparison has been made between methods employed in Europe for the supervision of insurance, bringing out their characteristic differences. This study by the OECD Insurance Committee, published under the title "Supervision of Private Insurance in Europe" constitutes an essential basic document. By providing a complete picture of the present situation, which up to now has not been generally available, this study will help to accelerate efforts being made towards a liberalisation of European insurance business, and thus towards better service for the insured.

vision in some countries (Belgium, France, Greece, Ireland, Luxembourg, and, with some exceptions, the Netherlands); in others (Austria, Germany, Sweden, Switzerland) only domestic concerns are supervised; in yet others (Denmark, Italy, Norway, Portugal, Spain, Turkey) foreign reinsurance concerns are also supervised if they have an establishment in the country. In the case of the United Kingdom, all those who write reinsurance contracts within the country are supervised. When written by concerns undertaking direct insurance as well, reinsurance is generally subject to supervision, though here, too, there are variations and exceptions.

Supervision is exercised in a variety of forms of which the principal are :

- by requiring the company to have an establishment in the country concerned;
- by prohibiting other forms of business to insurance firms;
- by licensing or registration;
- by the examination of returns submitted to the supervisory authorities;
- by inspection at the firm's place of business.

Each country has its own individual approach to the problem of supervision, and methods differ widely. It is generally agreed that efficient safeguards are necessary for the protection both of the public and possibly also of the well-run insurance firm which might otherwise lose business to less responsible companies offering cheaper rates and meretricious types of contract. But the danger exists of such controls assuming an exaggerated form in the desire of supervisory authorities to make doubly sure; each such authority naturally believes that it has found the perfect answer to

insurance supervision, and cases may occur of a too-meticulous application of the rules and hence of handicaps to trade.

The danger of conflicting or overlapping regulations which may hamper insurance transactions on the international plane calls for international co-operation in the matter; and in fact OECD has already taken a long step forward in this direction. In its Code of Liberalisation of Current Invisible Operations, first published in 1951, the Organisation included an Annex on Insurance which lays down common rules for instance for the transfer of amounts relating to insurance crossing national frontiers, for the establishment of guarantee deposits by foreign insurers operating in Member States, and for the choice and valuation of insurers' investments.

All European Member countries have subscribed to the Code, but it would be unrealistic to suppose that complete uniformity of rules regarding insurance will be achieved in the foreseeable future. It is, however, reasonable to hope for a degree of harmonisation between such rules, establishing an equivalence between methods of supervision which would afford the citizens of each country the same sort of protection if they were to conclude a contract with a foreign insurer.

To achieve this kind of harmonisation, it is essential that all concerned must think along the same lines and in fact efforts are being made in that direction. OECD as well as the European Economic Community is anxious for a complete study of the question, while the Economic Commission for Europe, the General Agreement on Tariffs and Trade (GATT) and the Council of Europe are examining certain aspects, as is also the International Chamber of Commerce, a non-governmental body. The European Conference of Supervising

Services of Insurance Companies holds regular meetings of those responsible for supervision in the different countries.

In addition to the Code of Liberalisation of Current Invisible Operations, mentioned above, OECD has recently published, under the title "Supervision of Private Insurance in Europe", a study by its Insurance Committee which describes in detail how insurance supervision is conducted in the Organisation's European Member countries, both as regards supervision itself and as regards contracts and professional organisation. This publication includes country chapters drawn up on a uniform plan by the supervisory services of each country, and a comparative analysis based on these reports. It constitutes a first attempt in this field at a comparison of the different national regulations and methods and is a basic document, essential for future negotiations aiming at liberalisation of insurance.

With the same object of clarification in view, the Insurance Committee is submitting for the approval of the Council a common classification of classes of insurance, reducing the present large number (some 85 classes have been noted) and disparity to reasonable proportions.

Restrictions on the Freedom of the Buyers of Insurance

Two forms of restriction are imposed : on freedom to take out insurance, and on the choice of the insurer.

In principle, insurance is voluntary; but most countries have compulsory insurance in certain sectors — liability, for example (chiefly third party but including employers' liability for industrial injury) and in some cases sickness, fire and death of livestock. This insurance is imposed to guard against certain hazards which might lead to personal ruin or to that of third parties, and to make sure that persons do not through their own improvidence become a charge on the community. The laws instituting compulsory insurance invariably set precise or minimum limits on the cover, the insurance companies generally retaining the right to decline proposals. In some countries, however, insurers are bound to accept proposals in certain classes : motor vehicle third party insurance, for example, in the case of France, Germany, Ireland, Norway and Sweden.

Freedom to take out insurance abroad is generally subject to certain restrictions, first imposed during the First World War and reintroduced during the Thirties.

In all countries except the Netherlands, compulsory insurance must normally be effected in the country in which the policy-holder resides, and in addition some countries (France, Ireland, Italy, Portugal and in most cases Greece, Spain Turkey) forbid all insurances in the supervised classes to be placed abroad. Other countries (Austria, Belgium, Denmark, Germany, Iceland, Netherlands, Norway, Sweden, Switzerland and, except for industrial life assurance, United Kingdom) tacitly allow such foreign insurance but, except for the United Kingdom, on conditions ensuring that this does not furnish insurers not licensed in the country with an indirect

TWO MAJOR EUROPEAN INDUSTRIES IN 1961

Premium receipts from insurance in 14 European countries amounted to approximately
\$ 12,718,000,000

An estimate of European motor manufacturers' sales in Europe :
\$ 6,000,000,000

COUNTRY	Percentage of National revenue
Austria	3.1
Belgium	4.4
Denmark	3.4
France	3.2
F. R. Germany	4.4
Italy	2.0
Luxembourg	2.5
Netherlands	4.4
Norway	3.6
Portugal	2.5
Spain	2.3
Sweden	3.2
Switzerland	5.1
United Kingdom	9.3

Type of Insurance Included : Life, Fire, Car, Work Accident, Other Accident, Theft, Maritime and Transport, Aviation, Hail, Health, Miscellaneous

means of seeking business there without supervision.

With the exception of Turkey, all the countries allow a risk to be insured abroad if it cannot be insured within the national frontiers, but contracts effected abroad are considered to fall outside the protection of the domestic law.

Three reasons exist for restrictions on the freedom to take out insurance abroad : *protection of the insured*, *protection of the insurer*, and *protection of foreign exchange reserves*.

Insurance is a very complex business, of whose technical aspects the average person is ignorant. *Protection of the insured* is therefore essential; it is vitally important to him



The international "green card" ensures that the tourist complies with the insurance laws of the country visited.

that the insurer will promptly meet his obligations under all circumstances, but clearly he is not in a position either to verify the insurer's ability to do so or to keep an eye on the latter throughout the years. Compulsory liability insurance (e.g. motor third-party cover) is designed to protect third parties who have had no say in the selection of the insurer; and for their protection the State must make sure that the insurer can honour his commitments. Another reason for insisting on insurance in the home country in certain cases is the difficulty of securing the execution of legal decisions in foreign countries and the application abroad of certain

preferential claims or liens accorded to domestic insured.

Justification for State tutelage over its citizens' insurance arrangements varies in degree. The inexperienced man who puts all his savings into life assurance might need to be protected against unscrupulous insurers unable or unwilling to safeguard his interests. And the person who is compulsorily insured — whether directly or through a third party — must be certain that the protection which is forced upon him and for which he or the third party has to pay, is effective. But on the other hand the big shipping company insuring its vessels, the airline its aircraft, the merchant his goods or the

industrial concern its plant, are probably sufficiently experienced to know where they can best insure themselves; they hardly need the protective guidance of the State.

While no-one questions the excellent motives of governments in protecting their citizens against any risks of faulty or dubious insurance, in some cases doubts may be entertained as to whether State tutelage is over-zealous. For example, why are governments so keen to protect their citizens in the matter of insurance when at the same time these citizens are free, within the limits of exchange control regulations, to deposit their money in a foreign bank over which these governments have no control? Why, again, are these same citizens permitted to entrust their health and lives to foreign doctors and hospitals, or to travel in foreign aircraft and ships?

The consideration arises as to whether it would not be possible to allow a citizen to insure himself with an insurer who does not come under domestic supervision, provided that the latter is subject to equivalent supervision in another country, as suggested earlier in this article. This would only be falling into line with normal arrangements accepted for travel by sea, air and rail. If the strict regulations applied to insurance were applied to other forms of commercial activities, international trade would quickly shrink to a minimum.

Compulsory third-party insurance for motorists is accepted by most people as a rightful and reasonable measure. But if, in an attempt to ensure its citizens' protection against injury from foreign cars, the State insisted in all cases on insurance being taken out with domestically-licensed firms, a serious obstacle would arise to the growing interests of the tourist industry in the reluctance of foreign motorists to comply with the resulting complex and irritating regulations. A clear proof that international co-operation and compromise can, however, find the answer to such a clash of interests is the general acceptance of the "green card" as guarantee of adequate cover when travelling abroad by car. This "card" — in fact a booklet of identical leaves for use in one or more foreign countries — assures the car-owner, the driver and the authorities of the foreign country he is visiting that he is sufficiently covered to comply with the laws of that country, whatever the conditions of his own insurance policy. Special offices have been set up in each country to deal with claims resulting from accidents involving holders of the "green card", and in this way the divergent interests of the authorities, the tourist industry and the motorist are satisfied.

Protection of the insurer has also called forth a restrictive attitude on the part of governments which cuts across the basic OECD principle that buyers of services shall be free to conclude transactions as they choose, at home or abroad. Among the reasons adduced for this attitude — reasons which are familiar in other industries and not peculiar to insurance — may be mentioned the desire in some cases to shield a young industry from foreign competition during a period of growth; or pressure from a powerful domestic industry; or the State itself having a hand in the business. Finally, there is the ever-present question of manifestation of independence or of prestige — of a young State desiring to set up a "national" insurance industry just as it has set up a national airline and a national shipping company.

In the long-term view, this attitude is bound to lead to

increased costs, to lack of balance in insurance transactions and, in fact, to harmful effects on the national interest which caused it to be invoked, and to complications in international markets. There is a tendency to forget that if insurance is to be profitable, it must have substantial resources and wide markets available to it.

As in trade and with other current invisibles, the *protection of foreign exchange reserves* was for many countries a valid and even an imperative reason for insisting on insurance being taken out at home during the 1930's and the early post-war years. Today only a few OECD Member countries still have balance-of-payments difficulties, and the only sector where some of the others can claim that they must maintain restriction on that account is life assurance, which could involve substantial movements of capital across their frontiers.

It is difficult to say whether design or accident made insurance restrictions grow up side by side with exchange restrictions. There are undoubtedly cases where the former flourished under cover of the latter and are tenaciously trying to perpetuate themselves now that that cover is disappearing. The exchange control mechanism was originally used to enforce both. It is to this day, even after the need to conserve foreign exchange has gone, the principle means by which regulations which forbid people to insure themselves abroad can most conveniently be enforced.

Future Objectives

The fruits of experience, and the discussions that have already taken place in international circles, demonstrate that a proper balance must be found between maximum protection of those insured who are really in need of it, and maximum freedom of choice for the responsible buyer of insurance. The importance of allowing maximum scope for the development of strong and effective national insurance industries in free competition with each other is equally apparent.

Already some progress in this direction has been made, thanks to the suppression of restrictions through the Code of Liberalisation of Current Invisible Operations: in matters affecting reinsurance and direct insurance of commercial goods in international trade, those concerned are free to insure abroad if they wish, although some countries maintain reservations in this respect.

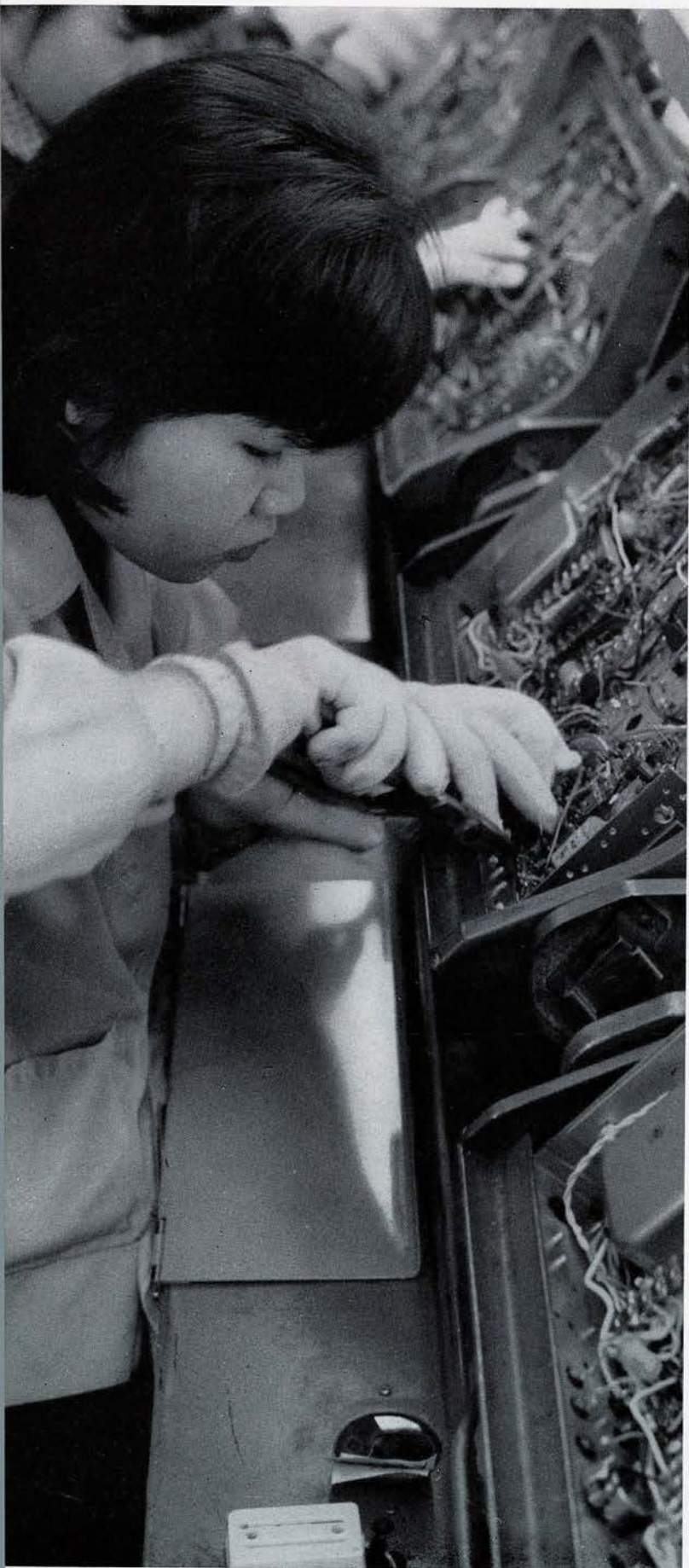
International contact between insurers has for long been widespread; there are few industries where international ramifications are more developed, whether in the case of direct insurance or of reinsurance. Under today's conditions, when integration of all kinds proceeds with ever-increasing momentum — despite the inevitable pauses — the insurance industry needs to work within national legal frameworks of approximately the same shape. This gives rise to knotty problems of civil, public, fiscal and commercial law, and of procedure. The OECD Insurance Committee is working towards their solution, though the process is not as rapid as could be desired; of all the problems affecting invisible transactions dealt with by the Organisation, those of international insurance business have proved among the most intractable.

JAPAN

*the
new
Member
of
OECD*

*In becoming a full
Member of the OECD,
Japan is formally
joining the community
of highly
industrialised nations
to which she is closely
linked by trade, by a
concern for the
less-developed countries
of the world and by
the fact of having
a similar political
pattern and structure
of production.*





Precision work : assembling television sets in a modern Japanese factory.

