

the **OECD** **OBSERVER**

THE OECD ECONOMIC OUTLOOK, JULY 1970
TEN YEARS' TRENDS IN INVISIBLE TRADE
EDUCATIONAL GROWTH POLICIES FOREIGN
INVESTMENTS IN DEVELOPING COUNTRIES
REPERCUSSIONS OF MANPOWER MIGRATION
A CENTRE FOR MANAGEMENT TECHNOLOGY



N° 47/AUGUST 1970

the OECD OBSERVER

N° 47

AUGUST 1970

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,
2 rue André Pascal, F 75 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 : 23s., \$3.50, F 15.00, FS 13.00,
DM 10.50.

Single copies : 5s. 6d., \$ 0.80, F 3.50, FS 3.00, DM 2.50.

EDITOR : Anker Randsholt

ASSISTANT EDITORS : Peter Tewson and Jane Bussière

PRODUCTION AND LAYOUT : Marc Delemme

All correspondence should be addressed to the Editor.

Photos : Cover : Farabola, Milan; page 11 : ILO; pages 15-16 : United States Lines; page 47 : Farabola, Milan.

CONTENTS

- 3 FOREIGN INVESTMENT IN DEVELOPING COUNTRIES

- 9 INTERNATIONAL MIGRATION OF LABOUR AND ITS REPERCUSSIONS

- 13 CONTAINERISATION : PROBLEMS OF THE SHIPPING INDUSTRY, PORTS, LABOUR AND GOVERNMENTS

- 17 HIGHLIGHTS FROM THE OECD ECONOMIC OUTLOOK — JULY 1970
 - 18 Inflation and payments equilibrium
 - 24 OECD invisibles in the 1960's

- 37 GUIDELINES FOR EDUCATIONAL POLICY IN THE SEVENTIES

- 44 THE INTERNATIONAL INSTITUTE FOR THE MANAGEMENT OF TECHNOLOGY
by Dr. J. A. Cade

- 50 NEW OECD PUBLICATIONS

FOREIGN INVESTMENT IN DEVELOPING COUNTRIES :

A Pattern of Increasing Support from the Governments of the Capital-Exporting Countries

Increasing support for private investment flows to developing countries is currently being given by the Member governments of the Development Assistance Committee (DAC) of the OECD. The main instruments of this support are investment guarantee schemes, public investment corporations and other direct financing, pre-investment assistance, fiscal incentives and exchange control preferences. Overall these amount to an important array of measures which can be expected in the long run to affect considerably the volume and character of the flow of external resources to developing countries.

This article, by Michael Emerson of the OECD Development Assistance Directorate, discusses first the background against which this generalised pattern of increasing governmental support has emerged. The main part of the article analyses investment guarantee schemes, which have in the past few years grown rapidly in number and size. A second article will deal with the other incentive measures. The whole set of facilities are described in detail in a new OECD publication⁽¹⁾ to appear shortly.

(1) Investing in Developing Countries: Facilities for the Promotion of Foreign Private Investments in Developing Countries, OECD, 1970.

Private investment in developing countries is benefiting from increasing support from the governments of capital exporting countries. This and a following article are principally devoted to analysing the character and effect of this growing package—whose main components are investment guarantees, public investment corporations, feasibility study financing, exchange control preferences and fiscal incentives.

What is common to the measures is that they are all conducive to the flow of private investment to developing countries. Many of the facilities have been conceived as instruments for the promotion of development. Many, on the other hand, are intended to support the national economic policies of the capital-exporting countries, while seen as producing useful economic effects for the host countries too.

For the largest exporter of private capital, the United States, the supply of investment to developing countries has long been viewed as an integral part of the overall supply of resources and skills to developing countries. For many years the Agency for International Development (AID) has been running in close tandem its programmes of official aid and of incentives to private investment.

The balance and relationship between United States official aid and private investment, however, are in the course of changing. Congressional cuts in

official aid appropriations, at a time of a trend growth in private capital flows, mean that the ratio⁽¹⁾ has changed, from 4 : 1 in 1962, to 2 : 1 in 1965, and 3 : 2 in 1969.

The most recent development has been the decision to split the functions of AID, so as to create a separate agency for administering the private investment programmes. OPIC⁽²⁾, the new institution, controlled by a board whose majority will be representative of private concerns is intended to give a stronger, more independent and business-oriented direction to the United States programmes favouring private investment in developing countries.

Germany might be described as the next most enthusiastic promoter (after the United States) of private investment as an instrument of development policy. A further factor has been the position of German industry as it was in the Fifties. Having emerged from the post-war period without either its network of international investments or any keenness to reconstruct such interests a third time over, German industry had to be encouraged by the Government to go overseas again. Similar reasons

(1) Official development assistance (i.e. excluding Export-Import Bank official export credits): total private capital flows.

(2) Overseas Private Investment Corporation.

also explain the early start of Japan in the field on incentives for investment in developing countries. Japan's incentives have been also particularly conditioned by priorities to secure raw material procurement and exports.

Of the smaller DAC countries, the Scandinavians, the Netherlands and Canada have all fairly recently adopted incentive measures. In the case of these countries the movement has been associated with the growth of their development assistance efforts. As their aid administrations have become larger and more professional, attention has been given more systematically to helping and encouraging the private sector to make its contribution to development, a contribution recognised to be largely complementary to that of official aid.

Of the traditional capital exporters to developing countries, France and the United Kingdom have long administered systems for favouring such flows. Both, however, have in recent years been less dynamic in introducing new policies than other OECD countries. This is explained by a number of factors. Both have remained substantial suppliers of direct investment to developing countries, and so the need to use incentives to generate such flows has not existed as for other countries. In addition, France has had the preoccupation of compensation claims from an important community of former investors in North Africa. The United Kingdom for its part was for some time inhibited by persistent balance of payments problems.

Investment Guarantees

Investment guarantee institutions are currently showing a phenomenal growth. The United States started the business in 1948, followed by Japan in 1956 and Germany in 1960. Then there was a pause for five years after which the following countries became investment guarantors in rapid succession: Australia (1966), Denmark (1966), Norway (1968), Sweden (1968), Netherlands (1969), Canada (1969), Switzerland (1970), and Belgium which is likely to follow in 1971. In addition there are two proposals for multilateral investment guarantee schemes under consideration. The IBRD has had a scheme under preparation for some years, but agreement to set it up has not so far been forthcoming. The recent proliferation of national schemes by smaller countries reflects in part the failure of the IBRD scheme to get off the ground. A second multilateral scheme, for EEC countries, was proposed in December 1969 by France at the EEC summit meeting at the Hague.

Purposes of the Schemes

There are different types of investment guarantee schemes according to the purpose they are intended to serve. The larger group is intended either principally as an instrument of development assistance policy, or as serving the double function of helping the development of recipient countries and strengthening economic relations between capital exporter and importer. The schemes of the United States, Germany, Denmark, the Netherlands, Norway, Sweden and Switzerland all fall into these categories.

(continued on page 6)

1 - SUMMARY OF GUAR

DAC COUNTRIES	I TYPES OF RISKS INSURED	II GEOGRAPHIC COVERAGE	III TYPE OF INVESTMENT COVERED
Name of executive agency or department	a. expropriation risks b. war risks c. transfer risks	a. worldwide b. developing countries only c. countries having signed bilateral agreement only	a. equity b. loans c. advances
AUSTRALIA Export Payments Insurance Corp. (EPIC)	a, b, c	a	a, b, c
CANADA Export Development Corp. (EDC)	a, b, c	a	a, b, c
DENMARK Danish International Development Agency (DIDA)	a, b, c	b	a, b, c to the extent they reflect a controlling interest in the investment
GERMANY Deutsche Revisions- und - Treuhand AG and Interministerial Board	a, b, c	c, and some other countries	a, b, c
JAPAN Ministry of International Trade and Industry (MITI)	a, b, c	a	a, b, c
NETHERLANDS Netherlands Credit Insurance Company	a, b, c	b	a, b, c
NORWAY Institute for Export Credits Guarantees	a, b, c	a	a or a and b together
PORTUGAL Ministry of Finance	credits : a, b, c bonds : a, (b and c optional)	overseas provinces only	b only
SWEDEN Swedish Export Credits Guarantee Board (EKN)	a, b, c	b selected countries only	a and b to extent they reflect controlling interest in co. Minority equity possible
SWITZERLAND	a, b, c in addition insolvency or refusal to pay by local public entities	b in principle	a, b, c
UNITED STATES Overseas Private Investment Corporation (OPIC). Until 1970, Agency for International Development (AID)	a, b, c	c (to date some 92 countries)	a, b, c

ANTEE SCHEMES FOR OVERSEAS DIRECT INVESTMENT

IV SPECIFIC ELIGIBILITY CRITERIA	V COVERAGE OF PRINCIPAL AND EARNINGS	VI COVERAGE IN Indemnities paid as % of recognised loss	VII CASE OF LOSS Reductions in coverage	VIII ANNUAL PREMIUM RATES % of outstanding amounts	IX DURATION OF COVERAGE	X DATE OF EFFECTIVE ESTABLISH- MENT	XI US % ACCUMU- LATED GUARANTEES OUTSTANDING	XII CURRENT VOLUME OF NEW GUARANTEES EXTENDED
a. develop- mental effect b. link with national export c. global ceiling	a. initial investment b. reinvested earnings c. remitted earnings (% of original investment)			except if otherwise shown				
b	a 100 % b 100 % c	up to 90 %	per net worth in financial statements	0.75 % on cur- rent amount (0.25 % per risk) plus half the above on standby amount	normally = minimum 5 years maximum 15 years	May 1966	June 30 1969 \$ 18.8 m.	nine months to June 30, 1969 \$ 16 m.
a and b c Can. \$50 m.	a 100 % b 50 % c 150 %	90 %	as elected by investor	0.30 % for each of the three risks together	up to 15 years	mid-1969	—	—
a b c \$29 m.	a 100 % b c 8 % p.a. for up to 3 years	85 % to 90 %	nil, unless unu- sually high repatriation, or effective compensation	0.5 % for the three risks together plus 1/8 of 1% on standby amount	up to 15 years	May 1966	May 1970 \$ 7.3 m.	12 months to April 1, 1970 \$ 2.3 m.
a	a 100 % b 50 % c 8 % p.a. for up to 3 years	up to 95 %	going concern value not ex- ceeding capital brought in	0.5 % of current amount for the three risks together	normally = up to 15 years exceptionally : up to 20 years	1960	mid-1969 \$ 280 m.	8 months to August 31, 1969 \$ 22 m.
b	a 100 % b 100 % c 10 % p.a.	up to 90 %	reduction based on book value	0.55 % for the three risks together	normally up to 15 years	capital 1956 profits 1957 merger 1970	December 1969 \$ 59.5 m.	1968 (capital scheme only) \$ 6.3 m.
a b	a 100 % b 50 % c 8 % p.a.	up to 90 %	limited amorti- sation during last 5 years of coverage	0.8 % for the three risks together	up to 15 years following com- pletion of the investment	1969	December 1969 \$ 4 m.	1969 \$ 4 m.
a c \$ 84 m. covering both export credits and investments	a 100 % b c 7 % p.a. up to three years	up to 90 %	fixed schedule of amortisation - starts normally after three years	0.5 % of maxi- mum amount for the three risks together	up to 20 years	1964/5	June 1970 \$ 15.9 m.	12 months to May 31, 1970 \$ 14.2 m.
a c	equity invest- ments are not covered	100 %	loan amortisation	free	duration of loan	. .	December 1968 \$ 84 m.	1968 \$ 58 m.
a c \$ 80 m.	a 100 % b c 8 % p.a. for maximum of 3 years	80 % - 90 %	phasing out system on a case by case basis	0.7 % for the three risks together	normally up to 15 years exceptionally up to 20 years	1968	—	—
a b in some cases c \$ 116 m.	a 100 % b c up to 24 % of principal	up to 70 %	for equity, in principle regular amortisation (around 5% per year)	principal 1.25 % profits 4 % of expected profits	15 years in principle	1970	—	—
a c 1970-1974 authority for \$ 7.5 billion new insurance	a 100 % b 100 % of principal c	99 %	per net worth in financial statements	a 0.25 % (con- vertibility) b 0.50 % (ex- propriation) c 0.5 % (war) b and c com- bined 0.875 % plus 0.1 % on standby amount	equity = max. 20 years loan = duration of the loan	1948	December 1969 \$ 7.3 billion (December 1965 less than \$ 2 billion)	1969 \$ 1.25 billion

Some of the schemes are more closely associated with the national economic policies of the investing country (the Australian scheme with export promotion, the Japanese scheme with export promotion and raw material procurement). Some further investment guarantee schemes are purely extensions of export promotion facilities and have no pretence to being anything to do with development assistance (Austria and France). The two multilateral schemes would both be primarily oriented towards the development of host economies.

The differences between export or development orientations, while important, should not be exaggerated. The schemes which are developmental generally require that the investments strengthen economic relations between the capital importing and exporting countries, if only by virtue of the fact that the investor must be a company from the guarantor's country. The export oriented schemes support investments which may for example assemble imported goods to an extent which is quite in line with the host economy's industrial development priorities. Guarantees for export oriented investments are cousins to export credit insurance, and it may be noted that export credit guarantees have, with certain reservations, been important factors in the making available of relatively cheap long-term finance to developing countries.

Type of risks covered :

Investment guarantees cover risks for which organised commercial insurance is not available. As in the case of export credit insurance, investment guarantee schemes are instruments which governments have developed to encourage the private sector to act overseas in the national interest, or in support of government policies - viz. development assistance.

Investment guarantee schemes cover three groups of non-commercial or so-called political risks:

- a) Expropriation, confiscation and nationalisation;
- b) War, revolution, rebellion and civil war;
- c) Transfer risks, i.e. prevention of, or delay in repatriation of profits and capital.

While many cases of expropriation and nationalisation are clear and explicit (e.g. in Cuba, or more recently in Chile, Zambia, Tanzania, Sudan and Uganda), there are also many circumstances in which the borderline between expropriation and more "normal" deterioration in the investment climate is hard to draw. Such borderline cases may arise with breaches of contract by public authorities, the imposition of excessive taxation, the withdrawal of import licenses, etc.

Cases of "creeping expropriation" (gradual increases in taxation, bureaucratic delays) may be particularly hard to determine. In this difficult area, investment insurers have encountered problems which the existing body of international law is unable to solve. It is expected that a body of case material will gradually build up to elucidate the limits of the risks to be compensated by investment insurers. Meanwhile each scheme has adopted its definition of expropriation, the United States for example having adopted a detailed set of criteria against which claims must be tested. The German scheme on the other hand adopts a very short definition and relies upon precepts of domestic German law to resolve any disputes which should arise between

insurer and investor. On this and other problematic aspects of investment insurers, experts from DAC countries are holding a series of annual meetings at the OECD.

As regards war risks, it is generally the case that damages from a generalised war would be excluded, thus putting investors on the same footing as for their investment in developed countries.

Terms of Guarantees

The terms and conditions of individual schemes, which vary a lot in detail, are summarised in Table 1. There are several elements to the terms of any investment guarantee, in particular fees (or premiums), the amount and duration of coverage, the degree of self-coverage and formulae for calculating losses for purposes of indemnification. Comparison of fee structures is complicated by differences in the bases to which they apply. In most cases, however, fees will amount to around 0.75 per cent to 1.0 per cent of the amount covered for all three groups of risk together. The duration of coverage tends to be between 15 and 20 years, although for loan capital, coverage is reduced with amortisation of the loan. Coverage generally applies 100 per cent to the initial equity and loan investment, but tends to be limited in amount for reinvested earnings (often from 50 per cent to 100 per cent of the initial investment). Special limitations sometimes apply to transfer risk coverage for remitted earnings (for example in some cases a limit of 8 per cent of capital invested per annum). In determining the formulae for the calculation of losses, countries have been guided by their particular accounting and legal habits, and practices therefore tend to differ in detail. After arriving at the agreed amount of a loss, a percentage of self-coverage is deducted before the amount of indemnification is paid (deductions of around 10 per cent are common, although the United States deducts only 1 per cent).

Investment insurance, at a cost of around 1 per cent per annum of the value of an investment, is accordingly far from free. The investor however is able to limit his coverage to those developing countries in which he feels the risks are greatest, and to leave investments in "safe" developing countries uncovered. If commercial insurance were made available for investment in developing countries, its cost would certainly be much higher.

Effect of Investment Guarantees from the point of view of Investors and Insurers

It is impossible to give a precise answer to the question "how much extra investment have the guarantee schemes generated?" Members of the business community tend to reply that guarantees are a useful facility. It is reasonable that investors do not always take out insurance whenever available. Coverage is not free, and so should be reserved for cases where risks are felt to be materially important. There are signs, however, that, after a fairly long familiarisation period, United States investors have come to regard investment insurance as part of the

While only the United States, Germany and Japan have any very substantial operational experience, it is notable that indemnified claims against both the United States and Germany amount to only about one-tenth of one per cent of the value of insurance cover contracted. Japan has suffered no losses.

From these results it might be concluded that the risk inherent in investing in developing countries has been much exaggerated in the minds of the business community. The risks would in particular seem to be less for new investments, the bulk of nationalisations appearing to hit long-standing investments which have strong associations with earlier periods in the eyes of local politicians. The relative immunity of new investments may also have some substantial basis, in that the modern investor in developing countries has on the whole learnt to show flexibility in adapting his business methods to the particular sensitivities of developing countries (for example through joint venture arrangements and agreements on the employment of local labour, etc.). The results of investment insurance schemes may reflect these factors to the extent that coverage is available only for new investment. Even under the United States scheme, in operation since 1948, the bulk of new investments have taken place in the past few years.

On the other hand there should not be undue optimism on the loss record. The United States scheme was for example lucky not to have suffered very large losses in Cuba, attributable in part to the fact that most of the investments there predated the establishment of the investment guarantee scheme, and in part to the fact that investors apparently thought Cuba too safe to be worth paying an insurance premium for. More recently the United States scheme has again been fortunate in not having been exposed to claims with the partial nationalisation of the copper mines in Chile and Zambia, and the nationalisation of oil investments in Peru. In all cases United States interests have been very large.

The accumulated financial reserves of the United States insurance scheme are now around \$100 million, whereas its contingent liabilities amount to \$7.5 billion. There are 22 individual developing countries in which the United States has issued over \$100 million investment insurance⁽³⁾. While the United States Government would always pay to investors any justified claims in excess of the scheme's own reserves, it is by no means clear that the present level of fees is too high. While fee modifications over the past few years have all been downward, there is no actuarial basis to their old or revised levels. Nor has it been possible to establish what level of fees actuarial principles would recommend.

From the point of view of the developing countries, investment guarantees bring advantages as a result of lowering the actual or supposed risks of investing in developing countries. Both in theory and practice "risk" is a factor which increases the minimum income required of a given investment. A reduction in the "risk" factor through investment guarantees should therefore reduce the profitability threshold for direct investment, and also reduce the urgency for the remittance of earnings or amortization of capital. In brief, investment guarantees should both help

increase the volume and soften *the terms of direct investment in developing countries*.

Being new, investment guarantees do not yet seem to be very well known or understood by the business community, except perhaps in the United States. In the future however one would hope that investment guarantees could be taken systematically into account in planning investment decisions: for example, where companies with a world-wide approach to investment adopt for their Discounted Cash Flow calculations a scale of discount rates according to the risks felt for different host countries, one would hope that the present high discount rates for "risky" developing countries could be systematically and very substantially lowered through the availability of investment guarantees.

Financial Credit Guarantees

The term "financial credit guarantees" is used to mean guarantees for private financial credits to developing countries, exclusive of investment guarantees described above and export credit guarantees. The guaranteeing of financial credits (in the context of the flow of resources to developing countries) is limited almost exclusively to the United States and Germany.

The United States programme, now called the "Loan Guarantee" programme (of OPIC) and formerly the "Extended Risk Guarantee" programme (of AID) is due to become a very substantial instrument for mobilising the flow of United States private capital to developing countries. The programme was introduced relatively recently with the main objective of permitting the developing countries to tap the vast sources of the United States institutional investor (pension funds and insurance components), at a time when the availability of official funds for development assistance has been curtailed by Congress.

The essential differences between financial credit guarantees and investment insurance are two:

- (i) financial credit guarantees cover against both political and commercial risks;
- (ii) the capital is provided as *portfolio* rather than *direct* investment.

The United States programme had by 31st December 1969 authorised guarantees of \$204 million for 27 projects. Its new authority under OPIC extends to \$750 million for five years (1970-1974). It is also intended that many of the priority projects into which guaranteed loans will be channelled will further be supported by a wide range of OPIC's other incentive measures.

The United States programme charges a fee of 1 ¼ per cent per annum and is available for 100 per cent coverage of loans not exceeding 75 per cent of a project's total financing. Coverage of a small volume of equity investments has also been authorised for high priority projects.

The German scheme for the guarantee of financial credits relates mainly to commercial bank credits, extended both to private enterprise and public authorities in developing countries.

(3) *There is however extensive triple coverage within these figures, as Table 2 shows.*

INTERNATIONAL MIGRATION OF LABOUR AND ITS REPERCUSSIONS

For the first time an international study has been carried out on the economic and social repercussions of intra-European manpower movements at labour market level. Although data on the size of these movements was available previously, their local effects were not known. In order to provide the competent authorities with the necessary information, a Working Party set up by the Manpower and Social Affairs Committee of OECD undertook research on this question. It began by conducting surveys in five emigration countries (Greece, Italy, Portugal, Spain and Turkey) and two immigration countries (France and Germany). Its findings will shortly be published under the title "Manpower Migration and Labour Markets". The article that follows singles out some of the points made in connection with emigration areas by Professor Kayser of the University of Toulouse (France), who co-ordinated the area studies.

The area surveys were carried out in one or more provinces in each country and frequently centred on large towns.

In Spain, the province of Seville, with an urban population of approximately 700,000 and a rural population of roughly half a million, is considered to be representative of the country as regards the distribution of the labour force. In view of the efforts made by this province to achieve industrialisation through the establishment of an "industrial pole", and because of the wealth of its agricultural production and the progressiveness of its local economy, this is a characteristic area.

In Greece, Kavala, Salonika, Volos and Patras are industrial towns or in the process of industrialisation and are the largest cities in the country after Athens. The rural exodus from the surrounding agricultural areas is very marked. In 1961 the total population amounted to some 560,000 urban and 540,000 rural dwellers.

In Italy, the Apulia region, which comprises the provinces of Bari, Brindisi and Taranto, has an urban population of about 580,000 and a rural population of some 850,000 (as at 1961). The region is undergoing intensive industrialisation and is thus becoming increasingly integrated with the national economic system. It incorporates extensive, overpopulated rural areas and mobility of labour in the region has recently shown a significant increase.

In Turkey, the provinces of Izmir and Kocaeli, of which the chief towns are Izmir and Izmit, have the highest degree of industrialisation and economic diversification in the country. The province of Zonguldak is notable for its coalfields and heavy metal industries.

The total population of the region numbers some 600,000 in the urban areas and 1,600,000 in the rural districts.

In Portugal, the region of Aveiro, located between Coimbra and Oporto, is one of the most industrialised in the country but at the same time has a very large and depressed agricultural sector. The region has a population of 580,000.

These were the emigration areas which the Working Party took for its study on the economic aspects of international migration. (The immigration areas chosen were the Lyons and Cologne regions.)

Internal Migration and International Migration

In spite of the differences between the five cases studied, the methods used by the rapporteurs, the specific nature of the surveys and the arbitrary choice of survey areas, a certain similarity emerges. As a result, Professor Kayser, who co-ordinated the local studies for OECD, has been able to draw certain working assumptions.

In analysing the effects of emigration on local labour markets, it is necessary, in his view, to make a clear distinction between the "rural" and "urban" environments despite the constant communication between the two and the permanent influence one environment has upon the other. The reason for this is that the attitude and behaviour of job applicants differ radically as between rural and urban areas and their problems are often contradictory.

(continued on page 10)

In the rural sector of the regions studied in Greece, Italy, Spain and Turkey the "traditional balance of underemployment" has been disturbed. The rapporteurs drew attention to the relief of demographic congestion everywhere and a real relaxation of the pressure exerted by the mass of rural workers. This may well be due to a slowdown, in the neighbourhood of the towns, in the natural population trend (fall in the birth rate), but it is chiefly the result of a considerable one-way migration flow.

The essential part of this flow seems to be to foreign countries and the bulk of the emigrants are workers from rural areas. But in all villages there are two competing trends: traditional internal migration to urban areas, which dates back to the 1950's at least, and migration abroad, which is often a new development (except in southern Italy) and increased significantly between 1960 and 1965. It is often difficult to distinguish between the two migration flows and the underlying factors are still far from clear.

According to Professor Kayser, it would in any case be a mistake to relate the two movements to one and the same category and to regard emigration abroad as merely a form or extension of urbanisation processes. These processes, with their potential consequences, give the impression that they are developing over areas that extend beyond the national frontiers, the distances involved being related to modern communication facilities.

In reality, however, the emigration of industrial workers cannot be compared with the rural exodus. In the first case the return of the emigrant is expected and desired, whereas migrants from the land are channelled into towns and industrial regions in the country and expected to remain there for good. The rapporteurs for Italy and Spain emphasised this difference and showed that the contribution to a family's budget of wages earned abroad enables the family to continue living in a rural area and thereby limits the drift from the land.

The influence of emigration on rural structures is therefore limited or at least represents a complex process. Its influence on the trend of the rural labour force is very strong, on the other hand.

There are few cases in which the flow has expanded to such an extent that it has led to a structural labour shortage. The only country in which such cases have been reported is Greece, which is notoriously underpopulated. But, elsewhere, the difficulties encountered by farmers or employers in recruiting seasonal workers at peak periods often point to a reduction in reserves and an increasing discrepancy between labour demand and supply.

Emigration has direct and indirect effects on the agricultural labour market, but it also changes the relationship between the rural labour force and the urban labour market. Owing to the deflection of the migration flow, the pressure of rural unemployment and underemployment is slackening: instead of flowing into the regional towns, the surplus agricultural population is either moving abroad or to the more industrialised areas in its own country. The influx of rural workers into the towns in a given geographical region now depends more on the employment vacancies available in the towns than on the blind thrust

from the rural areas. This explains why pressure on the urban labour market has not become stronger despite the often very adverse trend in agriculture in the various regions.

Emigration and the Urban Labour Market

The towns in which the surveys were carried out, Bari, Brindisi and Taranto in Italy, Seville in Spain, Izmir and Zonguldak in Turkey, Salonika, Kavala, Volos and Patras in Greece, and Aveiro in Portugal, are none of them capital cities and are all notable for their progressiveness. They are typical of the medium-sized town in these Mediterranean countries where large-scale investment, mainly out of public money, is being made to promote economic take-off. Almost all have experienced a very rapid population increase in recent years but in spite of this, unemployment does not appear to have increased to any great extent. In many cases the number of registered unemployed is declining.

It is difficult to say to what extent emigration is responsible for this state of affairs. The relaxation of pressure from rural workers on the urban labour market tends to promote a better balance between supply and demand. Moreover, emigration has drawn off a significant quantity of labour from the active urban population, especially in Turkey, and has reduced the surplus of labour over requirements. But, in Professor Kayser's view, much more complex mechanisms have combined to produce a situation of semi-equilibrium by reducing the demand for jobs and increasing the supply.

The decline in the activity rate in the population as a whole is partly responsible; this is a familiar development that reflects the trend in demographic structures as well as the discontinuance of certain traditional practices such as the employment of women and children. Another factor is the striking increase in the number of jobs in certain sectors. Contrary to what might be thought, the manufacturing industry is not one of these sectors. Although certain new firms have taken on large numbers of workers, the favourable trend has in most cases been offset by the disappearance of jobs due to the closing of traditional firms. A balance sheet of industrial employment growth in certain towns may show a deficit or maintenance of the status quo, but nowhere would it seem to show a substantial surplus.

Most of the new jobs are to be found in the construction and services sectors. The construction sector is to a large extent supplied directly from the rural labour force, but the services sector is specifically urban: the growth of jobs in services probably accounts for most of the recruitment of town dwellers in recent years.

The construction sector has a special significance: not only does it uproot rural workers and prepare them for urban life; it also mobilises a considerable mass of labour which is subsequently tapped by industry (the first workers recruited in factories are taken from the building trade). Above all, for certain workers it paves the way to emigration, for which work in the towns will merely have been a first step.



A market in Sicily: workers without permanent employment earn a little money by helping here and there

In short, the urban labour force may be likened to an iceberg, with part of its mass visible and the other part submerged. The visible part represents the total number of workers actually on the labour market and does not drastically exceed current demand. It may even fail to satisfy demand, since temporary shortages in the building sector have been reported.