JAPANESE industrialisation began late by Western standards, but early by comparison with the rest of Asia — during the last quarter of the 19th century. It was initiated by a Westward-looking government which itself constructed textile mills and railways and built up a fleet.

Early development was heavily oriented toward the production of raw silk which in 1929 accounted for two-fifths of Japan's exports, but the emphasis changed after the Great Crash in which Japan's raw silk trade suffered greatly.

A period of rapid industrialisation began in 1931 after the Japanese Government had abandoned the gold standard. Japan made progress in just the years when many other more industrialised countries were languishing through a period of economic stagnation.

By 1938 Japan was already more industrialised than is usually thought to be the case. Manufacturing accounted for 28 per cent of her national income; she had diversified her textile production into cotton and rayon, woollens and worsteds, and had become an important manufacturer of chemicals and engineering goods. Her merchant marine was the world's third largest.

However, because population had been growing fast — from 60 to 69 million in the years 1925 to 1935 — because of heavy rearmament expenditure and because a considerable price inflation had taken place, the period did not yield much improvement in the standard of living or of real per capita income.

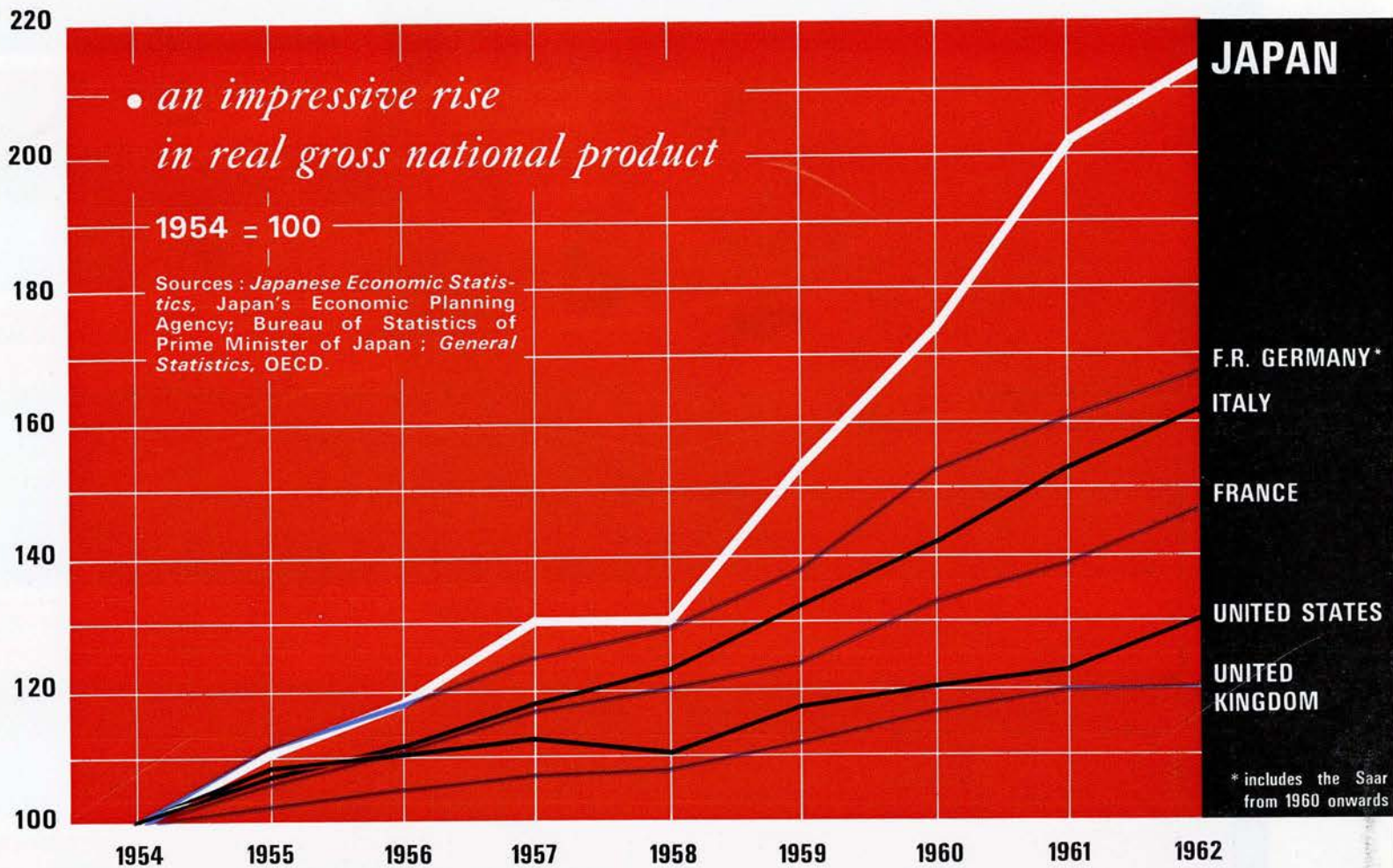


BEYOND THE POPULATION EXPLOSION

After the devastation of World War II, the Japanese economy was slow to start up again, but when the Korean War began in 1950, American procurement expenditure, accompanied by a change in occupation policy which permitted the growth of heavy industry, gave impetus to a new period of growth which, far from slowing down after that war was over, increased in intensity. From 1954 to 1962 the remarkable average growth rate of 10 per cent in real gross national product was sustained, among the highest in the world.

Equally striking, though life expectancy has increased by ten years since 1949, the birth rate has fallen so fast that net population growth is now at or below the rate prevailing in European countries. Moreover, inflationary pressures have until very recently been conspicuously absent with the result that there has

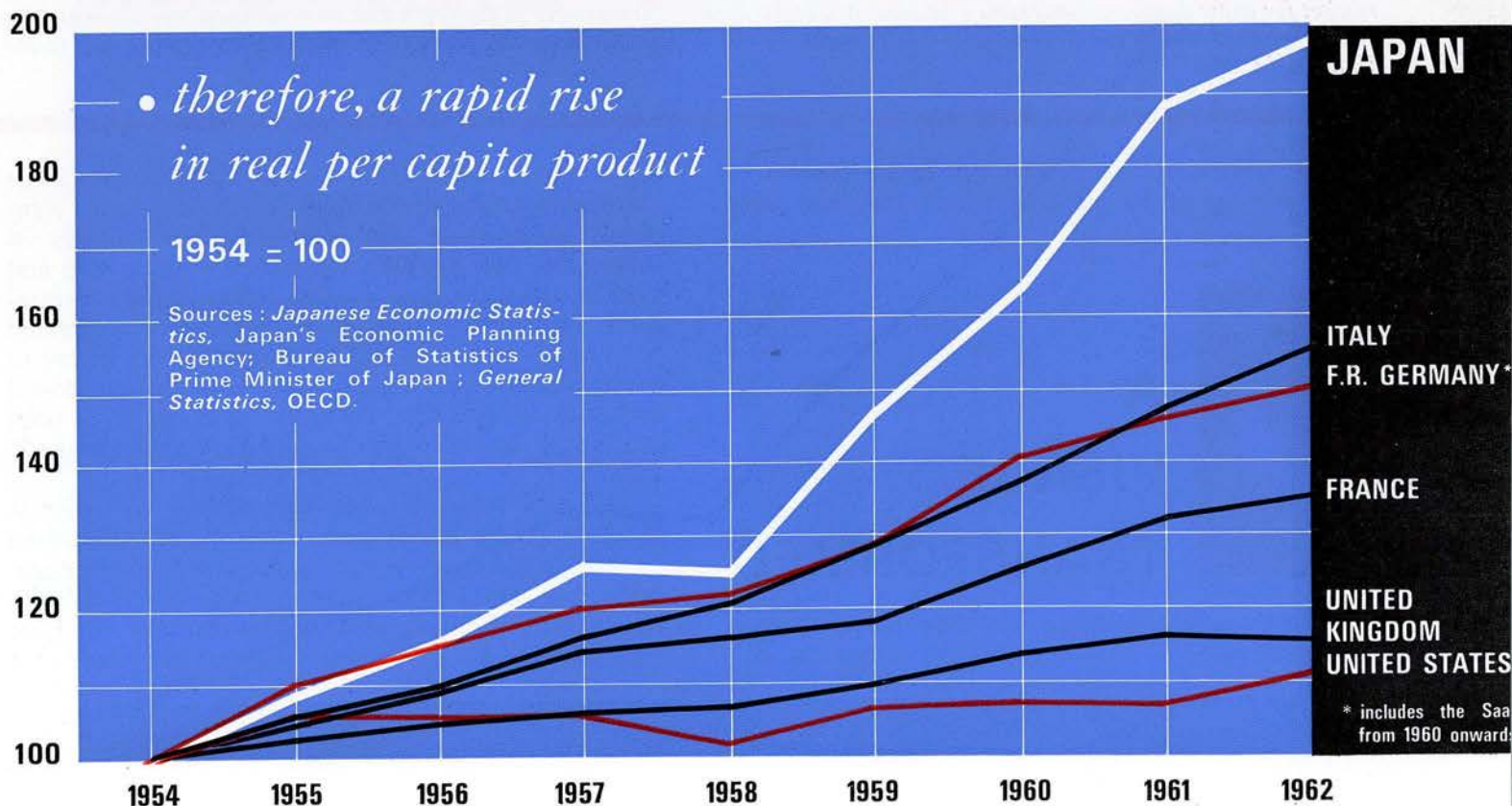
A STRIKING RATE OF ECONOMIC GROWTH

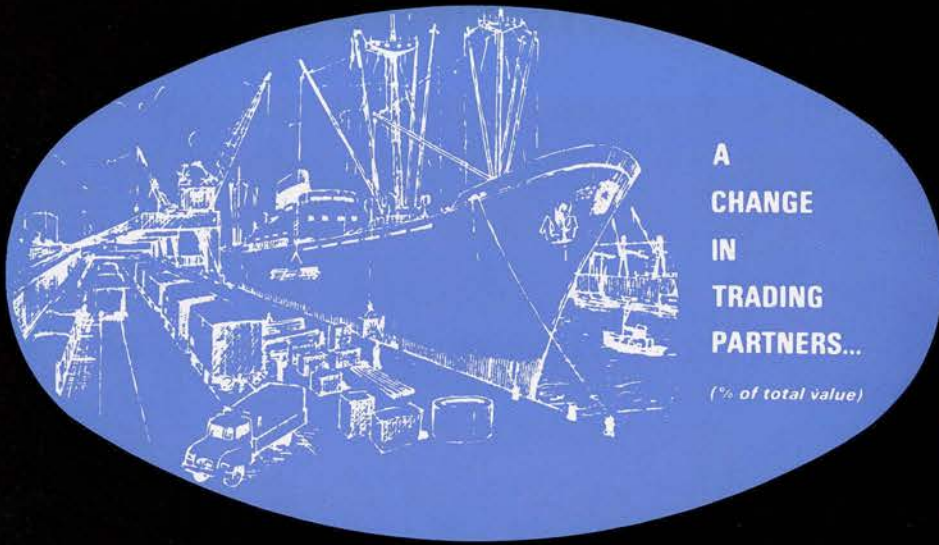


a relatively small growth in population

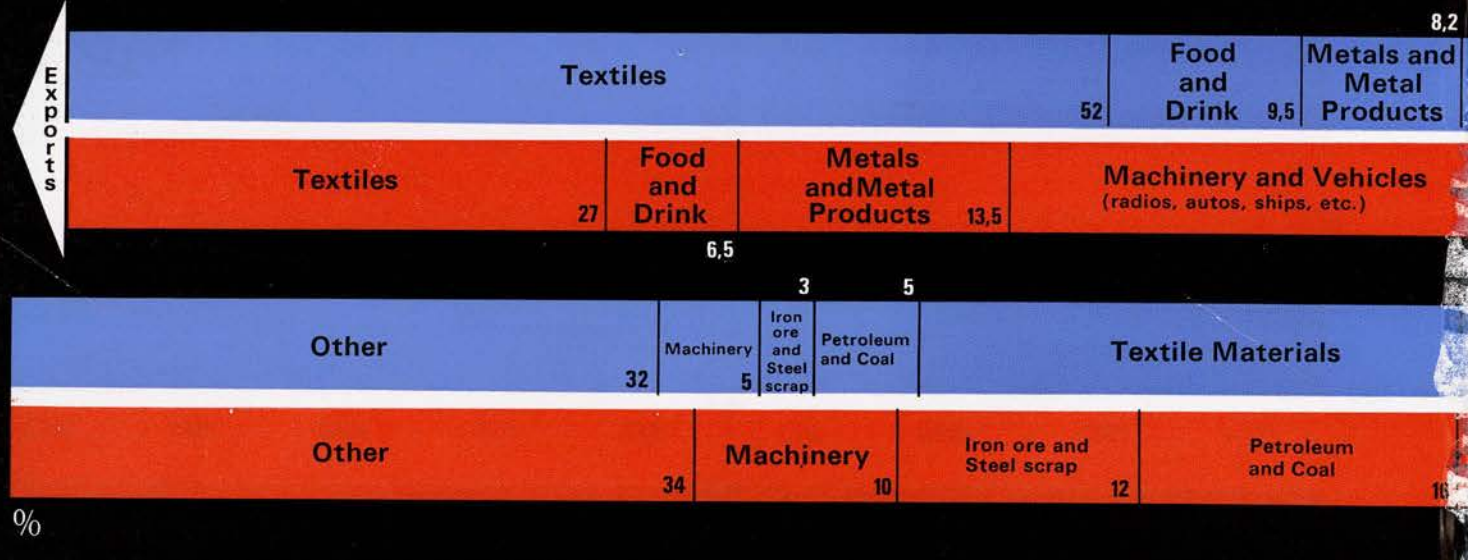
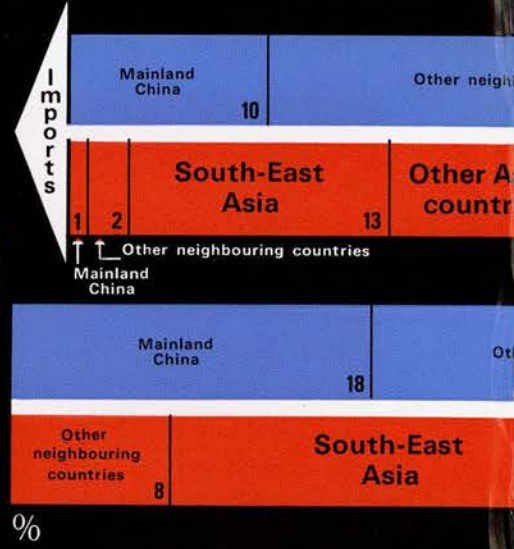
average yearly change 1954-1962

Source: United Nations Monthly Bulletin of Statistics





A CHANGE IN TRADING PARTNERS...
(% of total value)



1934-36 **1961**

Before the war, mainland China and other neighbouring countries were of the greatest importance to Japan both as an outlet for her exports and as a source of supply. After the war, Japan was faced with the necessity of completely re-orienting her trade. In the first stage, it was the United States that assumed the leading role in Japanese trade. Now Japanese planners feel that the United States market for many Japanese exports may be saturated and is looking increasingly to Europe, which they calculate has accounted for 51 per cent of the increase in world imports in recent years; to the developing countries, particularly in South-East Asia; and to the Soviet Union and China.

been a substantial rise in real per capita income — by an average of 8.9 per cent during the years 1954 to 1962.

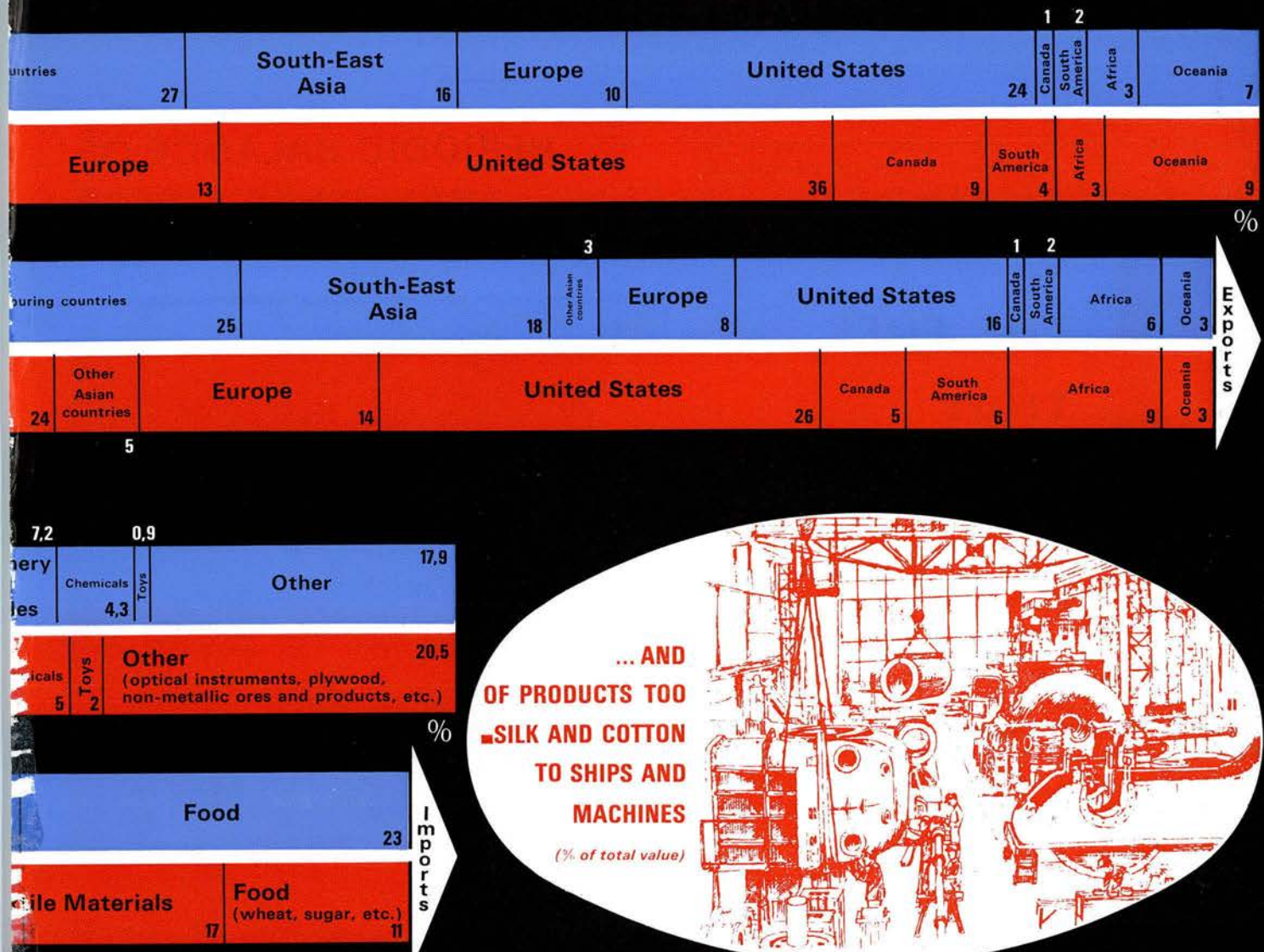


A VISAGE TRANSFORMED

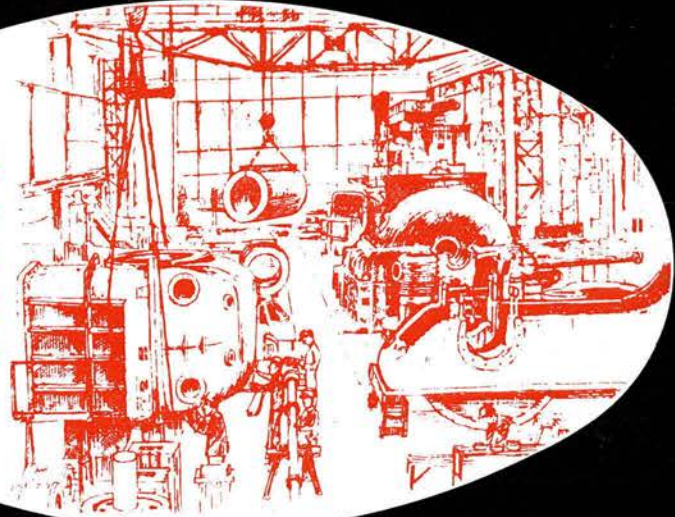
During the last decade a complete transformation has taken place in Japanese society. Industries into

which Japan had entered before the war have been completely changed, facilities vastly enlarged, completely modernised and geared to new sources of supply and new markets. A case in point is iron and steel in which the most modern techniques (e.g. continuous strip mills) have been introduced, integrated mills built, plants that had been located with an eye to the proximity of Manchurian raw materials abandoned in favour of new sites. Finally, processes have been introduced that make greater use of low grade domestic ores.

The new industries that have sprung up contrast vividly with the labour-intensive forms of production — textiles and toys — that characterised, even caricatured, pre-war Japan. Many of the new industries require large amounts of capital on the one hand, or high levels of technical competence on the other, or a



**... AND
OF PRODUCTS TOO
SILK AND COTTON
TO SHIPS AND
MACHINES**
(% of total value)



Source : *Economic Survey of Japan*, Japan's Economic Planning Agency.

Textiles, which provided the backbone of Japan's export trade before the war, have greatly diminished in relative importance. This is due in part to the change-over from silk and cotton to synthetics, but it is also the result of deliberate policy decisions; for Japanese planners have felt that less-developed countries would be moving into textiles and other labour-intensive types of production. They have tried to encourage the expansion of industries that require a high degree of technical proficiency and/or a heavy capital investment; goods that could be exported on a competitive basis to other industrialised countries and goods that could be used to build up the capital equipment of developing countries. The list of items that became major exports for the first time in 1960-61 shows the results of this kind of thinking. There are twelve in all: tape recorders, construction machinery, machine parts, batteries, electric gramophones, vacuum tubes, transistors, portable electrical appliances, motorbikes, tile bricks, carbon black and travelling goods.

combination of the two: transistors, computer parts, radio and television sets, motorbikes, cameras and other optical instruments, new kinds of chemicals, automobiles and tractors.

At the same time, the traditional labour-intensive forms of output have diminished in importance, partly as a matter of policy; for Japanese planners and government officials have felt that this type of production would more and more be taken over by the newly-developing nations.

There has been a revolution too in agriculture, which has increased the yield of farmlands almost enough to compensate for the rise in population. The national diet, moreover, has broadened, with greater accent on milk and meat, eggs and wheat and fruit.

Average animal protein consumption increased by more than 60 per cent between 1950 and 1962, from

17 to 27.3 grams per day, and there are other visible signs of an improvement in living standards. Young people are staying in school longer: the official school-leaving age has been increased by three years since the war to fifteen years, and less than half of those eligible actually leave at that age; about 10 per cent of the young people of college age are going on to college. People have more clothes than they used to and possess an impressive quantity of some consumer durables. Radio and television have penetrated into Japan to about the same extent as Western European countries: 91.2 per cent of urban families and 48.9 per cent of rural families had television sets in 1963. Seventy per cent of urban families have electric washing machines.

Plans for the future (a ten year plan was announced by the Economic Planning Agency in 1960) are to double national income in the decade of the Sixties

which would mean less rapid expansion than in the last decade but a high yearly average nonetheless, about 7 per cent a year in real terms.



THE FUEL THAT FEEDS

Japan's extraordinary growth record is certain to be among the principal topics that OECD economists and Member country delegations will study in the exchange of views and experiences scheduled to take place under the auspices of OECD's Economic Policy and Economic and Development Review Committees. Some of the elements in the experience of the last decade have already attracted world-wide attention.

- There has been a very high level of private investment — as high as 23 per cent of gross national product (for the year 1961). To some extent, particularly as regards large enterprises, investment has been helped by the Government through tax benefits to firms in the form of accelerated depreciation allowances and tax-exempt reserves (for retirement allowances, for price fluctuations, for special repairs and other purposes). But its main sources of finance have been, first, the rapidly growing profits, and, perhaps even more important, bank credits. Advances by the Bank of Japan to heavily dependent commercial banks allowed these in turn to provide industry not only with working capital but also with a substantial portion of the funds used for the purchase of plant and equipment. Almost 70 per cent of the total assets of a typical Japanese company is borrowed capital, whereas for the United Kingdom a more typical figure would be 50 and for the United States 30 per cent. This borrowing takes place despite what is, by Western standards, an extremely high interest-rate structure.

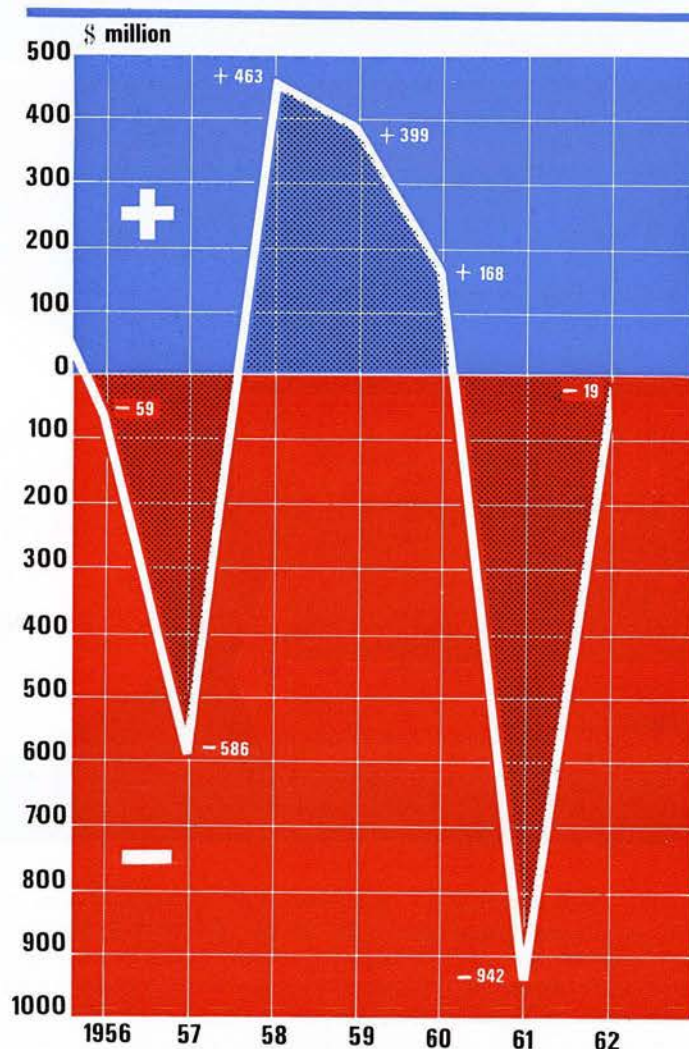
- Business enterprises have been eager to keep abreast of and to utilise the latest technological innovations.

- There has been available a ready supply of workers who are being carefully trained by their firms and by the educational system with its heavy technical emphasis. Wages, moreover, have through much of the period been low relative to those of other industrialised countries, though the actual difference is difficult to measure because a large portion of Japanese wages is paid in the form of fringe benefits — free housing, transportation, and large bonuses.

- The Government has been successful in using monetary policy to combat periodic balance of payments difficulties without bringing on a generalised deflation or a long-lasting contraction. The key to this success has been the subject of considerable debate among economists.

PERIODIC BALANCE OF PAYMENTS CRISES

Surplus or Deficit Goods and Services Account



Source : *International Financial Statistics*, International Monetary Fund.

The rise in imports and in payments for freight and merchandise insurance has outstripped the growth in exports several times during the recent boom. The Japanese Government has used monetary policy to counter such balance of payments difficulties.

- The flow of American funds in the form of procurement purchases continued at a high level for some years after the Korean War. The figure amounted to more than \$ 3 billion for the years 1952 through 1956, a sum equal to about a quarter of the value of Japan's imports of goods during this period.

Recent history gives, thus, a bright picture; but this does not mean that Japan has no problems, and the Japanese themselves are doing an impressive amount of pulse-taking. The principal problems spring from

the fact that Japan needs to import raw materials, and therefore the volume of exports places a sort of ceiling on her growth potential. Japan must expand her exports in order to continue growing.

But the competitiveness of Japanese exports in the past has depended to a great extent on factors whose future is somewhat clouded. Average wages remain lower than in other industrialised countries, but in some sectors such as steel-making and shipbuilding, the Japanese Ministry of Labour estimates that they are about equal to wages prevailing in the same industries in Italy and France. It may be expected that the gap will continue to narrow, if only because the work force in export industries is at present very young, and the principle that wages increase with age and length of service is firmly entrenched in the Japanese social system. Moreover, trade union strength is growing. At present some 35 per cent of paid employees are unionised.

Other costs may increase too. Until now, for example, most of the technology used has been imported from abroad, albeit with considerable local impro-

vements and adaptations. But Japanese firms are now finding it necessary to devote larger sums to costly research and development efforts.

As costs of present export products rise, it is expected that Japanese manufacturers will have to rationalise production and be prepared to switch to new products. If the necessary adjustments are to take place, however, a certain mobility of resources is requisite and some Japanese economists are concerned that this mobility may not be easy to come by because of certain traditional rigidities in the economy, e.g. a system of "lifetime employment" in which a man, just out of school, is hired for life.

The need for rationalisation and re-adjustment may in fact be imminent because of Japan's desire and need to fit into the community of industrialised nations as a full trading partner. Until now Japan's relations with many industrialised countries have been marked by mutual trade barriers and payments restrictions. As the barriers fall, some Japanese industries, e.g. automobiles and steel which have relatively high costs, may find the wind of competition stronger. To cite the

A ROLE IN ASSISTING DEVELOPING NATIONS 1962 Disbursements (Net)

		\$ million	%
OFFICIAL	OFFICIAL BILATERAL GRANTS (including reparations)	74.6	26.5
	BILATERAL LOANS (more than 5 years)	83.4	29.0
	CONTRIBUTIONS TO MULTILATERAL AGENCIES	7.2	2.5
PRIVATE	DIRECT INVESTMENT	68.4	24.0
	PORTFOLIO INVESTMENT AND OTHER PRIVATE CAPITAL	14.7	6.0
	GUARANTEED PRIVATE EXPORT CREDITS for more than 5 years	33.7	12.0
TOTAL		282.0	100.0

Source: *The Flow of Financial Resources to Developing Countries*, OECD.

Despite a relatively low per capita income, Japan ranks fifth among members of the Development Assistance Committee in the granting of official aid to less-developed countries and multilateral agencies (with a total of \$ 165 million) and sixth as to the volume of private investment (\$ 117 million).