The hidden part of this iceberg consists of urban manpower reserves, which are difficult to mobilise in that they include not only the workers who are objectively available, such as women of working age, but also those who may be termed subjectively available: the large numbers of city dwellers living from occasional trades and odd jobs who are difficult to pin down and yet are often quite able, if not actually skilled.

These reserves are considerable and have hardly been tapped by emigration. They may well continue to exist even when the labour market is under strain. In that event any shortage of labour cannot be interpreted as reflecting a state of full employment. The one-way flow of occupational and social mobility in emigration areas may well involve considerable unemployment, registered or concealed, together with a pronounced shortage of available jobs.

Urban emigration is generally associated with a low social and occupational level. Over and above a certain level of skill, wages or social standing the prospect of work abroad holds little attraction. If skilled workers are absent more often than not from the labour markets surveyed, it is not because they have left, it is because they do not exist, which is a sign that the educational system and vocational training facilities have failed to adapt themselves to the needs of the community.

Impact of Returning Emigrants

The effect of emigration is to draw off manpower but its action in returning labour to the market may be just as important. The question of the employment of returning emigrants was one of the major concerns of the OECD specialists engaged on the surveys. But compilation of data was rendered difficult by the fact that returning emigrants tend not to go into jobs which are appropriate to the skills, or at least the specialised training or work-discipline, they have acquired abroad. Instead they find themselves places in the traditional economy, in the craft trades or services, and in any case prefer to set up for themselves.

All the rapporteurs had difficulty in finding any favourable factors in the process of reintegrating the returning emigrants. None was able to quote any really conclusive instance in which the returning labour was used in a manner at all conducive to development. In no way do the returning emigrants help to further their country's economic growth, whether by the use of the savings they have accumulated abroad or the experience they have acquired. The top-heavy economic structure they find on their return — technological modernisation and demand for consumer goods tacked on to an obsolete economic and social machine — hardly induce them to turn the fruits of their temporary expatriation to good account. Nor are they helped by the fact that most of their time abroad was spent on the fringes of the real industrial community.

In any case, individual workers have for several years been easily reabsorbed by the labour market on their return. Moreover, according to most of the

rapporteurs, those emigrants who return for good appear to lose themselves in the throng and prove difficult to track down. The return of emigrants following the German recession of 1967 is still too recent to be analysed. But Professor Kayser puts forward an assumption which in his view might confirm the conclusions drawn from the general trend on the labour market.

If unemployment has increased only relatively little or not at all, and if the forced return of emigrants has not led to an alarming situation, it is because the elasticity of the labour market in the regions studied is still considerable. A large number of these emigrants have succeeded in finding jobs at various levels in the economy although they have no security of tenure and often have to live by occasional work. Farm workers can find a certain minimum of employment, while consciously or not those workers who originate from towns or have recently become town dwellers enter or re-enter the urban labour reserve referred to earlier.

Emigration and Regional Development

The surveys carried out in Greece, Italy, Spain, Portugal and Turkey are regional and in fact distinctly local in character. Wherever possible, the rapporteurs took account not only of a particular city, industrial centre or labour market, but also its whole environment whether rural or "semi-urban", the basic assumption being that the fragmentation of labour markets calls first for a geographical rather than a macro-economic analysis.

It emerges from the studies that emigration at regional level cannot be assessed in categorical or immediate terms. The analysis of certain demographic trends gives reason to fear that emigration is ultimately a factor of impoverishment. At the outset it relieves congestion, but little by little it becomes erosive.

In the short term there are obvious signs that emigration is an obstacle to development where no deliberate and co-ordinated emigration policy exists. Since there can be no serious qualitative control of departures, it is almost certainly the most enterprising persons who leave. Moreover, apart from diminishing the regional labour force qualitatively, emigration enables a significant proportion of workers to subsist in a reserve which prevents labour from being efficiently employed. Furthermore, it stimulates the consumption of modern manufactured products which are in most cases imported.

But it is evident too that effective and active links between emigrants and the regions from which they originate can produce favourable effects in the long run : in particular, the gradual integration of the regions and towns into the national and even international context produces a sequence of economic and, especially, social effects that create a salutary "demand for development".

In these circumstances, it is Professor Kayser's view that if the emigration factor is to be taken into account when formulating an active manpower and development policy, it would be wise to gauge and

control its impact at regional level and not just in the relatively abstract context of national planning.

Further Research

An examination of the actual state of a certain number of labour markets affected by migratory flows could never be sufficient to permit the formulation of a theory of the effects of migration at macro-economic level. But the OECD Working Party notes in its conclusions that a basic awareness of the structure of migratory movement is beginning to appear. This, it feels, must be developed by analysing the complete sequence of present migratory movements within Europe, namely the departure of migrants, their stay abroad and their return.

One of the main lessons to be learned from the studies is that migratory movement cannot be considered in the absolute : it has to be analysed in terms of time (short or medium term) and space (towns and regions). The ways in which the industrialised countries of Europe, either spontaneously or because of internal pressures, tap the readily available labour reserves in developing countries are radically different. It is therefore impossible, and for numerous reasons probably not desirable, to apply an overall regulatory policy. There is only one chance of integrating migration policy into an active manpower and development policy, and that is to apply special technical assistance measures tailored to the needs of the regions and countries supplying manpower and to the capabilities of those employing it. (For their part, the immigration areas and countries in which migratory flows play an important role are also calling for measures to rationalise migration.)

Having taken all these findings into account, the Working Party recommends two courses of action : the study of measures that will affect the whole migratory sequence (with special reference to the question of repatriation) in the light of specific geographical, economic and sociological data; and the pursuit of specialised lines of research.

This research, the experts concluded, should comprise the following main items :

- continued surveys of local situations, particularly in those countries which have not yet been studied : e.g. Yugoslavia for emigration, Sweden and Switzerland for immigration ;
- consistent and systematic analysis of repatriation as one of the vital links in the migratory chain, so as to throw some light on the relationship between immigration and emigration areas : e.g. migrants who return temporarily because of a change in the economic situation, those who return for good, those who never return at all, the use made of capital savings and training acquired, etc.;
- further examination of the links between spontaneous migration and organised migration, both as regards their nature and their consequences;
- analysis of the place held by immigrant manpower within the occupational structure of the industrialised countries : distribution by sector of activity, and development of this distribution over time;
- co-ordination of these studies with those under way in other national and international organisations.

CONTAINERISATION :

Problems of the shipping industry, ports, labour and governments

Container transport is being rapidly introduced on to the major sea routes between the industrialised regions of the OECD, America, Western Europe and Japan, and between these regions and Australasia. On all these routes the greater part of general cargo transport is expected to be moved in containers within the next few years. Full container services with single-purpose container vessels now account for the greater part of present and expected future unit transport capacity on deep sea services, though other forms of unit transport are actively participating in the present transformation and modernisation of general cargo carrying.

Earlier reports of the OECD Maritime Transport Committee, prepared at the request of the European Conference of Ministers of Transport, discussed the major problems which arose in the first stages of containerisation, drawing distinctions between technical, financial, commercial, legal, administrative and social problems affecting this development. In its latest report the committee emphasises that the ultimate question of viability of containerisation concerns not only each individual operation but the economy as a whole, including the social costs involved.

In its 1969 Annual Report, the Committee includes a special chapter on recent developments and trends affecting the problems and policy issues of containerisation.

The development of integrated transport systems presents the operators of inter-regional container services — usually the shipping firms — with a large number of organisational problems. Documentation of international door-to-door transport, control of the flow of containers inland and at sea, optimisation of movements, computer control and other factors present new problems for shipping companies. New management techniques are often required.

The central problem for each firm is the financial viability of the investment; and in this respect much depends on factors which lie outside the sphere of influence of the individual firm. The Committee's report warns that early optimistic reports on the profitability of container operations from individual shipping firms

should not be interpreted as meaning that all legal and administrative problems which arise on the international level have been solved or are on the brink of solution. Moreover, social problems arising from the replacement of former labour-intensive methods both at the dockside and aboard ship need to be speedily solved, if possible before the individual becomes directly affected.

Being interlinked, the major containerisation issues which concern shipping and ports cannot at this stage be isolated from each other and must be understood as affecting shippers, forwarding agents, inland transport interests and public administration and governments as well as shipowners. Virtually every problem of containerisation is a facet of one basic need, that of closer integration of the different

stages of international general cargo transport which are traditionally too loosely linked to provide the best framework for containerised transport. From this point of view the crucial problems of containerisation at the present stage are technical standardisation and the harmonisation of administrative procedures and of the legal framework.

Standardisation

At first glance, it seems that any deviation from the standards for containers laid down by the International Organisation for Standardisation (ISO) could only lead to overall losses as containerisation develops, because the free interchange of containers between all concerned is a condition of optimum utilisation. The importance of this factor was stressed in the early days, when standard containers were not yet widely used; in the meantime some new operators have introduced or plan to introduce non-standard containers which are more economic from their own point of view. If individual trades are considered in isolation the economics of operation may indeed point conclusively to non-standard containers.

Governments have not attempted to enforce the use of standard containers, but have limited themselves to recommending the wide adoption of ISO standards, although for their part, the European Ministers of Transport have strongly reaffirmed their support of these standards.

The Economic Commission for Europe (ECE) is at present studying the extent to which non-standard containers are being or will be used, and the problems which this may create. House-to-house container transport offers a strong incentive to shippers, and especially to manufacturers, to adapt packaging and products themselves to container sizes, and even to integrate containers directly with the production process. Non-standard containers could seriously hamper the development of full intermodal transport and thus reduce the scope of containerisation generally.

In recent months, the great versatility of the ISO standards has been demonstrated by the introduction of new specialised containers which conform to the standards: besides dry goods and refrigerated containers of various types, there now exist,

1. DEEP-SEA CONTAINER ROUTES SERVED AS AT END 1969 AND DEVELOPMENT PLANS (1)

Route	Estimated capacity of services in std. 20 ft. units			
	End 1969/beg. 1970		End 1970/beg. 1971	
	Vessel capacity	Annual carr. in each direction	Vessel capacity	Annual carr. capacity in each direction
United States and - Western Canada East Coast Europe	35,000	460,000	45,000	650,000
United States and - Western Canada West Coast Europe	2,000	19,000	16,000	127,000
United States and - Japan / Canada West Coast Far East	14,000	130,000	19,000	190,000
Western Europe - Australia	12,000	70,000	18,000 (2)	100,000 (2)
Japan - Australia	3,100	35,000	6,700	75,000

(1) Excludes North American near sea services and U.S. — Puerto Rico and U.S. — Hawaii services. At the end of 1969, vessel capacity on these routes was of the order of 15,000 standard units. Also excluded is capacity of military services.

(2) In 1972, the "Scanaustral" service will supply additional capacity of approximately 7,000/36,000 standard containers.

Source : Estimates based on "A.S. Shipping Consultants, Container Ship Register 1969-1970".

2. NEW DEEP-SEA ROUTES ON WHICH CONTAINER SERVICES WERE PLANNED AS AT THE END OF 1969

Route	Inauguration of services	Estimated vessel capacity standard	Estimated annual carrying capacity (one way) 20 ft. units
Western Europe - Japan Far East	mainly 1972	40,000 (1)	200,000 (1)
Western Europe - New Zealand	late 1972	5,600	35,000
U.S. and Canada - Australia / U.S. and Canada - Australia / (East Coast) New Zealand	1970-1972	11,000	75,000
U.S. and Canada - Australia / (West Coast) New Zealand	1970-1972	..	..
United States - South America (Gulf Coast) (East Coast)	1971	..	..

(1) Approximation; not all vessels ordered.

Source : Estimates based on "A.S. Shipping Consultants, Container Ship Register 1969-1970"

inter alia, containers for liquids, pressure vessels for liquefied gas and special containers for granulated goods. Containers are thus demonstrating their adaptability to the numerous exigencies of general cargo transport and it even seems possible that container transports may make in roads into certain bulk trades for relatively small lots (e.g. chemicals, timber).

Efforts aiming at standard numbering systems for containers and standardisation of handling equipment in ports and inland terminals are being pursued. Closely related to the stan-

dardisation of equipment are the questions of unifying and adapting customs and other administrative procedures in international trade to the needs of uninterrupted through transport. Examples are a draft convention on international customs transit with particular reference to container traffic; the exemption of containers from import duties and taxes when admitted temporarily; the use of foreign containers in internal traffic, and an international scheme for the reciprocal recognition of certificates, plates, etc.

These and other related problems are under study in the appropriate international bodies.

Insurance and Liability

While underwriters are understandably cautious in forming a final opinion, there are some indications that loss or damage to cargo in container transport has been less than in conventional shipping; for instance, a major British container service reports that it shipped 75,000 tons of cargo in the first five months of its operation to and from Australia and that claims for loss or damage were virtually nil. Container transport may lead to lower risks compared with break-bulk shipments, for example through a reduction of pilferage and of damage in loading, discharge and in transit, provided that the containers are properly stowed. In this connection, proper stowing of containers with regard to cargo safety and optimum space utilisation requires new specialised skills.

Discussions on a new international convention on combined transport are in progress in commercial circles. The aim is to provide a new set of rules, primarily to cover bills of lading relating to goods carried by combined transport, especially as regards liability for loss or damage to cargo which may occur in through transport, where separate regimes are in existence for road, rail and sea carriage. Such a convention will be considered at a later date at a conference at diplomatic level.

Economic Problems of the Shipping Industry

The development of containerised services and other types of unitised services on long sea routes has posed a number of problems: potential over-capacity of shipping space, concentration, shipping "conference" structure (1), and freight rate structure.

It now seems likely that a certain amount of overcapacity will occur during the next stages on the North Atlantic routes, and perhaps also on

(1) "Conferences": associations of cargo-liner companies operating in a particular trade or trades.

Pacific routes. The pioneers of containerisation, having passed through the stages of operation in coastal and inland trade of the United States, chose as the next step to enter the North Atlantic run; this led some conventional lines to discontinue their North Atlantic operations, while the majority decided to adapt themselves to modern requirements. Transport capacity on this route is likely to grow further and to exceed the demand for shipping space, at least during the transitional period. A similar trend seems to be developing on some Pacific routes between the United States and the Far East.

Highly integrated services have been developed as one means of providing ocean container transport on a rational basis. For example, the trade between Europe and Australia is to be handled by only two integrated services, each representing a number of large companies. The close co-operation that results from the need to maximise the efficient use of very expensive ships and facilities is likely to produce major changes in the conference structure which, in the view of some governments, may create a new situation.