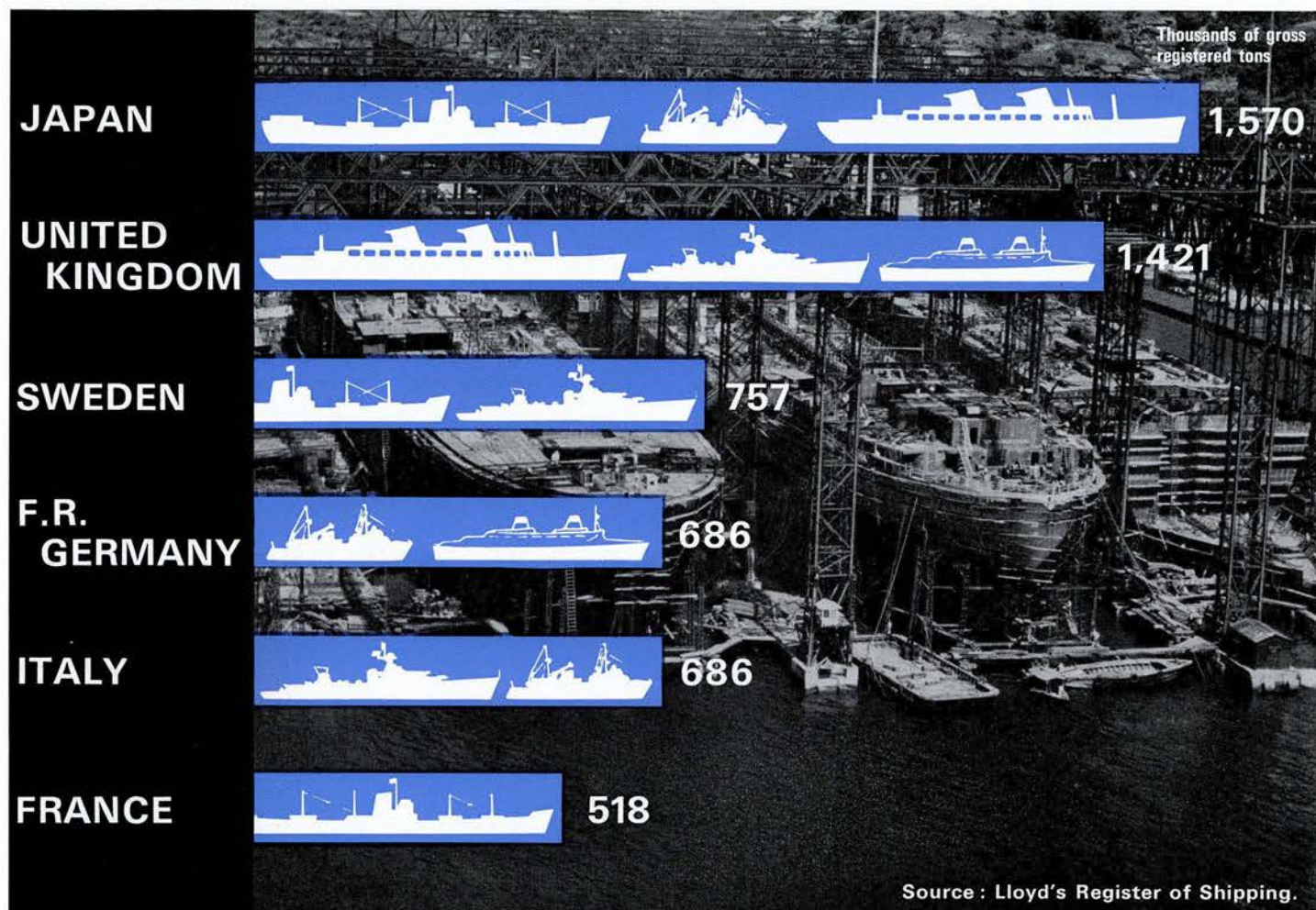
In the past few years, the largest portion of official grants has gone to Asian countries — primarily Burma, Indonesia, South Vietnam and the Philippines. These grants are, for the most part, given under reparations agreements but are used chiefly for development financing. Loans, on the other hand,

have been more evenly divided between Asia and Latin America, with India, Indonesia, Brazil and Argentina as principal recipients. Most official loans are made through the Export-Import Bank of Japan in conjunction with private capital.

Direct private investment has been concentrated chiefly in Asia, while the bulk of private export credits has been extended to Latin American countries. Japanese resources have played an important part in such recent projects as oil-field development in the Persian Gulf and construction of steel production facilities in Brazil.

THE BIGGEST SHIPBUILDER

Tonnage under construction, End, 1963



At the end of 1963, Japan had more ships under construction than any other country — 1.6 million gross registered tons. The United Kingdom was a close second with 1.4 million and Sweden came next. Most of the tonnage (70 per cent) was for export, but Japan has also been building up her fleet at a rapid rate. Tonnage under the Japanese flag increased 117 per cent between 1956 and 1962.

United Nations *Economic Survey of Asia and the Far East* for 1962, "Japan is in the position of a comparative newcomer and the question is how smoothly and to what extent the Japanese economy can be integrated in an expanding trade community of the industrial northern hemisphere".

Another problem confronting Japan is what her Economic Planning Agency has called a "serious lack of social overhead capital". In the process of growth, important elements of the economy's infrastructure have, so to speak, been left behind. There is an urgent need for new roads, houses, water and sewerage systems. Means must be found to provide these "unproductive" goods without overstraining the economy.

It must be added that there is a dichotomy between the modern, highly productive sector of the Japanese economy and the traditional sector, the latter being

characterised, up to now, by low wages and low productivity.

Possibilities for future growth remain very large; for despite her recent progress, Japan is still behind many other industrial countries as to living standards. Per capita product was only \$ 556 for the year 1962 or roughly half the average for OECD European countries. Prices, of course, are lower too, but there are some real differences; for example, passenger cars are owned by only one out of every 76 people as compared with almost one for every seven in France. This shows also the extent of trade opportunities with Japan for the West.

The period ahead will present challenging problems as Japan tries to consolidate her past growth and at the same time fit into the framework of world trade relations.

the problem of

LOW INCOMES IN AGRICULTURE

• *New Policies* • *A More Selective Approach*

Throughout the OECD area the farm population feels it is left behind in the process of economic growth. In other sectors of the community standards of living have been rising rapidly in recent years. In agriculture, too, incomes per head have generally risen as a result of an increase in the value of production together with a fairly rapid movement of manpower out of agriculture, but the improvement appears to have been insufficient to close the gap in income levels as between the farm and non-farm population.

Since the end of the Second World War the majority of OECD countries have undertaken to maintain farm incomes at a satisfactory level, and in the context of rising standards of living the guarantees given to the farm population have been widely interpreted as an assurance that it would share in this general improvement.

The agricultural income problem is however a complex one. The range of farm incomes is wide: some farmers obtain quite satisfactory returns from their farms, but in most countries the existence of a sizeable group of low-income producers pulls down the average for the sector. Little attempt has been made so far to identify these groups of low-income producers, or to examine the main causes for their weak economic situation, but every country's agricultural policy has been influenced by the alleged needs of these low-income farm groups.

A report approved by Ministers for Agriculture of OECD countries at their last meeting examines this problem and analyses the extent to which the various measures in force help low-income farmers and contribute towards an effective solution to the problem. The following article is based on this report.

The level of incomes in agriculture

In almost every country the range of farm incomes is very wide and the average income for the sector is of small value in judging the income position of the majority of farmers. The usual pattern is that a relatively small number of farms, benefiting from good management, large size of business, nearness to markets, favourable production conditions or other factors, obtain satisfactory incomes; but a

comparatively large number of farms, handicapped by poor management, small scale, fragmentation, adverse soil, topography, lack of capital or other factors, yield incomes which appear low and in some cases definitely inadequate by comparison with other groups in the country.

Some of the farm families which live on apparently low-income farms have other sources of income, in particular from part-time work in other occupations such as tourism, local industries, public works or handicrafts. Such supplementary incomes are in some cases very important and greatly exceed the income derived from the farm itself. The fact remains that in most countries a considerable number of families, living on non-viable farms and without access to any sizeable source of supplementary income, have standards of living well below the

average of the rest of the community. Moreover, many of these farm families earn less than the remuneration obtained by a full-time agricultural worker.

Main causes of low incomes

The basic factors which cause incomes among certain groups of farms to remain low under present or foreseeable price-cost relationships are the structure of farms, their location and the personal characteristics of the farmers, in particular their age and standard of management. The most serious problems usually arise when several of these factors are combined, as in the case of small and poorly-managed farms located in backward rural areas with unfavourable natural conditions.

The existence in many countries of a large number of small farms, very often seriously fragmented, is a consequence of various historical factors. In several Western European countries a farm structure, based largely on peasant agriculture, was already in existence in the period succeeding feudal times, and since then the consequence of traditional practices and laws of inheritance has often been to maintain many small farms and even to divide them into still smaller units.

The movement of labour out of agriculture has been the main factor working in the opposite direction, but this movement has in the past concerned in most countries agricultural workers and the younger members of farm families rather than the farmers themselves. Farmers are attached to their farms as a dwelling as well as a place of work and in many cases have difficulty in re-adapting themselves to new work. But in some countries and regions, movement out of agriculture has also been limited by inadequate opportunities for employment in other sectors.

On many small farms the labour force, consisting largely or even exclusively of the farmer himself and his family, is rather inflexible in relation to its available land resources; under-employment is widespread, the labour force on such farms being fully utilised only during certain seasons. This unfavourable ratio of labour to land appears as a basic difficulty of many small farms, accounting for the low returns which can be obtained. Moreover the smaller farms have relatively little opportunity to replace labour by capital, and may thus be unable to take full advantage of technological innovations, which in recent years have tended to stress the substitution of machinery for manual labour. If the small farmer is tempted to invest in new machinery it may be under-utilised and fail to be effective; on the other hand, if he does not change his techniques, his standard of living will fall increasingly below that of his competitors.

In almost every country it is found that in some regions average farm incomes are particularly low. This can be attributed either to the pressure of the

farm population relative to the other resources in the area or to the economic environment of the region. The main obstacle to an appropriate long-term adjustment seems to arise when the overall economy of the region is backward, with inadequate markets and employment possibilities. When a new job can be taken on only if the individual concerned is willing to move out of his district, difficult problems of adaptation are involved. Those who do move are usually the younger and more dynamic elements, and the consequence is an increase in the average age of the remaining farm population. This ageing of an entire rural community poses an acute social problem. The fact that at the present time many low-income farmers are old has an important implication: as these farmers die or retire, the farm structure may to some extent be improved.

Trends

In almost all Member countries the total farm population is falling and with it (though usually less rapidly) the total number of farms. The decline is usually greatest among the smallest size groups. As a result the number of farm families with incomes below a given absolute level is probably diminishing; this however does not necessarily imply a fall in the proportion of farm families earning incomes which appear low in relation to rising incomes in agriculture as a whole as well as in other sectors. It appears moreover that the most rapid fall in the number of farms is taking place in areas where there is a high demand for labour for non-agricultural employment (where agriculture is often relatively prosperous) rather than in backward rural areas, so that it is doubtful whether regional income disparities are diminishing.

Government action

Until comparatively recently the assistance provided by governments to agriculture was given to all farms without distinction and in a uniform way, and there was not much attempt to take selective action to improve the situation in the lowest income groups. A first step in this direction is the establishment of reasonably precise concepts of what constitutes a viable farm. It is only after this concept has been clarified that reasonable policies can be carried out to preserve the viable farms; to raise to the level of viability those which are not viable at present but are capable of becoming so; or to deal appropriately with that group of farms which, regardless of the assistance the community is prepared to offer them, will never reach a satisfactory standard. The problems of this latter group of farms may be a matter for social rather than for agricultural policy.

PERCENTAGE CHANGE IN THE ACTIVE AGRICULTURAL POPULATION

Country	Period	Percentage change in active agric. population	Active agric. pop. as % of total act. pop. at end of period
AUSTRIA (1)	1951-1961	— 30	23
BELGIUM	1950-1962	— 39 (2)	9
CANADA	1950-1960	— 34	11
DENMARK	1950-1961	— 25	18 (3)
FINLAND	1950-1960	— 24	29
FRANCE (4)	1954-1962	— 25	20
GERMANY	1950-1960	— 35 (5)	14
GREECE	1961	n. a.	53 (11)
ICELAND (6)	1950-1960	— 25	17
IRELAND	1950-1960	— 20 (7)	36 (7)
ITALY	1951-1961	— 28	29
LUXEMBOURG (4)	1947-1962	— 36	15
NETHERLANDS	1947-1960	— 27 (8)	10 (9)
NORWAY	1950-1961	— 25	17
PORTUGAL	1950-1960	— 9	40
SPAIN (1)	1950-1960	— 9	42
SWEDEN (1)	1950-1960	— 34	11
SWITZERLAND (1)	1950-1960	— 18	12
TURKEY	1950-1960	+ 20 (10)	71 (10)
UNITED KINGDOM(1)	1950-1960	— 16	4 (11)
UNITED STATES	1950-1961	— 27	8
YUGOSLAVIA (5)	1956-1961	— 10	57

- Notes - (1) Including employment in forestry, hunting and fishing.
 (2) Expressed in full-time labour units.
 (3) Share of total active population in agriculture, market gardening, forestry, etc.
 (4) Including employment in forestry.
 (5) Regular workers only.
 (6) Active population of 15 years and over.
 (7) Including employment in forestry and fishing.
 (8) Regular male workers only.
 (9) Female workers included.
 (10) Covers total rural population and share of this population group in the total population.
 (11) Including unemployed.

Associated with the concept of viability is that of the family farm. This type of farm appears to be at the centre of Member countries' agricultural policies, but the idea of a family farm has been changing in recent years. The term no longer applies to the peasant type of agriculture which still exists in some parts of Member countries, but to the sound operations that can be carried out by one or two families devoting full time to agriculture. This notion has, in recent years, given rise to the definition in official agricultural policies of the objectives to be pursued: many of the countries aim now at creating farms which can be operated by one or two full-time labour units.

In defining the level of viability it is necessary to take into account possible future developments within and without the agricultural sector; with rising per capita incomes in the other sectors and with improved technology in agriculture, the size of the business which will allow farmers to share in the general prosperity will have constantly to increase. The gradual reduction of the agricultural population is generally admitted to be essential for allowing those who remain in farming to share in the general prosperity.

Various measures which Member governments have adopted in recent years to cope with the problem of low-income farms have sprung from the necessity of creating these viable family farms.

Raising the Efficiency of Existing Farms

Most governments take a variety of steps to raise farm efficiency: the provision of loans and grants, financial assistance through co-operatives, advisory work and farm education backed by economic and technical research are the main methods employed. Also of importance are public services such as electricity and water supply, public works such as irrigation, drainage and flood control which play a vital role in many countries. Although most of these programmes are open to all farmers, they are of particular importance to low-income groups; in many cases the assistance granted by the public authorities is associated with certain minimum requirements which oblige the beneficiaries of this assistance to make a special effort to reorganise their farming operations.

Co-operation between small enterprises is at least a partial solution to the problems encountered by the low-income groups. Co-operative action may cover all fields of activity such as buying, selling and processing, as well as advisory work. But there is in every country a group of farms which can never become viable; so measures affecting the *external* farm structure also appear essential.

continued on page 30

External Farm Structure

The reform of the farm structure is a long-term undertaking in that it necessitates a shift of manpower from agriculture to other occupations. This shift of manpower out of agriculture can only take place gradually and requires a rate of economic growth providing for sufficient employment possibilities in other occupations.

Among the measures which improve the farm structure is the consolidation of fragmented holdings. Consolidation eliminates much loss of time and permits more rational exploitation. However if the total size of the farm is insufficient, consolidation alone is not enough: its immediate effect may simply be to enable the farmer to achieve the same result in much less time. In some countries it has been found that the labour-saving effect of consolidation has been sufficient to induce farmers to take part-time jobs off the farm. In general, however, consolidation schemes are fully justified only if the resulting units can provide an adequate living; they therefore need to be combined with enlargement programmes. In most of the countries concerned this is the case, and the work of consolidation and enlargement is carried out by the same agency.

Enlargement through the amalgamation of farms is a continuous process as holdings become vacant on the death of their occupiers and are purchased or rented by other farmers in the neighbourhood. But this process, however important, is unlikely to be sufficient. Many occupiers of low-income farms may not have the opportunity and lack the capital to acquire additional land. This may be remedied to some extent by credit facilities to assist such farmers in enlarging their holdings, and various schemes exist upon which farmers can draw. Such assistance, however, may not be sufficient and a greater degree of official intervention may be necessary, with the object of ensuring that land which becomes vacant is effectively used to create economic holdings. Several OECD Member countries have already adopted new legislation to deal with this matter. In some cases respect for the rights of property has proved to be an obstacle to the improvement of the farm structure.