It seems probable that the containerisation of the deep-sea trades will have repercussions on other shipping markets. For example, a surplus of tonnage of general cargo liners may develop, although this may be at least partly taken up by the continuing growth of demand for dry cargo shipping in general. However, as a result of the high capital requirement that deep-sea container shipping operations entail, the small shipping firm may have increasing difficulty in participating in the transport of general cargo and may increasingly have to turn to specialised trades.

There also remains the problems of freight rates for container services. So far, container rates for the deep-sea services have been based on existing conference rates with slight rounding down to enable different products to be grouped together. As yet, few reductions have been passed on to the shipper, who has, however, shared the benefits of containerisation in faster throughput and in having less capital tied up in transit. Furthermore, there is the prospect that freight rates will increase less rapidly in future than they would otherwise have done.

A crucial problem of tariffs for container services concerns house-to-

house rates or joint rates for sea and land carriage. Such rates would make it possible for the container operator to select as occasion arises (probably by computer) the optimum combination of inland carriers, ports and ocean carriers, for particular shipments instead of using laid down routes only. Some port authorities, however, fear that this might lead to the concentration of overseas container handling in only a few ports.

Economic Problems of Ports

Massive containerisation of general cargo movements is also likely to affect the ports: structural changes that result from containerisation will be due mainly to

- higher productivity of general cargo handling in ports
- growing competition between ports
- a growing share of inland-to-inland transport in full container loads.

The principal advantage of container operations is the reduced turnaround time of vessels in ports together with lower handling costs. One

estimate relating to the port of New York speaks of 600 man-hours for the loading and unloading of 10,000 tons of containerised cargo compared with 11,000 man-hours for the same quantity of conventional general cargo. This does not include time spent on consolidating the container cargo and of packing and unpacking the containers although this will partly remain in the port area and contribute to the port's activities. However, a particular problem for ports arises from the expected growth of full container loads, either between inland depots or directly between shippers and consignees. The overall impact of the reduction in manpower requirements will also depend on

- the place that general cargo handling fills in the total activities of the port
- the speed with which conventional general cargo handling is replaced by container movements
- the share of container transport which each port will be able to retain in competition with others.

Virtually all European and American ports which traditionally handle large general cargo volumes now have container installations or plans for



3. SEAGOING CONTAINER VESSELS AS AT END-1969

Type	Number of vessels	Total tonnage '000 dwt	Total carrying capacity in standard 20 ft. units
Full container ships	106	1.500	83.000
of which specially built	38	..	38.000
converted	68	..	45.000
Part container ships (1)	99	1.300	32.000
Total	205	2.800	115.000

(1) General cargo ships with specially fitted container cells, convertible container ships, container/pallet ships, container/car/trailer ships.
Source: Estimates on the basis of "A.S. Shipping Consultants, Container Ship Register 1960-1970". Covers vessels in operation as at 1/10/69 and vessels to be delivered in 1969.

4. CONTAINER MOVEMENTS ON PRINCIPAL UNITED STATES TRADE ROUTES

U.S. Pacific /Far East (Trade route 29)	Containers moved '000 standard 20 ft. units			Cargo moved '000 long tons		
	Inbound	Outbound	Total	Inbound	Outbound	Total
1968 1st Quarter	2.7	5.8	8.5	17.1	54.1	71.2
2nd Quarter	7.8	7.8	15.6	46.9	73.6	120.5
3rd Quarter	10.1	12.8	22.9	58.0	100.7	158.7
4th Quarter	12.7	17.9	30.6	65.2	148.3	213.5
1969 1st Quarter	24.6	31.7	56.3	173.3	263.1	436.4
2nd Quarter	30.0	30.9	60.9	225.0	293.0	518.0

U.S. North Atlantic/ U.K. - Continent (Trade routes 5, 7, 8, 9)	Containers moved '000 standard 20 ft. units			Cargo moved '000 long tons		
	Inbound	Outbound	Total	Inbound	Outbound	Total
1968 1st Quarter	23.7	24.1	47.8	218.1	200.0	418.1
2nd Quarter	24.2	29.0	53.2	226.7	237.7	464.4
3rd Quarter	25.5	31.5	57.0	223.7	250.1	473.8
4th Quarter*	22.0	20.8	42.8	193.7	159.3	353.0
1969 1st Quarter*	24.6	25.7	50.3	225.4	204.3	429.7
2nd Quarter	50.0	51.9	101.9	416.2	411.1	827.3

* Affected by Longshoremen strike.

their development; many receive one or several deep-sea container services. There is little doubt that existing or planned container handling installations, at least in Europe, are already largely sufficient for the foreseeable future if an overall view is taken.

It seems clear therefore that strong competition between ports for container cargo will become inevitable in future, especially in Europe and the United States. The operators of large container ships will wish to minimise the number of calls at each end of the route in order to make the most economic use of their ships; the extent to which the savings made in this way should be used to absorb extra inland transport costs incurred and the implications for inland transport will require careful consideration.

A choice of container ports and some degree of over-capacity of handling installations will provide the container transporters with a highly desirable safety margin and will permit more elastic operations.

Social and Labour Problems

The European Ministers of Transport have stressed the need to "keep close watch on the social problems which may arise as a consequence of the growth of container transport". Problems are likely to arise on board ship from the new conditions under which seamen have to work. Some companies have successfully concluded far-reaching agreements with the unions providing for more modern working conditions.

Another problem is the rate of replacement of labour-intensive handling in ports by mechanised container handling; but so far it does not appear that the pace of containerisation has accelerated to such an extent as to create serious problems of unemployment in ports.

During 1969 certain labour conflicts arose, notably in the United States and the United Kingdom, which were directly or indirectly connected with containerisation, and which in some cases resulted in the diversion of vessels to other ports. Solutions acceptable to all parties which safeguard, in particular, the interests of the workers concerned, could avoid social problems from the outset and help to speed up technical progress and increase productivity in ports.



Highlights from

OECD

**ECONOMIC
OUTLOOK**

JULY 1970

7

OECD Economic Outlook No. 7, published at the end of July, analyses the economic situation and prospects for the twelve months ahead. The widespread presence of price inflation is identified as the key issue.

The short-term prospect facing different countries varies considerably. Almost all have found themselves impelled to take steps to moderate demand: they are however at very different stages along this road. The United States - one of the countries further advanced in this process - is now in a phase of zero real growth. But, despite fears generated by the slide of prices on Wall Street, the present danger does not seem that of recession, either in the United States or the industrial world as a whole. Notwithstanding other differences in their situation, almost all OECD countries face serious and continuing price rises. The problem of getting inflation under control is discussed later in this note along with other policy problems. Questions relating to payments trends and the international monetary system are in part connected with - and in part separate from - the present difficulty experienced in ensuring a reasonable stability of prices.

INFLATION AND PAYMENTS EQUILIBRIUM

PROSPECTS TO MID-71

Over the last six months real output has risen slightly less—and prices considerably more—than foreseen in the last issue of Economic Outlook. The present OECD forecasts are for a satisfactory growth of output over the next twelve months and for some slowdown in the rate of rise of prices.

In the light of recent experience, the forecasts on prices could prove optimistic. On the side of output, prospects are made uncertain by recent developments in the United States. The sharp decline on Wall Street is bound to have an adverse effect—though one hard

to assess—on consumer and business confidence; and the resumption of expansion in the United States could prove slower, or less marked, than suggested by the forecast. But there remain good grounds for believing that a recovery will get under way in the first half of next year. In other OECD countries demand has generally been more buoyant than anticipated earlier.

The main features of the forecasts are:

• *Output*

Real GNP in the OECD areas is forecast to rise by 4½ per cent over the next twelve months. This is slightly below the estimated potential growth rate.

Summary of underlying trends
Percentage changes, seasonally adjusted annual rates

	1958 to 1967 average	1969	1970 I	1970 II	1971 I
REAL OUTPUT (GDP or GNP)					
United States	4¾	2¾	-1½	2	3¾
Other OECD	6	7	6½	5¾	6
TOTAL	5¼	5	1¾	3¾	4¾
PRICES (GNP deflator)					
United States	1¾	4¾	5¼	4	3¼
Other OECD	3½	4½	6¼	4¾	4
TOTAL	2½	4¾	5¾	4¼	3¾
OECD EXPORTS					
In value	9	16	14	10	8½
In volume	8¾	11¾	7¾	7	6¾
Average values	¼	3¾	5¾	2¾	1¾

• Prices

The average rise in domestic prices (GNP deflator) is forecast to come down from an annual rate of nearly 6 per cent in the first half of this year to $3\frac{3}{4}$ per cent in the first half of next year. The present, exceptionally high, rate of increase would fall in all major countries except Italy.

Forecast deceleration of price rise

Change in GNP deflator

from previous half-year, annual rate

	First half 1970	First half 1971
Germany	$7\frac{1}{2}$	4
Italy	$6\frac{3}{4}$	$7\frac{1}{2}$
Japan	$6\frac{1}{2}$	$3\frac{1}{2}$
France	$5\frac{3}{4}$	$3\frac{3}{4}$
United Kingdom	$5\frac{1}{4}$	4
United States	$5\frac{1}{4}$	$3\frac{1}{4}$
Canada	4	3

• Trade

The growth of OECD exports in value terms is expected to slow down further in the first half of next year to about the average over the last decade. This should be the combined result of fairly steady growth in volume terms and a much slower rise in foreign trade prices. (The longer-run relationship between domestic and foreign trade prices is discussed in a separate section of Economic Outlook No. 7).

• Current Balances

Changes in relative demand pressures, and the continuing effects of the 1969 parity changes, should produce some further improvement in the pattern of current balances within the OECD area. But these factors will probably have about worked themselves out by the middle of next year. The OECD forecasts suggest that, by then, the United States will have a current account surplus which would be low by historical standards; and that Japan will have an unusually large current surplus. The OECD area's combined current surplus with the rest of the world is expected to rise to a cyclical peak, and then to decline in the second half of next year.

• Monetary Developments and Capital Movements

It is not thought that any marked and general reduction of interest rates is likely; indeed, the possibility

Current balances

\$ billion, seasonally adjusted annual rates

	Average 1960-68	1969	1970	1971 I
United Kingdom	-0.35	1.00	1.3	1.3
United States	2.85	-0.89	1.1	1.6
France ^a	0.37	-1.55	0.4	0.6
Germany	0.62	1.81	0.6	0
Italy	1.05	2.37	1.3	1.4
Canada	-0.71	-0.67	0	-0.6
Japan	0.10	2.19	2.5	3.0
Total above	3.93	4.26	7.2	7.3
OECD CURRENT BALANCE WITH REST OF WORLD ^b	2.8	3.9	5.3	6.0

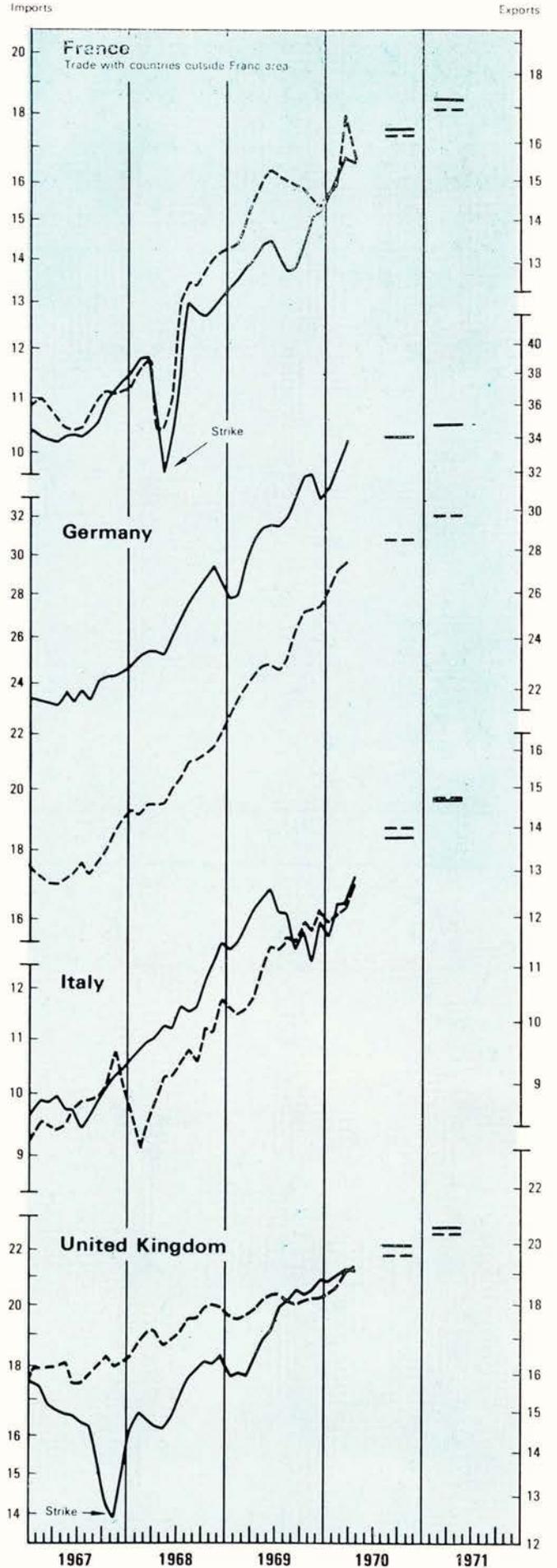
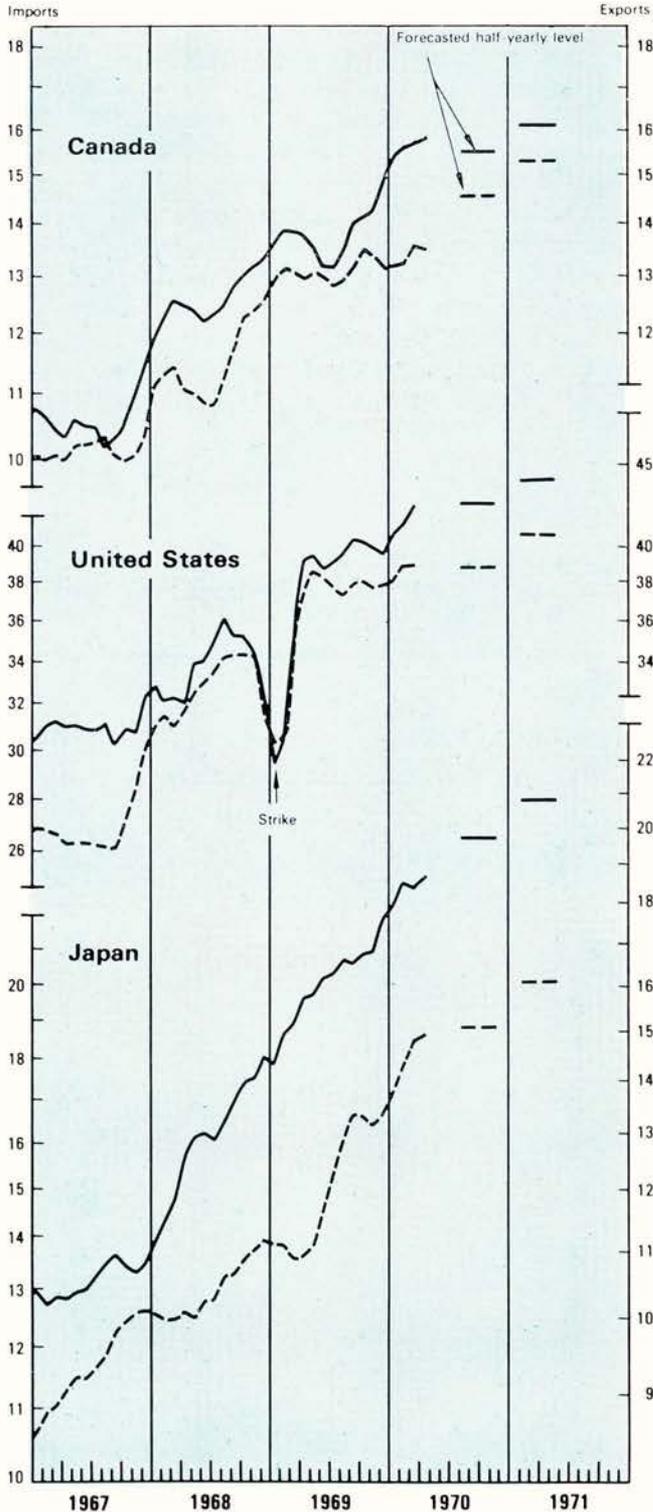
a) Transactions with non-franc countries. b) Roughly estimated by the OECD Secretariat.