The recipients of land redistributed under amalgamation programmes normally require capital both for the purchase price and for the equipment of the enlarged farm. Apart from the general credit schemes already mentioned, a number of countries now provide special facilities in this connection.

A policy of structural reform obviously cannot be carried out without regard to the human problems involved. Provision must be made for the low-income farmers whose farms have no chance of becoming viable and should therefore cease to exist

as independent full-time units. Any measures which encourage farmers concerned to give up their farming activity will at the same time increase the supply of land available for enlarging other farms. Since a high proportion of low-income farms are operated by elderly farmers, often without successors, one of the most promising courses lies in granting pensions, sufficient in amount to be an attractive alternative to continued farming. In most countries farmers are eligible for general old-age pensions schemes, but this does not necessarily induce them to give up their land. There seems therefore to be a strong case for granting additional pensions, conditional upon the farmer making most of his land available for use by other farmers (this need not prevent the farmer continuing to live in the farmhouse and keeping sufficient land to supply his domestic needs). A few countries have introduced schemes of this kind in recent years.

Another series of measures is designed to assist younger farmers or members of farm families to move to other occupations. The basic necessity in this connection is an adequate level of general education, and in those countries where rural education has appeared insufficient, steps are being taken to improve it. Further education of a technical nature in the countryside has in the past mainly concerned training for agricultural occupations, thus tending to discourage mobility out of agriculture rather than to encourage it; in several countries, however, training in non-farm occupations is being made more easily available to rural youth.

Price Support Measures

Price support has been used in many countries as the principal means of raising farm incomes. It has been implemented through import restrictions, price-fixing, support-buying by official agencies, product subsidies and other measures.

The needs of low-income farm groups have probably influenced price support policy, causing a higher degree of support to be given than might otherwise have been considered necessary. Though price support normally provides some immediate benefit to low-income farmers, these farmers probably benefit much less than other farm groups. As low incomes are related in the first instance to a small size of business, low-income farms tend to produce relatively little and to consume a comparatively high proportion of what they produce. A given increase in the price of their products therefore has proportionately less effect on their total real income than is the case with larger farms.

On the whole, uniform price supports probably give only a limited benefit to the low-income farmer, and certainly do nothing to reduce income disparities within the farm sector. Further, the emphasis placed on price supports in the general context of agricultural policy may hinder a permanent solution of the low-income problem. Attention is diverted



Mechanisation can save manpower and increase output economically. But to get full value from mechanisation an increase in the scale of farm business is essential.

from more selective programmes, and the high cost of price support programmes makes it difficult to obtain sufficient finance for other measures, even though a relatively small reduction in the degree of price support, if used to increase government expenditure on programmes of structural reform, could probably make a far more important contribution to welfare.

Price supports have an important role in preventing excessive price falls and in providing an assurance upon which farmers can build their plans. The presence of moderate price guarantees may be essential to carrying out programmes of structural reform. Nevertheless, in view of the relatively small benefit offered by price supports to those farm groups who most need to undergo a process of

adaptation, it cannot be argued that high price supports are essential during a period of transition to a more soundly-based farm structure.

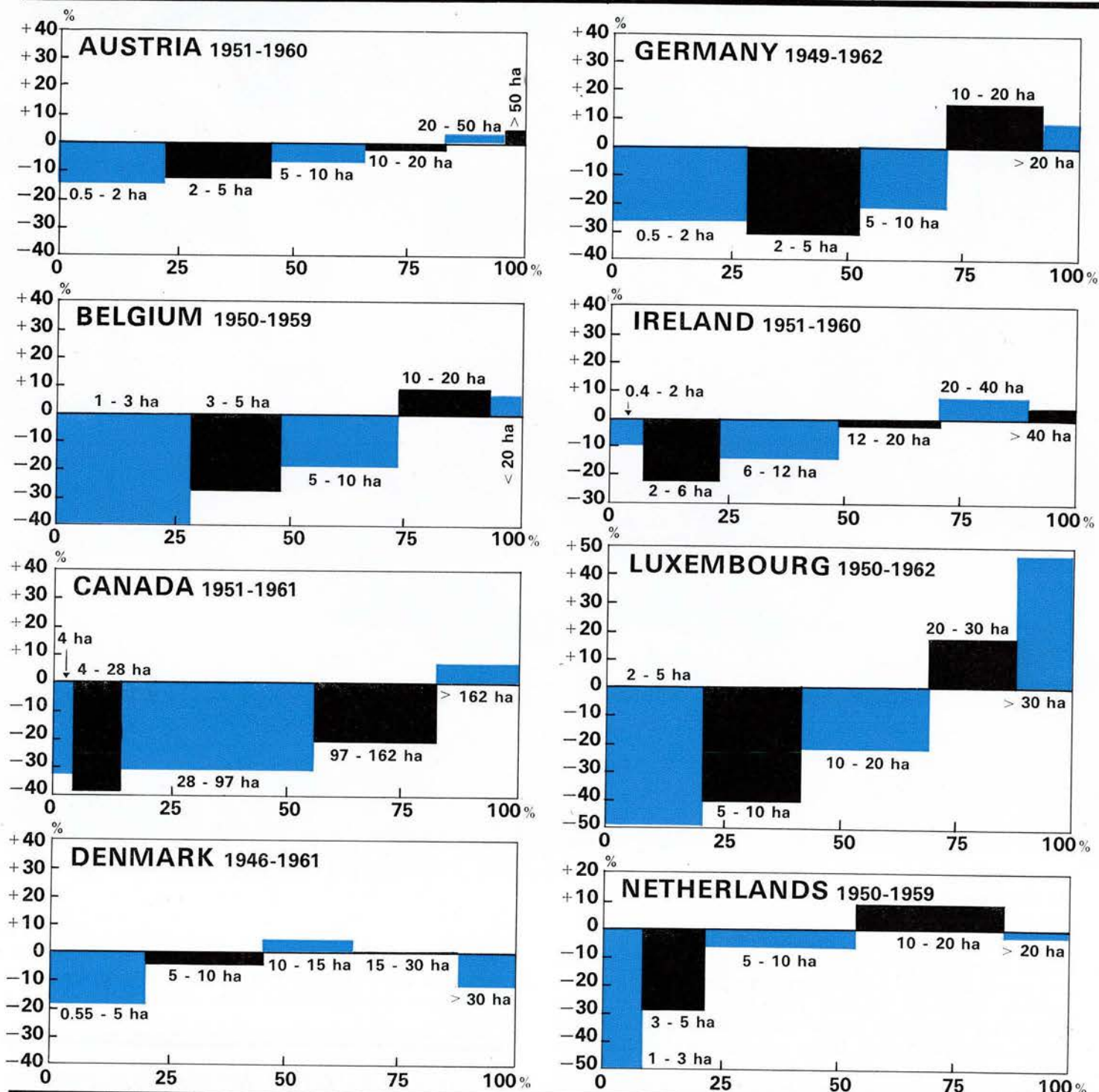
Regional Development Programmes

Low-income farms tend to be concentrated in certain regions of each country. In these regions, however, unfavourable natural conditions alone do not account for the problems which arise; a major

CHANGES AND DISTRIBUTION OF FARM HOLDINGS IN MEMBER COUNTRIES

(1 hectare (ha) = 2.47 acres)

(The height of columns represents the percentage decrease period concerned.)

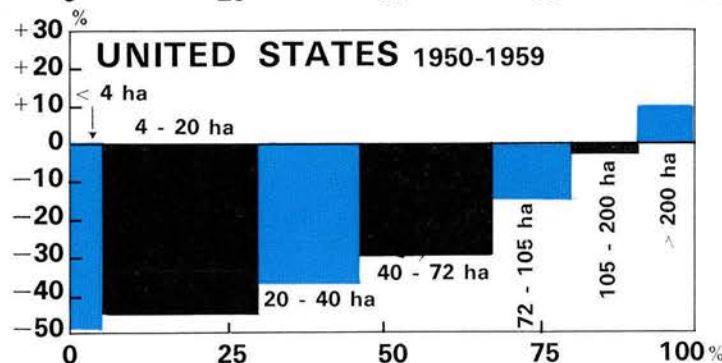
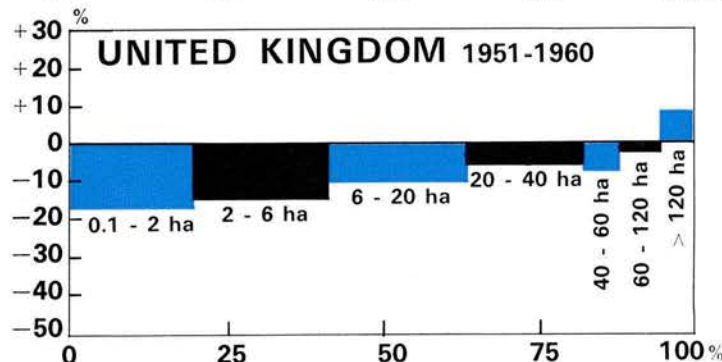
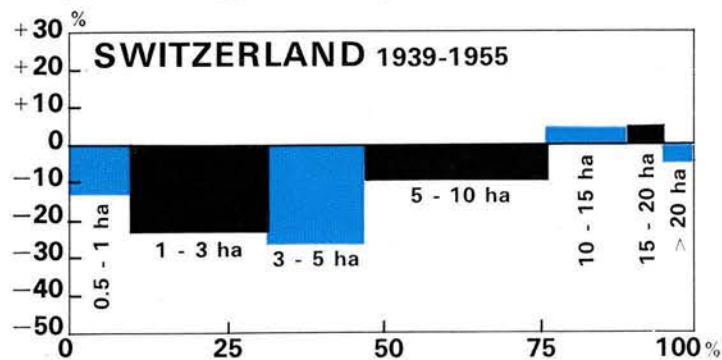
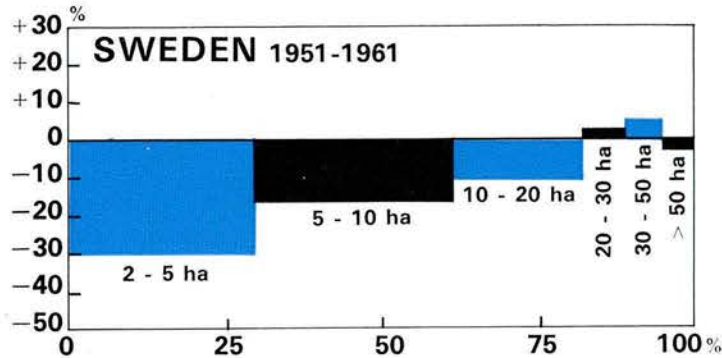


factor responsible for the low incomes is often the general economic backwardness of the region which has impeded sufficient adaptation in farming structure and methods. In such cases the cure for the problems of agriculture appears to lie not only in action affecting agriculture directly but also in

the overall economic development of the region. Adverse natural conditions may be countered through irrigation, flood control, drainage, afforestation and other measures. The improvement of the economic "infrastructure" — the construction of roads, the provision of electricity, water and other

SIZE GROUPS IN SELECTED

crease in the number of holdings of that size during the width of columns corresponds to the percentage distribution of holdings of that size at the end of the period concerned).



services — is a pre-condition for raising agricultural efficiency. Development of the non-farm sector, through the installation of new industries and services, the promotion of tourism, etc., benefits agriculture in various ways: the local market for farm produce is expanded, opportunities for part-time

employment are created, and permanent transfers to other occupations facilitated; the entire outlook and educational standard of the farm community may thereby be changed.

The execution of a programme of regional development does not mean that measures to improve the farm structure in the regions concerned can be neglected. Many of the farms in low-income regions seem unlikely to become viable with any foreseeable improvement in their environment, and in the first instance a reorganisation in the direction of fewer but bigger farms will be necessary. There may however be reasons which lead governments to discourage a movement out of agriculture in these regions: these reasons may be related to agriculture (for example in order to ensure suitable land use), but they may also be of a social character in that the farm population is thought an important element in the nation as a whole, or economic, in that the maintenance of a sufficient population appears necessary to assure the provision of tourist and other services.

In the latter case, some of the farmers in the region may be able to supplement their incomes from part-time work; nevertheless, if the number of farms is maintained approximately unchanged, many of them will remain permanently dependent on official support. The cost of such support should then be regarded as a consequence of social or economic policy rather than as part of a purely agricultural programme.

Conclusions

On many farms the size of business is inadequate to support a farm family; the amount of the available labour force is excessive in relation to the other resources and consequently is often underemployed. For some of these farms, greater efficiency and more intensive production may offer a means of raising their incomes. In the long run, however, it appears essential that the number of farms and the number of persons working on farms should be reduced, thus raising the average size of farm business.

The solution of the low-income farm problem thus involves the absorption into other sectors of labour which is presently under-employed and therefore underpaid in agriculture. The ability of the other sectors to absorb this manpower is therefore an essential factor, and requires appropriate policies.

Over the last ten or twenty years, many different approaches have been used to assist low-income groups in agriculture. Only recently have governments begun to adopt programmes which are guided by the same preoccupations and a similar philosophy: to ensure a decent standard of living for all farmers, and to reduce the dependence of the agricultural sector on continuous support by the community. Structural adjustments in the sector are accepted as necessary. But these adjustments must be promoted in close connection with developments in other sectors, and not in isolation from them.

OIL ■ fuel ■ for ■ growth

As the most important single product in world trade, oil provides the focal point for a vast network of commercial relations — between developed and less-developed nations and between developed countries themselves. All the Member nations of OECD are concerned with oil as consumers; some play other roles as well : as producers, transporters, refiners, distributors or as the seat of international companies engaging in all of these functions. Under the auspices of OECD a Special Committee for Oil functions as a forum for the discussion by Member governments of problems and policies relating to oil. This Committee has just published a comprehensive report called " Oil Today (1964) " which reviews the current world oil situation and gives a synthesis of the views of the OECD Member governments.

Oil has been an important source of the power behind the European economic boom of the last decade : it has provided almost two-thirds of the increase in energy required to sustain the high rate of growth. In the United States, where oil is plentiful, it has long been the largest single source of energy. For European countries, however, the use of oil has gathered pace more recently — helped, among other things, by the exploitation of new discoveries in Libya and Algeria just across the Mediterranean; the construction of huge tankers capable of carrying oil at low cost; new, more efficient refining techniques and the development of long-distance pipelines from the coast to inland refineries.

At the same time, the coal industry has been faced with many difficulties for which short-term solutions are not easy to find; the contribution of nuclear power and natural gas, in spite of recent encouraging developments in both fields, is

considered likely to be relatively small in the immediate future.

The dependence of OECD European countries on oil, already very substantial, is likely then to increase in the years ahead; during the last decade, the share of oil has risen from less than a fifth to 40 per cent of total energy consumption. It may well be 50 per cent by 1970.

THE WELLS ARE ABROAD

Since European OECD countries are not large oil producers, their switch to oil has also been a change from domestically supplied energy to imports : all but 6.6 per cent of the oil consumed in OECD European countries in 1962 came from abroad. This is in striking contrast with OECD Members in North America, the largest oil-producing area in the world, where imports currently furnish less than a quarter of the total

supply. Even at this level, however, North America imports roughly half as much oil as European OECD countries.

The bulk of the oil being imported by OECD countries comes from developing regions. In 1961 oil purchases from these areas totalled \$6 billion; and oil exports to OECD countries accounted for 27 per cent of the total exports of the developing areas to OECD Member countries. For North America the most important source of imports by far is the Western Hemisphere, chiefly Venezuela; for Europe it is the Middle East.