TOTAL TRADE OF MAJOR OECD COUNTRIES

3-month moving averages, seasonally adjusted
billion dollars at annual rates

--- Imports
— Exports

Except for the United States and Canada, the import figures are on a c.i.f. basis, but the import scale (left) has been adjusted downwards to take into account the average discrepancy between f.o.b. and c.i.f.



of higher long-term rates by the end of the period reviewed cannot be ruled out. Recent months have seen capital outflows from the United States. Prospects depend in large part on changes in relative interest rates in different countries, which are hard to predict. But capital outflows from the United States, and inflows into countries where demand pressures remain strong, seem likely to continue. So long as the forecasts of domestic developments prove roughly correct, existing international monetary arrangements should be quite adequate to cope with any financing problems thus arising.

• *International Liquidity*

Official reserves are likely to show a substantial rise in 1970—in large part because of the distribution of \$ 3½ billion of SDRs in January, in part also because of other factors. The increase would have been larger had it not been for the extinction of large official short-term credits, notably by the United Kingdom and France—the counterpart of which was previously included as an element in other countries' reserves. To measure the course of international liquidity it seems desirable to eliminate this element, and estimates on an adjusted basis are also given in Economic Outlook No. 7. The increase likely this year has to be viewed as coming after—and to some extent compensating for—the very slow rise over the preceding four years, at a time when world trade and international transactions in general have been rising extremely fast.

THE PROBLEM OF RISING PRICES

• *Price Rise Doubled*

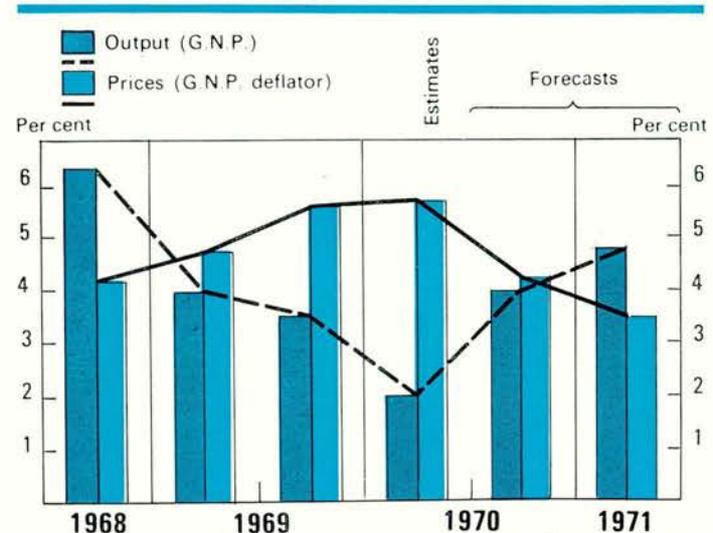
Price inflation is an old problem which has now acquired new dimensions and a new urgency. The last twelve months have witnessed the most pronounced and general price rise experienced in the OECD area since the Korean war. Prices have been rising in most countries by at least 5 per cent; this is more than double the average rate in the early 1960's. It is clear, moreover, that the strength of the inflationary forces generated over the last two or three years has been consistently under-estimated. OECD forecasts, like other official forecasts, have understated the price rise that is occurring and is likely to occur. Thus since last December the forecast rise in the OECD GNP price deflator in 1970 has had to be raised from around 4 per cent to over 5 per cent. This alone is enough to cast some doubt on whether the slowdown in the rise of prices now forecast for the next twelve months will fully materialise. And, even if achieved, a 3-4 per cent rate of inflation in the first half of next year would still be regarded by most people as unacceptably high.

DEMAND AND PRICES

in seven OECD countries (1)

Half-yearly changes at annual rates

Adjusted for seasonal variations



(1) The seven countries (United States, Canada, Japan, France, Germany, Italy, and the United Kingdom) account for 90 per cent of OECD G.N.P.

• *An International Problem*

In previous inflationary phases there have always been one or more important countries in which prices remained fairly stable. Now practically all countries are in the same situation: such islands of stability now hardly exist. This increases the difficulty of finding a solution. An unusual and to some extent unexpected feature of the last twelve months has, for instance, been the sharp acceleration of prices in world trade. In dollar terms they have been rising at an annual rate of over 5 per cent compared with an average of ¾ per cent over the period 1955-1967. For the first time in a decade, prices in world trade have been rising as fast as the general domestic price level. The unusual feature has been the rapid rise in the prices of manufactures. In the past, foreign markets have usually been more competitive than domestic markets since, at any one time, there was one or more major exporter which, because of weak markets at home, acted as check on other exporters. But with the generalisation of excess demand and rapid cost increases, this has no longer been the case in the past year. The ability—and to some extent the will—of both governments and exporting firms to resist cost inflation has thereby been weakened, since they have seen other countries similarly failing to hold the tide. This, in turn, has reacted on countries' price levels through what may be called "imported" cost inflation.

• *Inflation and Demand Management*

Price inflation is an iterative process, since cost increases take time to work through the system and wage increases are affected by the rise in consumer prices. There are thus bound to be delays and lags

Output and prices in seven major countries

Percentage change from previous period at seasonally adjusted annual rates

	1958-1967 Average	1968	1969	1970 Forecast ^a	1969 I	1969 II	1970 I	1970 II	1971 I	
United States										
GNP	4.7	4.9	2.8	$\frac{1}{4}$ (1½)	2.6	1.5	-1½	2	3¾	
Deflator	1.8	4.0	4.7	5 (4)	4.7	5.3	5½	4	3½	
Canada										
GNP	4.7	4.9	5.0	3 (4)	5.0	3.5	3¼	1¾	4½	
Deflator	2.4	3.6	4.7	4 (4)	5.2	4.5	4	3½	3	
Japan										
GNP	10.7	14.0	12.2	10¾ (11¼)	11.4	12.2	10½	9½	12¾	
Deflator	4.6	4.0	4.4	6 (4¾)	3.0	7.1	6½	4½	3½	
France										
GDP	5.8	4.9	7.9	5½ (4)	5.0	5.7	5½	5¼	5¼	
Deflator	4.0	4.7	6.9	5½ (5½)	6.8	7.0	5¾	3¾	3¾	
Germany										
GNP	4.8	7.2	7.9	5½ (4¼)	7	8¼	4½	4½	3	
Deflator	2.9	1.5	3.4	6½ (4¼)	3	5	7½	5	4	
Italy										
GDP	6.0	5.9	4.8	7 (7)	6.5	-3.2	11¾	8	6	
Deflator	3.8	1.5	4.0	6½ (4¾)	4.4	5.5	6¾	7	7½	
United Kingdom										
GDP	3.3	3½	1¾	2¼ (3)	-½	4	¼	4	3	
Deflator	3.0	3¾	5	5 (3)	5½	4½	5½	4½	4	
TOTAL OF ABOVE ^b										
GNP/GDP	5.3	5.9	4.7	2¾ (3¼)	4.1	3.5	1¾	3¾	4¾	
Deflator	2.5	3.7	4.7	5¼ (4¼)	4.7	5.5	5¾	4¼	3¾	
TOTAL EXCLUDING UNITED STATES ^b										
GNP/GDP	6.2	7.3	7.2	6 (6)	6.2	6.1	6½	5¾	6	
Deflator	3.6	3.2	4.6	5¾ (4½)	4.5	5.8	6¼	4¾	4¼	

^a) In brackets are the forecasts of *OECD Economic Outlook* No. 6. ^b) At 1968 exchange rates.

before restrictive action has its desired effect on prices. Such lags have certainly been in evidence in recent attempts at stabilisation—there may even be some question whether they have not lengthened. Output in the OECD area has been decelerating for two years now—since the middle of 1968—but over this same period the price rise has been accelerating.

The general strategy which governments have been following aims to resume a normal rate of growth, but

at a lower level of demand pressure. Some countries, such as the United Kingdom, France and the United States, have already reached, or will soon be reaching, this stage. Other countries, notably Germany, are still struggling to eliminate excess demand. This strategy could, however, prove less successful, and price inflation more resistant to it, than is hoped. The obstinacy of the price rises suggests that there is a danger that price and wage increases will not come

down to acceptable levels during the cooling off period: or that, if they do, they may accelerate again quickly as soon as normal growth is resumed.

But even were the result of a given degree of demand restraint to prove less than expected, this would not mean it was the less necessary. Even if not a fully sufficient answer, it is a first, basic requirement that restrictive policies should not be relaxed prematurely, but should be pursued with firmness and good judgement. There may be a number of lessons in this respect to be learned from the experience of the last few years. For those countries still in the process of seeking to eliminate excess demand, there is need to maintain a balance between monetary and fiscal restraint, which not only takes into account inevitable political restraints but also meets the essential economic requirements. Germany provides a current example of a country where, because of the political difficulties involved in fiscal action, monetary restraint has had to be carried to the point where it is nearing the limits of effectiveness. Pushed further, it could be seriously undermined by capital inflows: it could eventually also put too much of the burden of adjustment on particular sectors of demand which happened to be hardest hit by monetary restraint. This is not just a specifically German problem: over-reliance on monetary restraint raises these difficulties in any economy open to outside monetary influences.

For those countries in the happier position of being now able to begin to relax restrictive policies, or likely to be reaching this over the coming year, there is a simpler — perhaps, indeed, platitudinous — lesson. While the likely impact of restrictive action has nearly always been over-estimated, there has been a very frequent tendency to under-estimate the impact of expansionary action. It is not only a question of making proper allowance for the lag between action and the effects of action; account has also to be taken of the resilience of private demand evident in modern full employment economies, especially when inflationary expectations have become entrenched. Prudence in promoting re-expansion is particularly important for countries—such as the United States and the United Kingdom—whose longer-term balance of payments outlook calls for a price performance relative to that of other countries considerably better than in the recent past.

● *The Politics of Inflation*

No country today is likely to be prepared deliberately to provoke a severe recession as a means of combating inflation. And the experience of those few countries which, at one time or another during the 1960's, fell short of their potential growth rates for some period of time, suggests that the undercurrents of social and political discontent thus generated may eventually have rather violent economic repercussions which are difficult to control or foresee.

The danger of a resumption of inflation on the present scale as soon as, or soon after, normal growth

rates are resumed is an equally unacceptable prospect. Apart from the social inequities it creates, there is an evident risk that, in practice, renewed inflation would turn out to be *accelerating* inflation. Some countries, it is true, have learned to live with continuing rapid price inflation. But generalised accelerating inflation in the major developed countries of the world would be a serious threat to economic and political stability both within the OECD area and beyond.

The problem of inflation today arises in part from the very successes of modern society in other directions. The unparalleled success of modern economies in achieving high and rapidly rising living standards gives rise to high expectations for the future. The resulting pressures are difficult to control in a society which has succeeded in maintaining its open and decentralised nature, and where the distribution of incomes is determined by the interplay of complex economic and social forces. Though the institutional historical and political context varies from country to country, the basic problem is the same: how to mitigate the self-defeating—and therefore self-perpetuating—tendencies inherent in the price-wage spiral, while preserving basic economic and political freedoms.

It is considerations of this sort which underlie the attempts to evolve so-called "incomes policies". Their success has so far been limited. But the alternatives may prove unworkable or unacceptable. It therefore appears highly desirable—and probably inevitable—that the search should go on; and it would probably be wrong to underestimate the possibilities of progress. It will, however, take time for the lessons to be learned, for attitudes to change, and for appropriate institutional arrangements to be evolved.

In the meanwhile there is an urgent problem of breaking the present wage-price spiral; and achieving results, as quickly as possible, which will dampen expectations about probable future price trends. Governments have it in their power to act in various ways which would be helpful in this respect; and if all governments were to give increased priority to exploring these possibilities, their efforts would prove mutually reinforcing.

● *Inflation and International Payments Equilibrium*

Since the revaluation of the Deutsche Mark, questions concerning international balance of payments equilibrium have taken second place to the problem of inflation. The two problems are both distinct and closely linked. They are distinct because, even if all countries were inflating together with no balance of payments difficulties, it would still be imperative, on domestic grounds, to bring down price increases to a tolerable level.

They are closely linked for several reasons. First, greater success or failure in bringing inflation under control in one country or another will, in time, bring renewed disequilibrium in international payments.

(continued in page 24)

Second, international trade and capital movements have been an important vehicle whereby both demand and cost inflation have been transmitted from country to country. In turn, this means that in an open economy the choice of policy instruments to combat domestic inflation can raise difficult problems of economic management. This is well illustrated by recent events in Canada, which arose from the difficulty of simultaneously defending a fixed parity and maintaining an appropriate domestic monetary policy, in a world of increasingly mobile capital movements. (A special section of Economic Outlook No. 7 reviews the action taken by the Canadian authorities).

One important feature of the international scene has been the great improvement in the payments position of France and the United Kingdom. Equally important have been the—relatively modest—progress made by the United States on current account, and the sharp reversal of last year's capital inflow into the United States. A large official settlements deficit has thus been incurred by the United States so far this year. This could continue on a reduced scale, although future developments here are hard to predict. Last year's capital inflow to the United States, and this year's reversal of the flows, reflected the shifting relative posture of monetary policies in the United States as compared with those in other countries; and these

shifts in turn essentially reflected the short-term evolution of conjunctural situations. But it is also clear that last year's developments were unusually favourable to the United States overall balance of payments. What is of greatest concern is, therefore, not the oscillations of the capital account, but the relatively small improvement in the trade balance, at a time when relative demand pressures are cyclically favourable to the United States.

Many other countries—particularly those with a strong underlying external balance—face a rather different problem. Their efforts to contain inflation have been undermined by two factors: first, by the sharp rise in import prices which, as already noted, has resulted from the generalisation of inflationary trends; and second, by the capital inflows, which have just been discussed, and which have made it difficult to maintain effectively restrictive internal monetary policies. Countries may well have misjudged the extent to which their anti-inflationary efforts can be undermined in both of these ways.

The international payments problems facing the United States and other OECD countries are, of course, in many ways complementary; they are opposite sides of the same coin. As such, they call for a collective approach if satisfactory solutions are to be found.

OECD INVISIBLES IN THE 1960'S

Invisible transactions are an important and growing component of nearly all countries' balances of payments. In this article, Eduardo Merigo and Stephen Potter of the Balance of Payments Division examine some of the principal trends over the past decade in the various items in OECD countries' invisible accounts.

The article is extracted from a special study contained in Economic Outlook N° 7, which has just been published. The special study also contains an extensive statistical annex giving detailed tables by country and by major item, an analysis of trends by country, technical notes and a bibliography.

The invisibles account¹ is perhaps the most neglected part of the balance of payments. The observation of Professor E. Devons : "Today economists... rarely, if ever, analyse the constituent items

1. Invisibles cover transactions in services (including factor payments), and transfer payments. Precise definitions of the various concepts and categories used can be found in the IMF's Balance of Payments Manual; a briefer description is contained in the technical notes provided with the article in Economic Outlook.

of the invisible account as part of the structure of world trade, as is now done so frequently for merchandise trade² remains to some extent true. This can be explained partly by data availability: statistics for invisibles do not match the wealth of information, broken down geographically and by commodity, that is published every month for visible trade. Even so, the subject would appear sufficiently important to warrant much more attention than it is usually accorded:

- OECD countries' total invisible flows amount to over 40 per cent of those of trade in goods, and have grown at much the same rate (about 9 per cent annually from 1960 to 1968) (Table 1).

- For individual countries invisible flows can be a major item in the balance of payments. Total invisible credits have been more important than exports of goods for Spain, Greece, Portugal and, until 1968, Norway. The net surplus on invisibles has also made an essential contribution to current account equilibrium in countries such as the United Kingdom, Austria and Switzerland whose trade balance has been in deficit throughout the decade. And an improvement in the invisible balance of the United States during the same period has gone some way towards offsetting a large deterioration on trade account. Conversely, Canada, Japan and, most of all Germany, have had very large and growing invisible deficits (Table 2).

- Exports of services are also an important source of economic activity in several Member countries. In

Norway gross exports of services were equivalent to 22 per cent GNP³ in 1968 and the net services surplus was almost 10 per cent of GNP. In Spain, exports of services are about 6½ per cent of GNP and the balance about 3½ per cent. And in the United Kingdom the corresponding figures are as much as 8½ and 1¼ per cent.

The influence of structural factors is predominant in determining countries' invisible balances and their underlying development through time. Geographical positions, size and population density, foreign policy commitments, technological levels, accumulated international investment positions and historical traditions regarding certain activities such as banking, insurance or shipping are factors having a permanent or only slowly changing influence.

Against this, the influence of cyclical factors such as changing relative demand pressures has tended to be smaller on total invisibles than on trade balances or capital flows. But cyclical influences are by no means insignificant and may possibly have increased in importance over the period. The rapid growth of foreign travel, which has become a mass phenomenon towards the end of the decade, may have tended to make this item more sensitive to fluctuations in economic activity and employment. Increased international migration among OECD countries also provides a source of cyclical fluctuation as foreign workers may be among the first to be affected by cyclical changes in employment⁴. Earnings on direct investment are cyclically sensitive, even though the remitted portion seems to be independent of short-term fluctuation of total earnings; and international interest payments are of course closely related to cyclical changes in interest rate levels. The transportation account often tends to follow fluctuations in the trade balance, but for some countries developments in total world trade may be of greater significance.

In a more general sense, and notwithstanding "natural" factors, some influence of long-term economic developments can be discerned among OECD countries:

- Countries with relatively low per capita incomes, comparatively cheap prices in tertiary activities and excess labour tend to have a surplus or only a small deficit on invisible transactions.
- Industrial development, leading to increasing incomes, full employment, investment from abroad and large needs for foreign know-how and specialised services tends to diminish the surplus or increase the deficit, which can reach large proportions.

(continued in page 26)

TABLE 1
Total OECD invisibles^a
\$ billion

	1960		1968	
	Credit	Debit	Credit	Debit
Services				
Travel	5.2	4.9	11.3	10.4
Transportation	8.8	8.8	16.6	17.0
Investment income ^b	8.4	4.8	17.6	11.2
Government services	3.2	5.9	5.2	7.9
Other services	5.9	4.6	12.7	10.8
TOTAL	31.4	29.0	63.4	57.3
Transfers				
Private ^c	1.7	1.9	3.5	4.2
Official ^c	0.2	3.9	0.6	5.3
TOTAL	1.9	5.8	4.1	9.5
TOTAL INVISIBLES	33.3	34.8	67.5	66.8
Memorandum items:				
Visible trade, fob	80.9	76.3	159.8	154.2
All current transactions	114.2	111.1	227.3	221.0

a) Sum of countries' figures appearing in the statistical annex, plus those for French transactions with the overseas franc area.

b) Includes reinvested earnings on direct investment by and in the United States and United Kingdom.

c) The figures are not wholly gross.

2. E. Devons, "World Trade in Invisibles", Lloyds Bank Review, April 1961.

3. The relevant concept for a discussion of components of Gross Domestic Product would be non-factor services, i.e. services excluding investment income and workers' earnings. Transfers do not figure as part of GNP or GDP, but appear in national income accounting in the sector accounts, official transfers in the current account of the central government and private transfers in the household appropriation account.

4. Germany provides an interesting, though perhaps extreme, illustration of these two factors: travel expenditure and migrants' remittances remained stagnant or fell between 1966 and 1968 and shot up in 1969, a boom year.

TABLE 2
Invisible balances
\$ million

	1960	1964	1968	1969
	to	to		
	1963	1967	Annual averages	
United States ^a	-1 331	100	760	(0)
Canada	-1 307	-1 466	-1 736	-1 916
Japan	-404	-1 049	-1 481	-1 567
France ^b	408	100	-906	..
Germany	-1 661	-2 721	-2 821	-3 328
Italy	1 072	1 558	1 579	1 784
Benelux	554	533	456	271
United Kingdom ^a	488	388	744	1 373
Norway	448	642	860	786
Austria and Switzerland	491	831	1 057	..
Spain	595	1 282	1 332	(1 443)
Other Northern countries ^c	258	78	-82	..
Other Southern countries ^d	389	628	807	..
OECD BALANCE WITH REST OF WORLD	-300	250	600	..

a) Including reinvested earnings.

b) With non-franc countries. The figure for 1968 is affected by speculative factors

c) Denmark, Finland, Iceland, Ireland, Sweden.

d) Greece, Portugal, Turkey.

iii) More mature economies, which have accumulated a large surplus of foreign assets and can be large-scale suppliers of know-how or specialised services, tend to be in surplus.

Obviously, any country classification into these three groups could only be arbitrary, as many other factors would have to be taken into account. But to take only a few examples, Spain could perhaps be regarded as a typical member of the first category, Japan of the second, and the United Kingdom of the third. Many countries are more difficult to classify. Italy for example exhibits some characteristics associated with the first category and some with the second; and France has characteristics of both the second and third categories. Germany and Japan, two of the most important deficit countries, could be moving towards the third category by the end of the coming decade.

ANALYSIS BY ITEM

• Travel

This item accounted in 1968 for 16 per cent of total gross invisible transactions of OECD countries after growing at an average of about 10 per cent a year over

the decade. It covers essentially expenditure on goods and services by travellers (i.e. primarily tourists, but also for example business travellers and students) outside their country of residence⁵. Mediterranean and Alpine countries have tended to have substantial and growing travel surpluses, and high-income countries further north—in particular Germany and Sweden—as well as the United States have experienced growing deficits. These have increasingly benefited countries outside the OECD area, and the travel balance of the area as a whole has slowly but steadily deteriorated from a small surplus at the beginning of the decade to a \$ $\frac{1}{4}$ billion deficit at the end (Table 3).

Tourism, which is a component of private consumption, normally accounts for the greater part of a country's travel expenditure. As expenditure on tourism, both domestic and foreign, is primarily a function of incomes, it is not unnatural to find some relationship between per capita GNP and expenditures on foreign travel. Other factors, such as climate, density of population, geographical location and size, are also very important. Chart A suggests that average "propensities" to travel (i.e. shares in total consumption) tend to be highest in the countries where incomes per head are highest. And at given income levels there is a tendency for the propensity to be higher in geographically smaller countries. North America and Japan (not shown in the Chart) are in a quite separate category, no doubt largely because of the size of Canada and the United States and the geographical isolation of Japan.

TABLE 3
Selected balances on travel^a
\$ million

	1960	1964	1968	1969
	to	to		
	1963	1967	Annual averages	
Italy	667	1 053	1 112	1 139
Spain	414	1 048	1 111	1 195
Austria	246	407	430	489
Switzerland	261	372	404	(450)
Sweden	-45	-129	-204	-238
Germany	-382	-646	-674	-936
United States	-938	-1 170	-1 247	-1 332
OECD BALANCE WITH REST OF WORLD	0	-150	-250	..

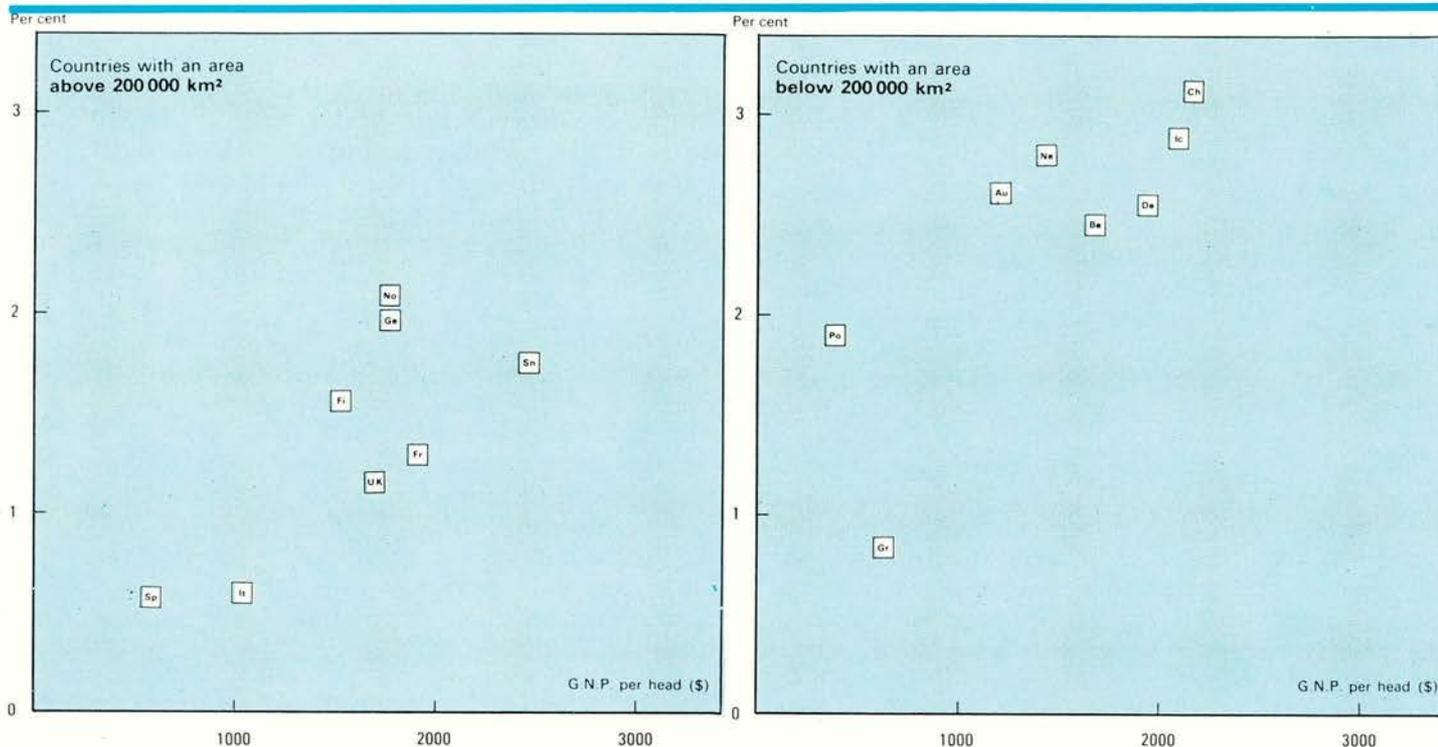
a) Statistics for this item vary considerably in reliability between countries. They are based in many cases on banks' statistics of foreign exchange presented for conversion

5. Passenger fares on international travel are in principle included under transportation (or excluded from the balance of payments altogether if paid to a domestically-based company), but those within a foreign country are regarded as part of travel expenses.

CHART A

PROPORTION OF CONSUMPTION EXPENDITURE DEVOTED TO FOREIGN TRAVEL in European OECD countries (1) *

Average, 1960-1968



* The letters in the squares indicate the initials of each country as follows: Au, Austria; Be, Belgium; De, Denmark; Fi, Finland; Fr, France; Ge, Germany; Gr, Greece; Ic, Iceland; It, Italy; Ne, Netherlands; No, Norway; Po, Portugal; Sp, Spain; Sn, Sweden; Ch, Switzerland; and UK, United Kingdom.