European imports from the Middle East have grown steadily, but their relative importance is declining as other sources of supply open up. In 1962, eleven per cent of Europe's total oil consumption came from Africa, mainly Algeria and Libya, where twenty companies and consortia have brought discoveries made as recently as 1959 to market in record time. Another 7 per cent comes from the U.S.S.R. and other Eastern European countries, which virtually doubled their sales to OECD European countries during the years 1959 to 1962.

Imports from the Western Hemisphere, chiefly Venezuela and the Netherlands Antilles, occupy a somewhat special position, providing as they do return cargo for tankers which deliver Middle Eastern crude oil to North America; these crudes are in general more expensive but are complementary to those obtained by European buyers from other sources.

OIL TOMORROW

Growing dependence on oil has caused European nations to ask themselves some probing questions, first as to the physical adequacy of future supplies. If consumption grows as it has in the past, reserves which are at present known and can be profitably tapped by existing techniques could be exhausted within 17 years. Nevertheless, the OECD Special Committee for Oil judges that there is no reason to fear the physical exhaustion of oil resources, at least within the period for which reasonably accurate forecasts can be made. In the past, proven reserves have always grown at least as fast as consumption.

One likely future source of supply is the oil embedded in tar sands and shale for which mining techniques are approaching the development stage. Present estimates of oil potentially available from oil shale alone are more than five times larger than present proven reserves. The Athabaska tar sands in Canada also offer a large potential for hydrocarbon fuel production. In addition there is the possibility of exploiting offshore deposits. More than twenty companies are at present investigating or contemplating investigation of the North Sea area. It has long been realised that much of the continental shelf throughout the world is likely to cover oil or gas deposits, but this investigation is the first on any considerable scale in Europe.

European users also have a direct concern in the international flow of oil supplies. This highly industrialised area, in which energy require-

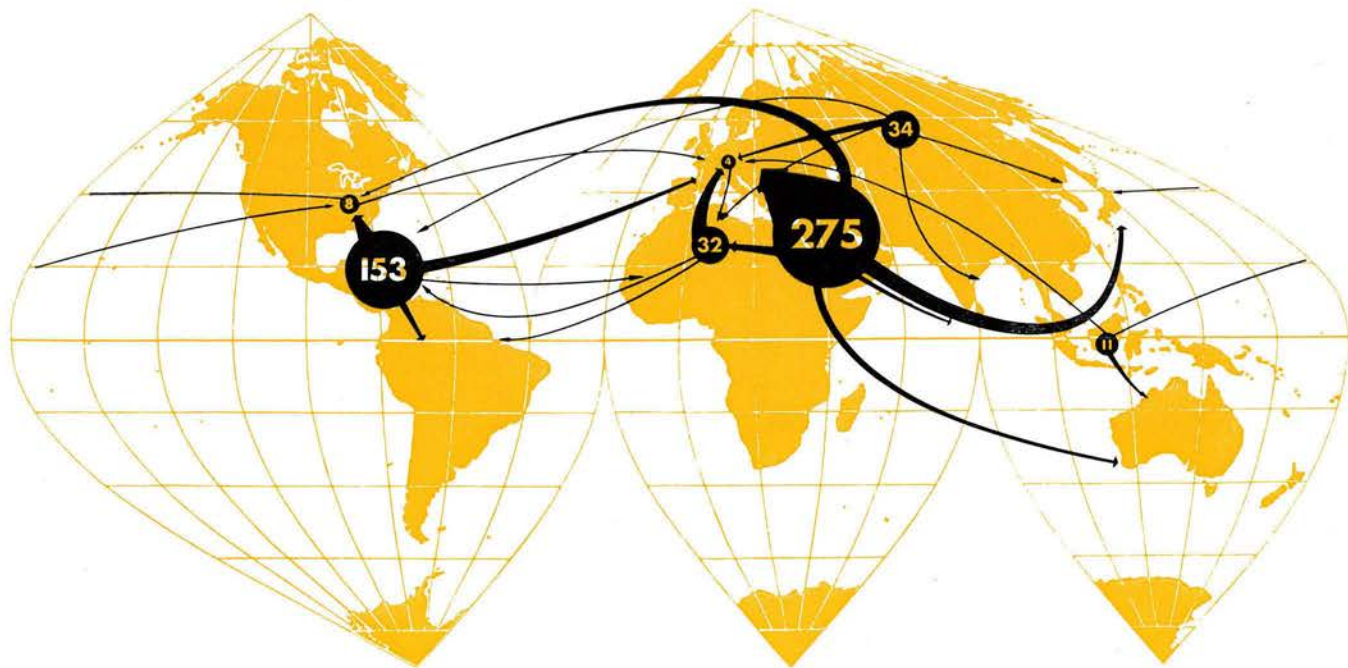
ments for industrial growth are largely being met by oil, is an oil deficit area; it is therefore increasingly concerned with developments outside the area which could affect the smooth flow of oil. The extent of its dependence for its oil supplies on other parts of the world, and the possible effects of the interruption of oil supplies from these regions, have come under study, and governments have been concerned with safeguarding their economies from such disruptive effects.

One safeguard is the diversification of oil supply, for example, the recent discoveries in nearby North Africa. Another is the existence of a reserve production capacity; thirdly, Member countries have undertaken a programme of stockpiling as recommended by the Council of OECD in July 1962. At present, the Special Committee for Oil judges that a great many contingencies involving the dislocation of Europe's

oil supplies could be met without too serious effects on the economy.

One further consideration will determine the extent to which oil supplies will be forthcoming in the future. It is an economic one. Oil requires one of the highest investments of any industry. During the decade that ended in 1962, capital and exploration expenditures for oil outside the Sino-Soviet area came to more than \$ 100 billion. For the coming decade, total capital requirements of up to \$ 158 billion more will be needed according to the Committee's estimates. Traditionally, a very large portion of the investment funds — roughly 90 per cent during the last decade — has been provided by the oil companies out of their own resources. The oil industry can only continue to provide so much of the investment required to meet the growing demand for oil if it is able to obtain a reasonable return on its capital.

MAIN INTERNATIONAL MOVEMENTS FROM MAJOR OIL PRODUCING CENTRES 1962 (Crude Oil and Products) (million tons).



The bulk of the oil that enters into world trade comes from the Middle East of which a great part is sold in OECD Europe. Second largest source of exports is the Caribbean, principally Venezuela and the Netherlands Antilles. The principal market for these countries is the U.S., followed by OECD Europe. In 1962, 34 million tons of oil were sold by the U.S.S.R. and other Eastern European Countries to customers outside the area. Africa exported only slightly less, 32 million tons, virtually all of which was purchased by OECD European Member countries.

RESOURCES OF SCIENTIFIC AND TECHNICAL PERSONNEL



in the oecd area

There seems to be a clear need in many Member countries for a closer coordination of educational policies with the more general policies aiming at economic growth and increased welfare. This appears from an International Survey on the demand for and supply of scientific and technical personnel made by OECD and published recently. Kjell Eide, Director of the Secretariat for Planning of Education and Research recently established by the Norwegian Government, contributed this article. Before Mr. Eide took over this post, he was a member of the OECD Secretariat directly concerned with the preparation of the Statistical Report on the Survey.

The policies of Western countries in using education as an instrument for economic growth and increased general welfare vary strongly from country to country. Around 1950 between 2 and 3 per cent of an age-group of youngsters found their way to a university degree in most Western European countries with developed economies. By 1970 some countries, such as France and Sweden, envisage this percentage to be 7 to 8 per cent, and in the case of Yugoslavia the percentage of university graduates in an age group is expected to exceed 10 by the end of the present decade. Other countries seem to be content with maintaining during the 1960's the level of university graduation achieved in the early 1960's.

The production of qualified manpower is only one — although a very important one — among many factors creating economic and social progress ; consequently there is no *a priori* basis for judging the efforts of different countries in this direction by their allocation to this factor alone. The question still remains however whether such a wide variety of policies in this field is likely to reflect in each individual country an optimal solution to the problem of allocating resources to education. Are certain countries over-investing in education or is this instrument for progress being neglected by certain other countries ?

The Third International Survey of Scientific and Technical Personnel (1) provides no direct answer to this question. The fact that the Member country with the greatest economic performance — the United States — at the same time shows by far the most striking educational efforts — 21 per cent of an age-group graduating from universities by 1970 — may be an indication in this direction but does not provide conclusive evidence to this effect. Nor does the correlation that can be found in general between gross national income and educational efforts in OECD Member countries suggest the final answer to the question of what might be the optimal resource allocation to education in individual Member countries.

The survey findings highlight however a number of policy issues related to the question of resource allocation, a few of which are indicated below.

General secondary education is in all Member countries the dominant recruitment basis for higher education. The functions of general secondary education within the educational system differ however from country to country. While in the larger European countries, Italy, France, Germany and the United Kingdom, more than 80 per cent of secondary school graduates qualified for admission to higher education actually enter this higher stage of the educational system, this proportion is only 50 per cent in the United States and even lower in some other European Member countries. In the former countries, preparation and selection for higher education is thus potentially making the secondary level the main bottle-neck for the expansion of university training. In the other countries general secondary education has a much wider set of functions providing at the same time a much broader basis for further expansion of higher education.

(1) Recently published by the OECD under the title "*Resources of Scientific and Technical Personnel in the OECD Area.*"

Flow through higher education

The chances that new entrants to higher education will complete their studies also vary considerably from country to country. In the United Kingdom about 90 per cent of new entrants obtain a first degree; in a number of other countries, including the United States, only 50 to 60 per cent of university entrants obtain their first degree. Although the completion rate should not be taken as a direct measure of the effectiveness of institutions for higher education, the striking differences between individual countries in this respect do certainly raise a number of questions as to the functioning of this part of the educational system. The same applies to the wide variation between countries as to the length of university courses presumably providing personnel with fairly equivalent professional qualifications. It cannot be excluded that these differences reflect a true wastage of resources in certain countries and the question inevitably arises whether a society can afford this having regard to growth targets on the one hand and to the limited pool of qualified personnel on the other.

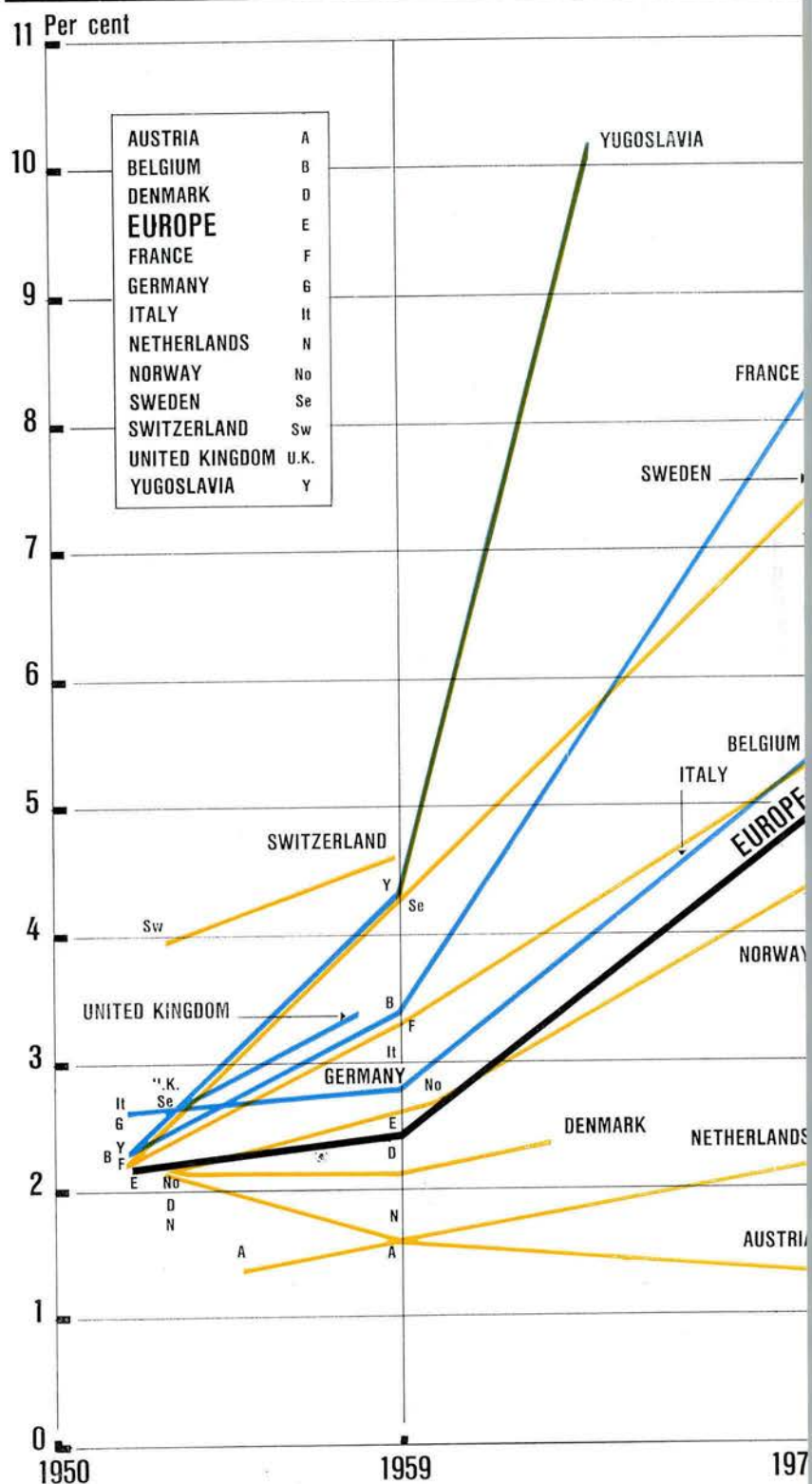
For Europe as a whole Survey data present this picture of the flow of students through higher education : in 1955 approximately 260,000 pupils completed secondary education in these countries and were qualified for higher education — or 5 per cent of the corresponding age-group. The number of new entrants to higher education in 1955 constituted 74 per cent of this group. In relation to the number of enrolled students in higher education the new entrants in 1955 amounted to 22 per cent. Five years later the number of first degrees came to approximately 130,000 or 14 per cent of the same student body. The ratio between first degrees in 1959 and new entrants in 1955 was 67 per cent.

The corresponding picture for the North-American countries is significantly different. In 1955 the number of graduates from secondary education was approximately 1,450,000, corresponding to 59 per cent of the relevant age-group. The number of new entrants to higher education constituted 47 per cent of these graduates. In relation to the number of enrolled students the new entrants amounted to 22 per cent. Five years later the number of first degrees amounted to approximately 400,000 or 13 per cent of the same student body. The ratio between first degrees in 1959 and the new entrants in 1955 was 57 per cent.

Production of scientific and technical personnel




Although obviously all types of qualified manpower make their contribution to economic and social progress, the Third International Survey especially examines the production of scientific and technical personnel, in particular engineers, natural scientists and agricultural scientists. The proportion of all university output graduating in these subjects varies from 75 per cent in Austria to slightly more than 20 per cent in the United States and

FIRST DEGREES IN RELATION TO THE CORRESPONDING AGE GROUP, BY COUNTRY, 1952-1970



This graphic presentation showing the development of the number of first degrees in relation to the population of the corresponding age indicates each country's situation in the base year furthermore, it takes account of the demographic factor, which is of particular importance for countries with marked demographic increase.