1. Excludes Turkey, for which consumption figures are not available, and Ireland, for which travel debits include passenger fares.

For a given country, the development of travel expenditure seems over the longer term to be related to changes in consumption expenditure; in the short-term, however, travel expenditures tend to be erratic and the relationship with consumption weaker. Over the 1960's the marginal propensity to travel (compared with total consumption) has been higher for all countries than the average propensity; for major countries the elasticity has been as follows⁶:

United States	1.1	Italy	1.7
Canada	1.2	Netherlands	1.7
Japan	1.5	Belgium	2.0
United Kingdom	1.5	France	2.5
Germany	1.6		

The elasticity takes rather similar values in the various European countries, apart from France, where the result may have been influenced by the abolition of currency restrictions around 1960⁷. North American elasticities are significantly lower, and Japan comes at the lower end of the European range.

Travel receipts seem to be determined by a complex set of factors; some elements of tourist demand are fairly easily substitutable between countries, others hardly at all. Certain trend factors have operated in the period under review—in particular, a tendency for the Mediterranean countries to increase their share in the total at the expense of more traditional tourist countries. But

these trends are by no means immutable. In the last two or three years, indeed, previously established trends seem in several instances to have been arrested. (Chart B: this chart excludes travel between the United States and Canada, which amounted to about 17 per cent of total OECD travel at the beginning of the decade and 13 per cent at the end).

No thorough-going analysis appears to have been made of the impact of changing relative prices on countries' travel receipts. An IMF study⁸ indicated that the response to the discrete changes in relative prices resulting from parity changes was typically quite large⁹; the "apparent elasticity" (defined in value terms)¹⁰ of tourist receipts to relative consumer prices was found to range from 0.7 for Finland to 6.9 for Spain, with a median value of about 3. The same type of analysis tentatively applied by the present authors to the 1967 parity changes seems to yield rather different results.

(continued in page 28)

6. The elasticities were calculated on the basis of regression equations run in log. terms with levels of consumption and travel expenditures in current prices; such equations catch mainly the long-run elasticity.

7. A dummy variable was introduced for the the United Kingdom to catch the effect of the currency restriction in the final years of the decade.

8. A.S. Gerakis, "Effects of Exchange Rate Devaluations and Revaluations on Receipts from Tourism", IMF Staff Papers, November 1965.

9. This finding appears to be confirmed by H.P. Gray, "The Demand for International Travel by the United States and Canada", International Economic Review, January 1966.

10. The conventional price-elasticity measured in volume terms would be higher by one.

The exercise was based partially on estimated figures, and as it covered only two years after the devaluations did not allow for more than short-term effects. For what they are worth, the results give an "apparent elasticity" of about zero for Spain, implying that foreign currency receipts from tourism were virtually unaffected by the devaluation. The result may owe something to the May events in France and their aftermath; there may also have been capacity constraints in the short run. The analysis gave apparent elasticities of about $\frac{1}{2}$ and 1 for the United Kingdom and Finland respectively (suggesting favourable effects on foreign currency earnings). The exercise had little meaning for Denmark, for which the change in relative prices during the relevant period was very small, or for Ireland, a large proportion of whose tourists come from the United Kingdom, another devaluer. The effect on receipts of the more modest changes in relative prices that normally occur in the absence of parity adjustment is much more difficult to assess.

Among the many other considerations affecting countries' travel receipts, special once-for-all attractions also play a part. The outstanding example is the Montreal Expo-67, which may have boosted Canadian receipts in that year by \$ 300-400 million. It is probable that the greater part of that sum reflected diversion from United States domestic tourism rather than a reduction in other countries' foreign travel credits.

● Transportation

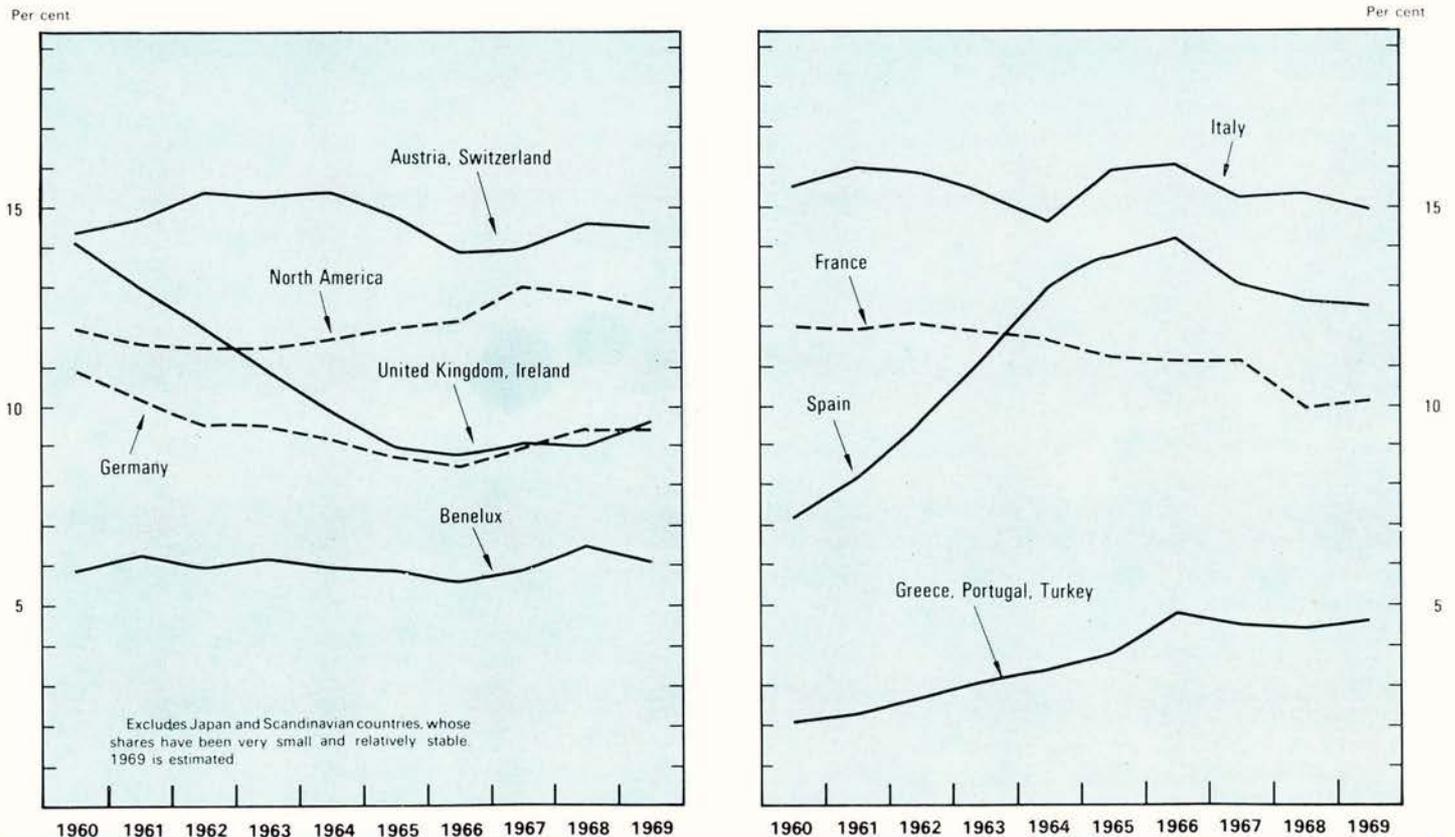
For many OECD countries, transportation is responsible for the largest gross flows in the invisible account (and, for the OECD as a whole, it accounted in 1968 for 25 per cent of total invisible flows), but the balance is in most cases relatively small. The greater part of transportation transactions consists of freight and other expenses connected with the movement of goods; this item therefore tends to follow the trend and fluctuations of merchandise trade. The relationship between the two need not, however, be very close. One reason is that the item also includes passenger fares on international travel. Another is that transport payments include only that part of the transport cost of imports paid to foreigners¹¹: institutional changes affecting the extent to which traders use their own rather than other countries' vessels therefore influence trends over time. Some countries with large fleets derive a substantial proportion of their transportation receipts from third-country trade; such earnings in turn involve expenditures by way of port disbursements, etc., which can be very high.

An important determinant of transportation receipts and payments is the development of shipping costs, but unfortunately no composite index is available cover-

11. The freight costs of trade are regarded as borne by the importer; this implies that the carriage of goods in ships of the importing country represents a purely domestic transaction. Equally, the carriage of goods in a ship not belonging to the exporting country produces a transaction that does not affect the exporting country at all.

CHART B
SHARES IN TOTAL OECD TRAVEL RECEIPTS

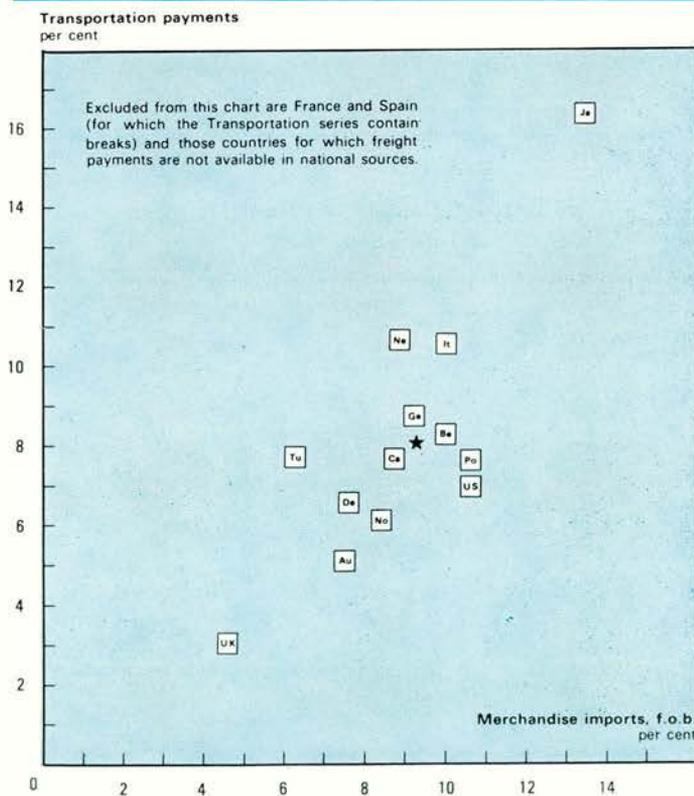
(excluding North American intra-travel)



ing the development of shipping costs of all kinds¹². Liner freight rates (usually determined by the "liner conferences" in consultation with shippers) have risen steadily in recent years, while costs of shipping in tankers and bulk carriers have fallen markedly over the longer run, mainly because of growing vessel sizes. Rates for short-term charter are subject to day-to-day movements in the spot freight market and can be much more volatile.

Total OECD transportation receipts and payments have each grown *in value* by an average $8\frac{1}{2}$ per cent¹³ annually in the 1960's, compared with annual increases of 9 and 8 per cent respectively in imports and exports at constant prices. Average transport costs thus seem to have remained rather stable (the apparent slight fall for imports relative to exports is perhaps due mainly to the different types of sea transport used for manufactures and primary products). This outcome reflects the influence of various divergent factors. On the one hand, the increasing share of trade between countries that are geographically close, and the growing relative importance of manufactures are factors tending to reduce expenditure on shipping services for a given development of shipping costs. On the other hand, the growing importance of civil aviation would tend to increase transport costs.

CHART C
**TRANSPORTATION PAYMENTS
 AND MERCHANDISE IMPORTS⁽¹⁾**
 Annual average percentage change, 1960 to 1968



1. The letters in the squares indicate the initials of each country as follows: Ca, Canada; US, United States; Ja, Japan; Au, Austria; Be, Belgium; De, Denmark; Ge, Germany; It, Italy; Ne, Netherlands; No, Norway; Po, Portugal; Tu, Turkey; UK, United Kingdom; and ★, O.E.C.D.-Total.

The ratio of total transportation *payments* to merchandise imports can vary enormously between countries. The highest ratio during the decade (about 25 per cent) was that of Norway, where port disbursements and other transportation costs related to the large size of the merchant fleet are much higher than freight payments. The United Kingdom and Japan also had rather high ratios (of the order of 15 per cent) in both cases because of their insular position and the large size of their fleets. At the other extreme were countries like Belgium and the Netherlands whose imports for domestic use come largely from neighbouring countries¹⁴. Over time, the relationship between the growth of individual countries' transport payments and their imports was, however, quite close (Chart C); as the foregoing paragraphs have indicated, this outcome is the net result of a number of conflicting factors. From 1960 to 1968, total OECD imports rose about $9\frac{1}{4}$ per cent annually *in value*, and transport payments as a percentage of import values (c.i.f.) thus fell slightly; this was also true for most individual countries except Japan, Italy and Turkey.

The relationship between countries' *receipts* and their merchandise exports can also differ markedly; for some countries (in particular, the United Kingdom, Norway and Greece) receipts from carrying their own exports are only a small part of the total. Over time, movements in countries' shares of total transportation receipts seem to depend partly on export growth and partly on relative changes in the sizes of merchant fleets (Table 4). Over the 1960's only Japan, Norway and Greece among OECD countries increased their share in the world merchant fleet—the former dramatically, the other two countries slightly. There was a strong rise—both absolutely and relatively—in the share of flag of convenience countries. The United Kingdom fleet grew hardly at all over the decade, and that of the United States fell¹⁵. These two countries have had the largest shares of total OECD transportation receipts (over 20 per cent each on average), but their shares have declined rapidly, especially that of the United Kingdom. The Japanese share has grown spectacularly. Other countries have kept their share of transportation receipts fairly constant through the 1960's (Chart D).

In spite of developments on the credit side, Japanese

12. For a detailed discussion of the various types of freight rates, see OECD, Maritime Transport — the annual report of the Maritime Transport Committee.