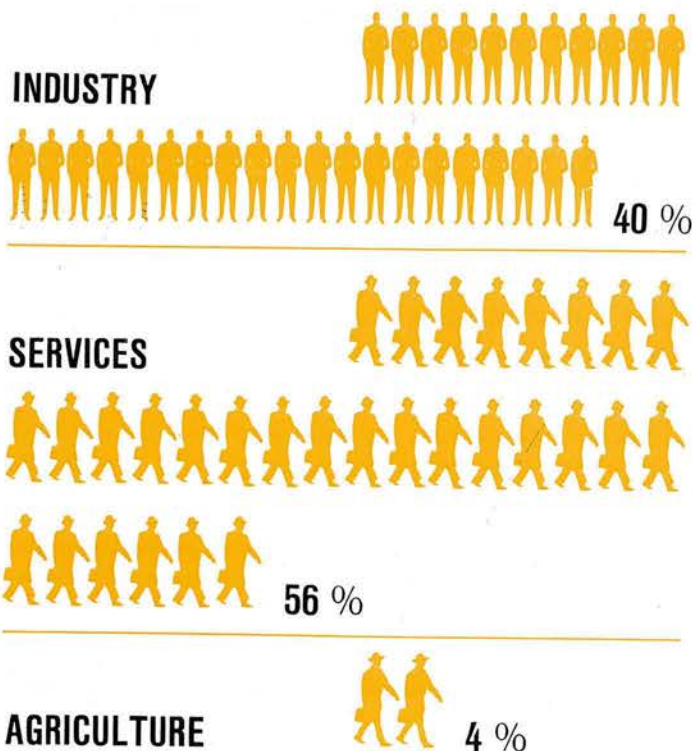
FIRST DEGREES IN THE DIFFERENT SCIENTIFIC DISCIPLINES IN RELATION TO TOTAL FIRST DEGREES, 1959 (PERCENTAGE)

COUNTRIES ⁽¹⁾	SCIENTIFIC DISCIPLINES	 NATURAL SCIENCES	 ENGINEERING	 AGRICULTURE
AUSTRIA ⁽²⁾	75	19	44	12
DENMARK	48	3	30	15
NORWAY	44	6,5	27,5	10
FRANCE	42	20 ⁽³⁾	20 ⁽³⁾	2 ⁽³⁾
UNITED KINGDOM ⁽⁴⁾	42	25	14	3
NETHERLANDS ⁽⁵⁾	34	12	17,5	4,5
SWEDEN	30	12	15	3
SPAIN	30	11	13	6
GERMANY F.R.	29	8	17	4
IRELAND	28	9	12	7
YUGOSLAVIA	27	6	13	8
BELGIUM	27	12	12	3
ITALY	27	12	12	3
SWITZERLAND ⁽⁵⁾	24	9	13	2
CANADA	23	7	13	3
UNITED STATES	22	10	10	2
GREECE	13	6	5	2

1. Data not available for Turkey.
2. Estimate for 1963.

3. Estimate by the Secretariat.
4. Great Britain
5. Non-nationals included.

DISTRIBUTION OF SCIENTISTS AND ENGINEERS BY SECTORS OF ECONOMY IN EUROPE, 1959 (OECD)



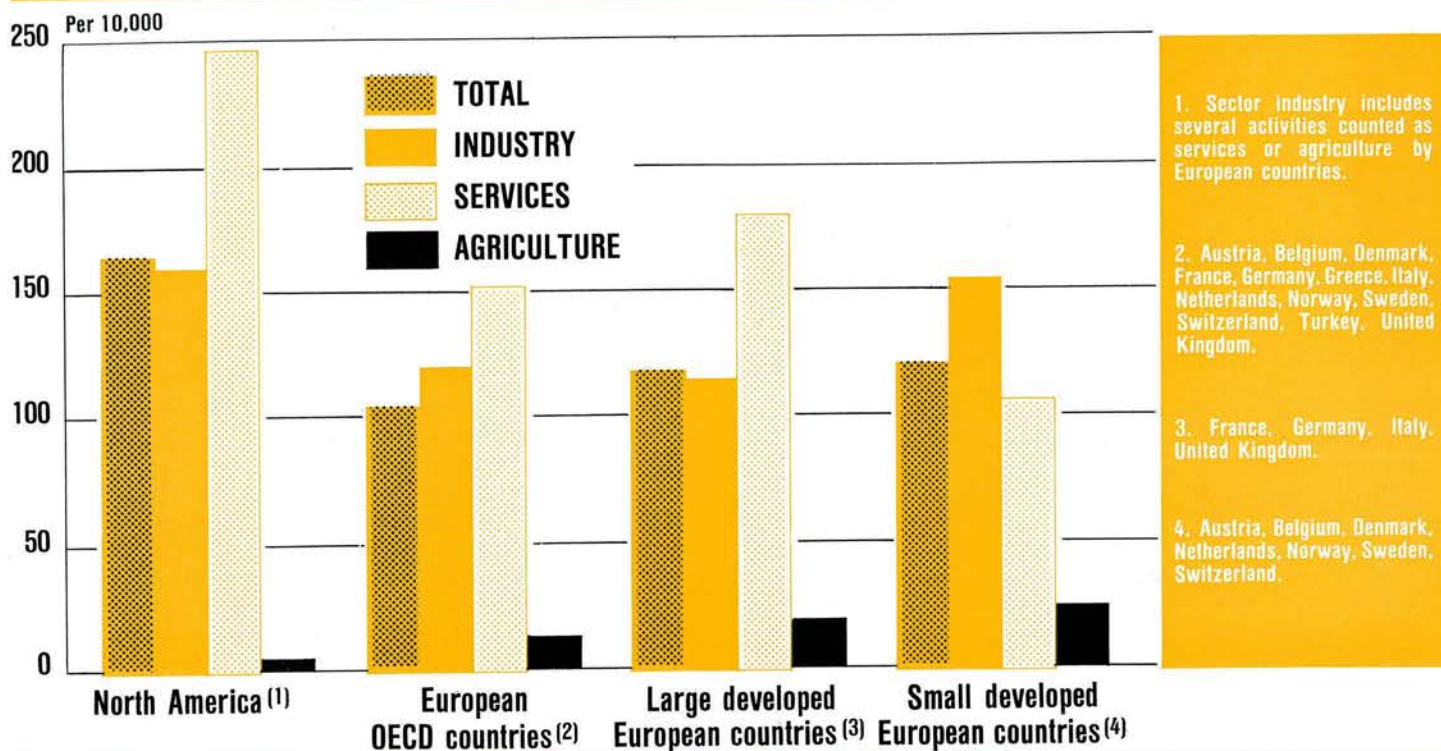
15 per cent in Greece. In Western European countries there is a clear tendency towards an increase in the proportion of students in scientific disciplines as their share of the total number of graduates is expected to increase from 30 per cent in 1950 to 38 per cent in 1970. Particularly strong efforts in this direction can be found in France and the Netherlands where the percentage of science graduates in 1950 was rather low. In the United States on the other hand the tendency towards a rise in the relative number of graduates in scientific disciplines is only very slight.

A closer examination of scientific studies reveals a clear connection between the relative strengths of specialised science lines in secondary education and the proportion of university students choosing scientific subjects. This may be taken as a further indication as to the decisive influence of general secondary education on the development of higher education.

Furthermore, the survey shows that drop-out of university studies is as frequent in scientific disciplines as in other studies. Engineering, however, which in most European countries has relatively strict entry regulations, shows a completion rate of about 75 per cent, against 60 per cent for natural sciences in European OECD countries.

The distribution of science graduates between engineering and natural science and agricultural science shows no regular pattern from country to country; while both in Europe and North America as a whole the numbers of

SCIENTISTS AND ENGINEERS IN RELATION TO CIVILIAN EMPLOYMENT (TOTAL AND BY SECTORS OF ECONOMY), 1959



graduates in engineering and natural science are of the same order of magnitude, individual countries show variations from ten engineering graduates for each natural science graduate to, at the other extreme, two science graduates for each engineer. There is no evidence that the relative emphasis on engineering versus science studies is related to the level of economic development or the industrial structure of individual countries. The wide variations may therefore be taken to indicate that the professional composition of a country's scientific and technical personnel may be more dependent upon such factors as traditional features of the educational system and conventional attitudes of employers than on specific economic requirements.

A clear trend can be found in Western Europe towards a far more rapid increase in the output of natural scientists than of engineers. Existing forecasts indicate that in 1970 European universities may turn out twice as many scientists as engineers while in 1950 the number of graduates in engineering was clearly superior to that of natural science. This trend, which is not to be found in North America, may to some extent reflect a shift in the preferences of students and/or a more rapidly expanding demand for natural scientists. It seems more likely however that it simply reflects the difference in the costs of training the two types of personnel. In a period of general shortage of training facilities at university level most countries seem to find it easier to expand the capacity of natural science studies than that of engineering.

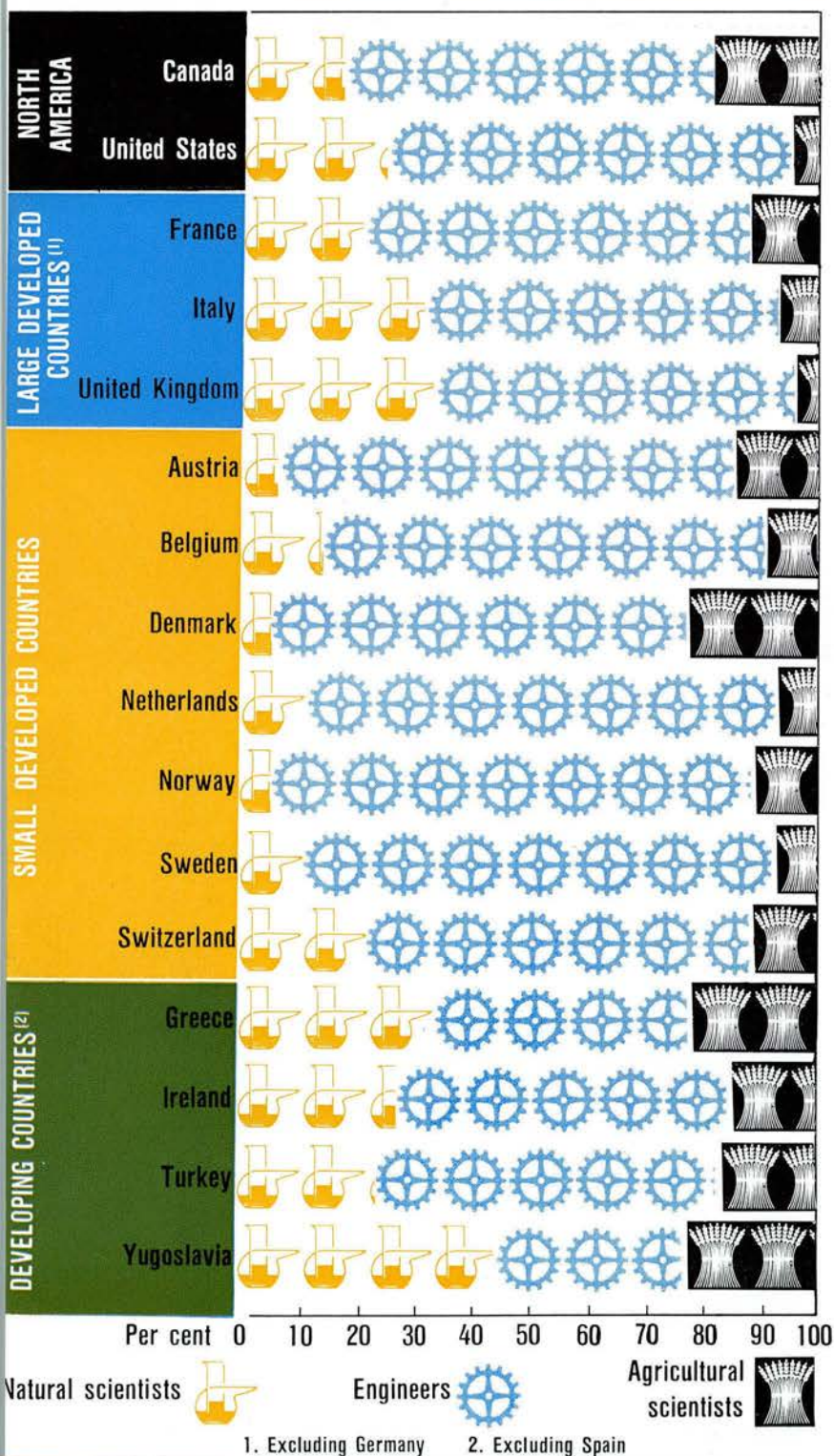
As a consequence the study of natural science would in most countries be subject to less strict entry regulations than engineering, a fact which tends to channel the increasing flow of students into higher education in the direction of natural science.

Trends in the stock of highly-qualified personnel

The main impact of education on economic growth and increased welfare works through the stock of qualified manpower in the labour force. Educational efforts therefore will only come to bear upon such objectives with a considerable time lag. Consequently a substantial part of the Third International Survey has been devoted to a study of trends in the stock of highly qualified manpower in Member countries concentrating on scientific and technical personnel. In fact — due to the special difficulties in obtaining relevant data — a major part of the work on the survey had to be put into this assessment of available manpower resources, which is the first of its kind among the industrialised market economy countries.

The total stock of scientific and technical personnel — natural scientists, agricultural scientists, engineers and technicians — in the OECD area in 1959 was between

COMPOSITION OF THE STOCK OF SCIENTISTS AND ENGINEERS BY OCCUPATIONAL FIELDS IN THE DIFFERENT OECD MEMBER COUNTRIES, 1959



the American and the European Member countries, the percentage being 3 in the former and 1.5 in the latter countries.

The number of scientists and engineers — leaving out the technicians — in the OECD Member countries in 1959 was approximately 2.6 million, the European countries having a slightly higher share than North America. In relation to the total of employed persons, however, the percentage of scientists and engineers in American Member countries was at a markedly higher level than in the Western European countries, approximately 1.6 per cent against a little less than 1 per cent. Within Western Europe itself there are also differences: while in a few European countries this ratio comes closer to the American level, others have much lower ratios than the European average.

The European stock of scientists and engineers has been growing at an annual rate of 4 per cent during the latter half of the 1950's and will, according to existing forecasts, grow at a higher rate — 6 to 7 per cent — in the first half of the 1960's. The American Member countries expect a similar rate of growth in the 1960's.

Large groups of engineers with less than university training are found mainly in countries with more developed economies, this category of personnel being small in number or even non-existent in most countries with low gross national product per head. By 1970 the European economy may contain a slightly higher proportion of engineers with less than university training than it now does, as the stock of such personnel seems to grow at a more rapid rate than the stock of university-trained scientists and engineers.

In European Member countries 65 per cent of the total stock of scientists and engineers are trained as engineers, the corresponding figure being 71 per cent in American Member countries. As a consequence of the increased relative output of graduates in natural sciences, the stock of scientists may grow from 20 per cent of all the scientists and engineers in 1950 to 30 per cent in 1970. Agricultural scientists constituted in 1959 10 per cent of the European stock of scientists and engineers and 4 per cent of the American stock; this share is gradually declining in both regions.

The distribution of the European stock of scientists and engineers among the different sectors of the economy shows approximately 40 per cent to be employed in industry, 56 per cent in services and less than 4 per cent in agriculture. Available data indicate a trend towards a decline in the relatively small share of the agricultural sector while no significant change can be found in the shares of the two other sectors.

In 1959 the number of scientists and engineers in industry accounted for 1.2 per cent of industrial employment in Europe and 1.7 per cent in the United States. The corresponding percentages for services are 1.8 per cent and 2.6 per cent respectively, while in agriculture the percentage was only 0.1 per cent in Europe and even less in the United States. These ratios tend to increase both in services and in industry and at a somewhat more rapid rate in the latter sector.

The ratio between specialised employment and total employment varies considerably between individual countries and no trend towards uniform composition of the stock can be found. However, in general, low income countries tend to employ a higher share of their scientists and engineers in the service sector.

four and four and a half million, corresponding to slightly above 2 per cent of the total number employed in this area. This average caused a marked difference between

Breakdown by fields of specialisation

A breakdown of the European stock of scientists and engineers in each sector of the economy by fields of specialisation reveals considerable differences between the sectors. In industry 85 per cent of the stock are engineers while in the services this professional group constitutes slightly more than 50 per cent of the stock of scientists and engineers against nearly 40 per cent of natural scientists and 10 per cent of agricultural scientists. The corresponding breakdown of the American stock of scientists and engineers reveals a similar picture. In the European agricultural sector more than 80 per cent of the total number of scientists and engineers are agricultural scientists. Both in the industrial sector and in the services there is a tendency for the natural scientists to increase in number more rapidly than engineers.

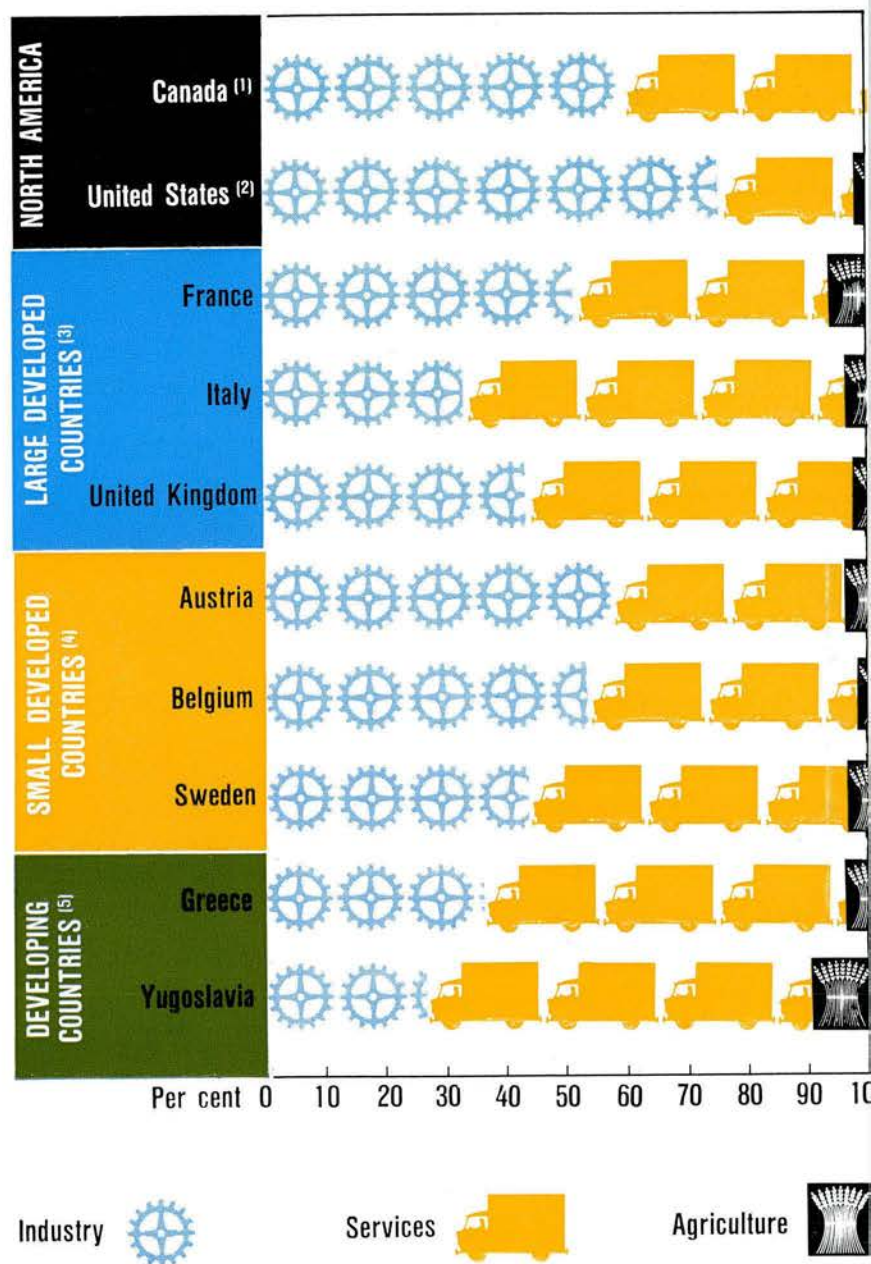
There is a large concentration of natural scientists in the service sector; close to 80 per cent of the total European stock is found here. There is also the tendency for the industrial sector to absorb an increasing number of all natural scientists. This also corresponds to future expectations in the United States. Conversely the European engineers are already concentrated in the industrial sector which employs 55 per cent of them. Nearly 60 per cent of the agricultural scientists are employed in the services, somewhat more than 10 per cent in industry, and only 30 per cent in agriculture.

The almost complete lack of a consistent pattern of deployment of different types of scientific and technical personnel in the different sectors of the economy in individual countries seems to confirm that factors other than technical and economic requirements play an important role in deciding the actual deployment in each country. The relationship between educational qualifications and requirements of the economy seems to be more complicated than is often assumed.

The final part of the Third International Survey is devoted to a study of the actual and expected future shortage situation as regards scientific and technical manpower. The conclusion can be drawn that although such shortage can be found in most of the Member countries and is likely to persist during most of the 1960's, this does not apply to all Member countries; and to some extent the shortage which can be found is mainly a reflection of a general shortage of qualified manpower. In most Member countries increased educational efforts will still be needed in order to cope with the increased demand for scientific and technical manpower.

However, the most important conclusion to be drawn from this survey material is perhaps the strong underlining of the importance of the educational system itself in determining not only the total supply of qualified manpower but also its professional composition. There seems to be a clear need in many Member countries for a closer coordination of educational policies with the more general policies aiming at economic growth and increased welfare. Optimal solutions to the problems of allocation of resources to education can only be found within the broader framework of general welfare policies involving all main fields of government activity and all major parts of government machinery. The survey findings

DISTRIBUTION OF SCIENTISTS AND ENGINEERS BY SECTORS OF ECONOMY IN THE DIFFERENT OECD MEMBER COUNTRIES, 1959



1. Agriculture is included in sector industry. The same applies for the branches commerce and transportation, storage and communication.

2. Commerce, transportation, utilities, communications, business and professional services are included in sector industry.

3. Excluding Germany.

4. Excluding Denmark, Netherlands, Norway, Switzerland.

5. Excluding Ireland, Spain, Turkey.

leave considerable doubt as to whether adequate techniques of such concerted policies have been developed and put into operation by the OECD Member countries.

OIL TODAY (1964) *(see article on page 34)*

This report by the OECD Special Committee for Oil reviews the main features of oil consumption and supplies in the OECD area from 1959 to 1962, and discusses features of the situation relevant also to the future.

148 pages (demy 8vo) U.S. \$ 2.50, 15 s., F 10, Sw.fr. 10, DM 8.30.

LOW INCOMES IN AGRICULTURE *(see article on page 27)*

This study by the OECD Committee for Agriculture examines the farm income situation in OECD countries, with the object of identifying low-income groups among farm families and indicating the factors responsible for their difficulties. It also surveys the relevant policies pursued by Member countries and their effectiveness in dealing with the low-income farm problem.

(available early July).

GUIDE TO EUROPEAN SOURCES OF TECHNICAL INFORMATION

The most widespread use of information and documentation can alone enable the enormous investment in scientific research to pull its full weight in economic expansion (see last issue of the OECD Observer). This guide is intended to put a means of reference to 487 sources of information at the disposal of individuals and firms.

260 pages (demy 8vo) U.S. \$ 3, £ 1. 1s, F 15, Sw.fr. 15, DM 12.50.

ENGINEERING EDUCATION IN THE COMPUTER AGE

As part of the OECD series on Applied Mathematics for Engineers, this volume incorporates the results of an international seminar held to discuss ways of introducing computer science into the education of engineers. It includes papers by leading experts in a number of countries on such subjects as mechanical data processing, the effect of computer science on engineering mathematics, and the work of the International Computation Centre.

105 pages (demy 8vo) U.S. \$ 1.75, 10/6d., F 7, Sw.fr. 7, DM 5.80.

NUCLEAR ELECTRONICS

This publication contains the proceedings of the International Symposium organised in November 1963 by the Société Française des Électroniciens et des Radioélectriciens, with the assistance of the OECD European Nuclear Energy Agency. It comprises nearly a hundred papers, presented by world specialists, on aspects of radiation detectors, data processing in nuclear electronics and fast electronics. The papers are printed in their original language (either English or French).

861 pages (demy 8vo) U.S. \$ 10, £ 3. 3 s., F 40, Sw.fr. 40, DM 33.

AGRICULTURAL ADVISORY SERVICES IN EUROPE AND NORTH AMERICA - 1963 (OECD Documentation Series in Agriculture and Food, N° 62)

Recent changes in thinking in advisory services in Member countries — indicated by greater emphasis on economic and social aspects of the work, rather than technical aspects — are documented in this volume. It contains the conclusions and recommendations of the 1963 OECD Conference of Directors of Agriculture and Agricultural Advisory Services, the results of a survey of developments in advisory work since 1960, and the 17 major papers presented at the Conference by delegates from 11 countries.

186 pages (demy 8vo) U.S. \$ 2, 12/6 d., F 8, Sw.fr. 8, DM 6.50.

STATISTICS OF NATIONAL ACCOUNTS

This volume brings together national accounts statistics for OECD Member countries; country statistics of expenditure, income and output are adjusted to secure greater inter-country comparability on the basis of standard definitions. Section I contains key indicators and structural relationships for the individual Member countries to enable inter-country comparisons to be made; Section II totals for OECD countries combined, EEC countries combined, EFTA countries combined; Section III accounts and tables for individual Member countries with available data for the whole period 1950-1961; Section IV documentation, indicating sources used and adjustments made.

282 pages (imperial crown 4to) U.S. \$ 3.50, £ 1, F 14, Sw.fr. 14, DM 11.50.

WHERE TO OBTAIN OECD PUBLICATIONS

ARGENTINA

Editorial Sudamericana S.A.,
Alsina 500, BUENOS AIRES.

AUSTRALIA

B.C.N. Agencies Pty. Ltd.,
62 Wellington Parade,
EAST MELBOURNE, C.2.

AUSTRIA

Gerold & Co., Graben 31, WIEN 1.
Sub-Agent :
Buchhandlung Jos. A. Kienreich,
Sackstrasse 6, GRAZ.

BELGIUM

N.V. Standaard-Boekhandel,
Huidevettersstraat 57, ANTWERPEN.
Librairie des Sciences (R. Stoops),
76-78, Coudenberg, BRUXELLES.

BRAZIL

Livraria Agir Editôra,
Rua Mexico, 98-B, RIO DE JANEIRO.

CANADA

Queen's Printer - Imprimeur de la Reine,
OTTAWA.
Prepayment of all orders required.

DENMARK

Ejnar Munksgaard Forlag,
Nørregade 6, KØBENHAVN K.

FINLAND

Akateeminen Kirjakauppa,
Keskuskatu 2, HELSINKI.

FRANCE

OECD Publications Office
2, rue André-Pascal, PARIS (16^e).
Principaux sous-dépositaires :
PARIS : Presses Universitaires de France,
49, bd Saint-Michel (5^e).
Librairie de Médecis,
3, rue de Médecis (6^e).
Sciences Politiques (Lib.),
30, rue Saint-Guillaume (7^e).
La Documentation Française,
16, rue Lord-Byron (8^e).
BORDEAUX : Mollat.
GRENOBLE : Arthaud.
LILLE : Le Furet du Nord.
LYON II^e : L. Demortière.
MARSEILLE : Maupetit.
STRASBOURG : Berger-Levrault.

GREECE

Librairie Kauffmann,
21, rue du Stade, ATHÈNES.

GERMANY

Deutscher Bundes-Verlag, GmbH.
Postfach 9380, 53 BONN.
Sub-Agents : BERLIN : Elwert & Meurer.
MÜNCHEN : Hueber.
HAMBURG : Reuter-Klößner;
und in den massgebenden Buchhandlungen
Deutschlands.

ICELAND

Snæbjörn Jónsson & Co. h. f.
Hafnarstræti 9,
P.O. Box 1131 - REYKJAVIK.

INDIA

International Book House Ltd.,
9 Ash Lane,
Mahatma Gandhi Road, BOMBAY 1.
Oxford Book and Stationery Co. :
Scindia House, NEW DELHI.
17 Park Street, CALCUTTA.

IRELAND

Eason & Son,
40-41 Lower O'Connell Street, DUBLIN.

ISRAEL

Blumstein's Bookstores Ltd.,
35 Allenby Road,
and 48 Nahlat Benjamin St., TEL-AVIV.

ITALY

Libreria Commissionaria Sansoni
Via Gino Capponi 26, FIRENZE.
Via Paolo Mercuri 19/B, ROMA.
Corso Cavour 93, BARI.
Sub-Agents :
GENOVA : Libreria Di Stefano.
MILANO : Libreria Hoeppli.
NAPOLI : Libreria L. Cappelli.
PADOVA : Libreria Zannoni.
PALERMO :
Libreria C. Cicala Inguaggiato.
ROMA :
Libreria Rizzoli; Libreria Tombolini.
TORINO : Libreria Lattes.

JAPAN

Maruzen Company Ltd.,
6 Tori Nichome Nihonbashi, TOKYO.

MOROCCO

Éditions La Porte " Aux Belles Images ",
281, avenue Mohammed-V, RABAT.

THE NETHERLANDS

Wholesale Agent :
Meulenhoff & Co., N.V. Importeurs,
Beulingstraat 2, AMSTERDAM.
Principal Retailer :
W.P. Van Stockum & Zoon
Buitenhof 36, DEN HAAG.

NEW ZEALAND

WELLINGTON, Government Printing Office,
20, Molesworth Street (Private Bag), and
Government Bookshops at
AUCKLAND (P.O.B. 5344).
CHRISTCHURCH (P.O.B. 1721).
DUNEDIN (P.O.B. 1104).

NIGERIA

University Bookshop Nigeria Ltd.,
University College, IBADAN.

NORWAY

A/S Bokhjornet, Lille Grensen 7, OSLO.

PAKISTAN

Mirza Book Agency,
65, The Mall, LAHORE 3.

PORTUGAL

Livraria Portugal,
Rua do Carmo 70, LISBOA.

SOUTH AFRICA

Van Schaik's Book Store Ltd.,
Church Street, PRETORIA.

SPAIN

Mundi Prensa, Castelló 37, MADRID.
Libreria Bastinas de José Bosch, Pelayo 52
BARCELONA 1.

SWEDEN

Fritzes, Kungl. Hovbokhandel,
Fredsgatan 2, STOCKHOLM 16.

SWITZERLAND

Librairie Payot,
40, rue du Marché, GENÈVE
et à LAUSANNE, NEUCHÂTEL, VEVEY,
MONTREUX, BERNE, BALE et ZÜRICH.

TURKEY

Librairie Hachette,
469 Istiklal Caddesi, Beyoglu, ISTANBUL,
and 12 Ziya Gökalp Caddesi, ANKARA.

UNITED KINGDOM and CROWN COLONIES

H.M. Stationery Office,
P.O. Box 569, LONDON S.E.1.
Branches at : EDINBURGH, BIRMINGHAM,
BRISTOL, MANCHESTER, CARDIFF, BELFAST.

UNITED STATES

McGraw-Hill Book Company
OECD Unit, TMIS Annex,
351 West 41st St.,
NEW YORK 36, N.Y.

YUGOSLAVIA

Jugoslovenska Knjiga, Marsala Tita 23,
P.O.B. 36, BEOGRAD.

Orders and inquiries from countries where sales agents have not yet been appointed may be sent to OECD, Publications Office,
2, rue André-Pascal, Paris (16^e)

Organisation for Economic Co-operation and Development