13. As recorded. Allowing for breaks in series, the "true" increase would be about 8 per cent.

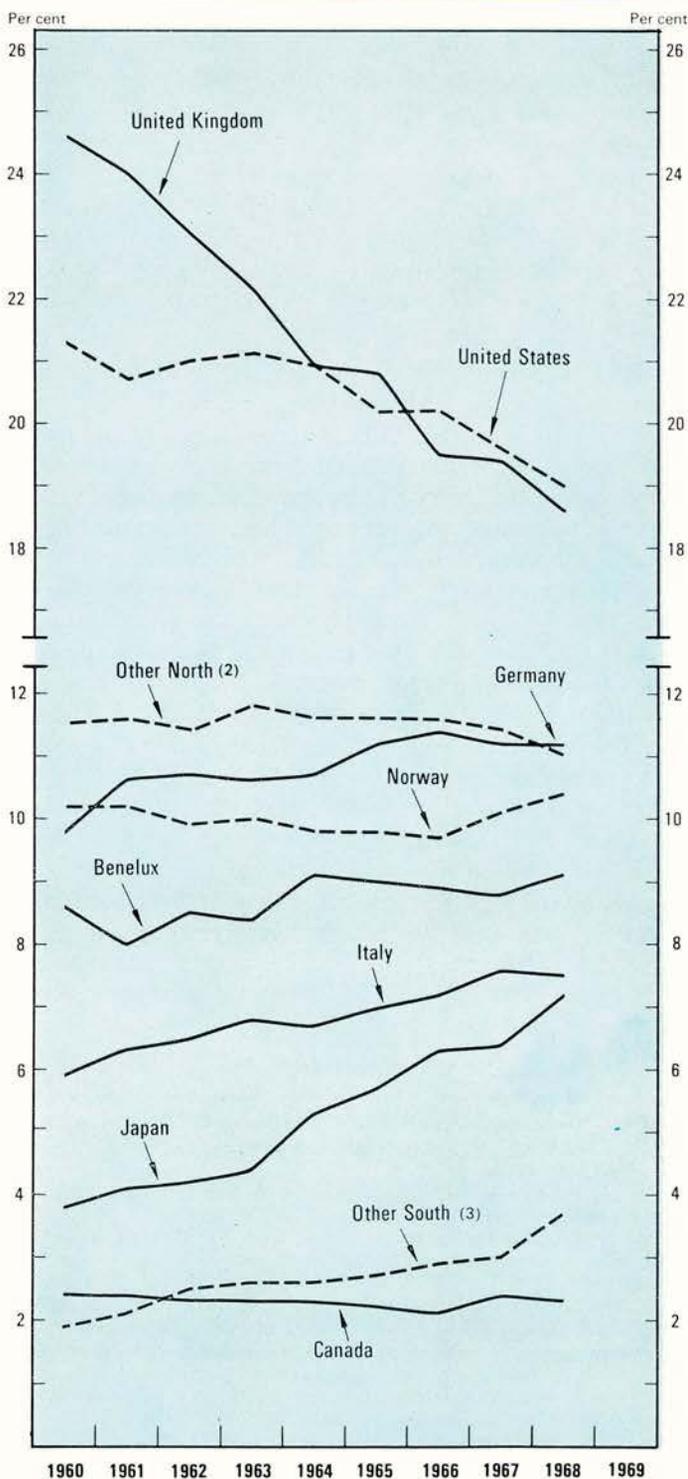
14. Freight transactions are recorded *fob* at the frontier of the exporting country. A small land-locked country trading exclusively with its immediate neighbours would record nearly zero freight expenditures in its balance of payments, as the cost of transporting the goods to the frontier would be part of the import *fob* value and only transport within the importing country by a foreign carrier (which is relatively rare) would be recorded as a freight payment. Belgium and the Netherlands handle a very large volume of entrepôt trade originating from overseas, but this is recorded net in the balance of payments.

15. The stagnation or fall in the fleets of the United Kingdom and the United States may be to some extent directly connected with the rise in those of flags of convenience as the final ownership of the latter may be with United States or United Kingdom residents. To that extent, the resulting losses on transportation account would be offset by gains on investment income.

debts have grown so fast, and those of the United Kingdom so slowly, that the Japanese balance worsened steadily through most of the decade (though there was no deterioration in 1969), and the United Kingdom's balance improved slightly (Table 5). The largest sur-

pluses throughout the period were recorded by Norway (which also had easily the largest improvement) and the Netherlands. The United States and Canada had small deteriorations and there was little change elsewhere. Despite the rapid rise in the fleets under flags of conven-

CHART D
SHARES IN TOTAL OECD
TRANSPORTATION RECEIPTS (1)



1. Excluding France, for which the transportation series contains two breaks.
2. Austria, Denmark, Finland, Iceland, Ireland, Sweden, and Switzerland.
3. Greece, Portugal, Spain, and Turkey.

TABLE 4
Merchant fleets

	1969		Annual average percentage change, 1960 to 1969
	Millions of gross tons	Share in world total (%)	
Japan	24.0	11.3	14.8
United Kingdom	23.8	11.3	1.3
Norway	19.7	9.3	6.5
United States	19.6	9.2	-2.7
Greece	8.6	4.1	7.4
Italy	7.0	3.3	3.6
Germany	7.0	3.3	5.0
France	6.0	2.8	2.4
Netherlands	5.3	2.5	0.8
Sweden	5.0	2.4	3.3
Total OECD	139.4	65.8	3.7
World	211.7	100.0	5.6
<i>Memorandum items:</i>			
Liberia	29.2	13.8	11.2
Panama	5.4	2.5	2.7

TABLE 5
Selected balances on transportation
\$ million

	1960	1964	1968	1969
	to 1963	to 1967		
	Annual averages			
Norway	472	675	898	827
Netherlands	285	393	413	494
United Kingdom	-14	59	214	182
Germany	-179	-179	-162	-151
Italy	-125	-190	-205	-219
United States	-165	-231	-300	-477
Canada	-211	-287	-350	-393
Japan	-393	-598	-869	-871
OECD BALANCE WITH REST OF WORLD	700	500	700	..

ience, the balance with non-OECD countries remained fairly steady throughout the period.

● Investment Income

By the middle of the decade, investment income had become the most important single component of invisible receipts. It is the only item showing a substantial surplus for the OECD area vis-à-vis the rest of the world—\$ 3 billion at the beginning of the 1960's, increasing to \$ 6 billion in 1968¹⁶. By far the largest surplus country is the United States, with the United Kingdom following far behind and Switzerland picking up rather rapidly in recent years. Canada has recorded the largest deficits; Germany had an increasing deficit until the mid-sixties but its position has since improved. The Japanese deficit, which was quite small at the beginning of the decade, increased steadily until 1969 (Table 6).

Flows of investment income over the decade clearly depend in a general way on stocks of assets and liabilities inherited at the start and on subsequent capital flows. Unfortunately, statistics of capital stocks outstanding are scarce. The United States and the United Kingdom publish comprehensive statements of international assets and liabilities outstanding (Table 7). These two countries account for a considerable part of total OECD receipts—about 80 per cent in 1960, and still over two-thirds in recent years. And they are responsible for about one-half of the considerably smaller total of the area's investment income payments. The Table shows clearly that the net asset position of the United States is a good deal stronger than that of the United Kingdom, but that each country's balance sheet is characterised by an excess of long-term assets over liabilities, and of short-term liabilities over assets. This pattern is reflected in their investment income accounts, for the rates of return on long-term investments (in which direct investment and other private long-term capital predominate) have normally been well above rates paid on short-term borrowing—though this has been less true in the most recent period¹⁷. Thus, while the ratio of total assets to total liabilities for the two countries together is about 1.4¹⁸, their combined investment income receipts are more than double their payments.

The only category for which investment income can be matched with the corresponding capital stock is direct investment—almost certainly the most profitable. The rate of return, excluding oil, has averaged about 11 per cent for the United States and 9 per cent (with a tendency to increase) for the United Kingdom; it has been quite sensitive to world cyclical influences, turning down in 1961 and in 1966-1967 (Chart E). Remittances home averaged about 6½ per cent for the United States

TABLE 6
Selected balances on investment income
\$ million

	1960	1964	1968	1969
	to	to		
	1963	1967	Annual averages	
United States ^a	4 004	5 425	6 473	(5 900)
United Kingdom ^a	846	1 061	687	1 200
Switzerland	175	286	441	(500)
Netherlands	139	204	200	208
France ^b	46	151	198	..
Italy	-72	-60	34	106
Japan	-73	-187	-254	-281
Germany	-275	-416	-210	-141
Canada	-606	-824	-955	-914
OECD BALANCE WITH REST OF WORLD	3 850	5 200	6 000	..

a) Including reinvested earnings.

b) With non-franc countries. For 1967 and 1968, includes some reinvested earnings on French direct investment abroad.

TABLE 7
International investment position of the reserve
currency countries, end-1969
\$ billion; estimates

	United States	United Kingdom
Assets		
Direct investments	69.8	20
Other private long-term	24.1	14
Official long-term	30.7	3
Private short-term:		
Banks	9.6	32½
Other	4.0	3
Official reserves	17.0 ^a	2½
TOTAL	155.3	75
Liabilities		
Direct investments	12.1	10
Corporate stocks	19.1	5½
Other long-term	10.7	8
Non-bank private short-term	2.6	½
Other short-term:		
To private	28.9	33½
To official	17.8	11 ^b
TOTAL	91.2	69
NET ASSETS	64.1	6

a) Including reserve position in the IMF.

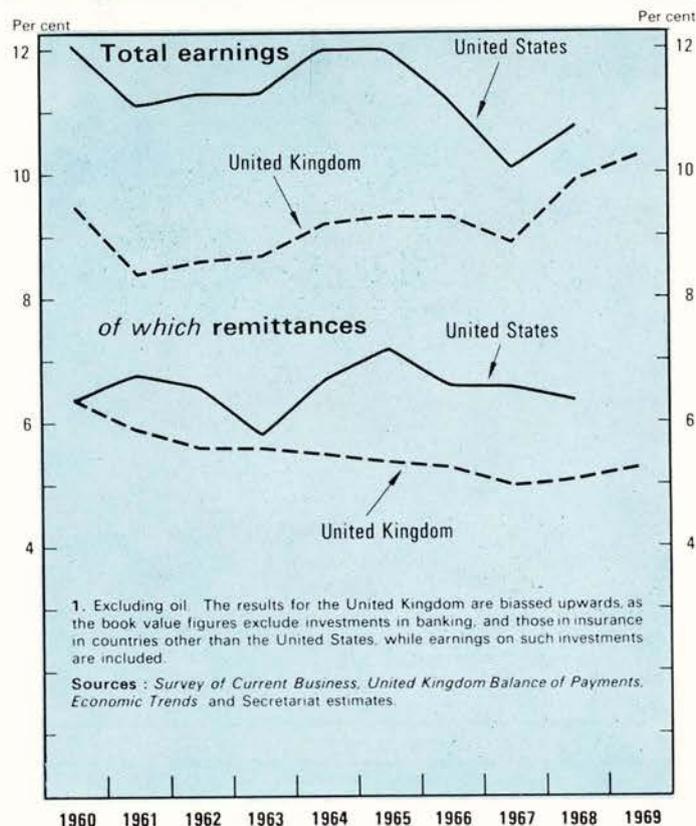
b) Including IMF credit tranche drawings.

16. Including reinvested earnings on direct investment by and in the United Kingdom and the United States.

17. It should be noted that the United Kingdom's position includes some \$ 29 billion of both assets and liabilities representing the City of London's activity in the Euro-dollar market, net earnings on which appear in "other services".

18. Excluding gold reserves, reserve position in the IMF, and the United Kingdom's Euro-dollar activity.

CHART E
RETURN ON FOREIGN DIRECT INVESTMENT (1)
 as per cent of book value at beginning of the year



1. Excluding oil. The results for the United Kingdom are biased upwards, as the book value figures exclude investments in banking, and those in insurance in countries other than the United States, while earnings on such investments are included.

Sources: Survey of Current Business, United Kingdom Balance of Payments, Economic Trends and Secretariat estimates.

and 5½ per cent for the United Kingdom, showing little connection with year-to-year movements in total earnings.

Canada, which has the largest net payments of investment income, also publishes figures for its international investment position. The latest complete data relate to 1966; estimated summary totals for end-1968 are as follows¹⁹:

19. Source: Quarterly Estimates of the Canadian Balance of Payments, Third Quarter 1969.

TABLE 8
**Selected balances
 on government services**
 \$ million

	Military				Non-military			
	1960 to 1963 Annual averages	1964 to 1967 Annual averages	1968	1969	1960 to 1963 Annual averages	1964 to 1967 Annual averages	1968	1969
Germany	1 001	1 153	1 337	1 523	-59	-166	-162	-181
Japan	384	418	589	640	-10	-35	-37	-19
France ^a	135 ^b	50	-86	..	-15 ^b	-24	-95	..
United Kingdom	-415	-593	-501	-507	-19	34	36	54
United States	-2 525	-2 582	-2 690	-3 335	-204	-301	-855	-334

a) With non-franc countries.

b) 1961 to 1963.

	US \$ billion
Assets : long-term	8
short-term	6
Total	14
Liabilities : long-term	34
short-term	4
Total	38
Net liabilities	24

A comparison of these figures with those for investment income would be misleading because the latter exclude reinvested earnings which are particularly important on the debit side; allowing for this, it seems quite likely that the return on Canadian assets is somewhat lower than that on Canadian liabilities.

Unofficial estimates of total assets and liabilities have recently become available for Japan²⁰. They indicate that—despite a significant net debit on investment income—Japan had a net creditor position at the end of 1969 :

	\$ billion
Assets : long-term	6½
short-term	8½
Total	15
Liabilities : long-term	6
short-term	5¾
Total	11¾
Net assets	3¼

The implied rate of return on assets is little more than half that on liabilities (4 per cent compared with 7 per cent). The main reason for the lowness on the credit side appears to be the importance of subsidised export credits (and large recent investment in raw material extraction on which initial profits may be low) as components of long-term assets. In any case Japan has only recently (in 1968) emerged as a net creditor; given its large current account surplus, its overall creditor position will continue to increase—and its investment income account should begin to improve in the near future.

For other countries the lack of comprehensive capital

20. Estimates by a private Japanese bank, published in Nihon-Keizai-Shinbun.

stock data makes analysis of investment income difficult; and the absence of figures for reinvested earnings usually makes it virtually impossible to arrive at stock figures by summing flows for a run of years. But cumulated flow figures can give an approximate idea of turning points and possible future trends. Italy and Germany, for example, have seen an improvement in their investment income accounts following a sharp turnaround in their capital account positions (Chart F)²¹. In Italy, the turning points have coincided, but the magnitude of the improvement on investment income is quite small in relation to the rapid accumulation of foreign assets. The reason may be that, as shown in the chart, a large part of the increase in assets took the form of unauthorised capital exports (exports of banknotes) most of the interest on which is probably reinvested abroad. In Germany the turning points also

coincided, but a significant improvement on investment income has only been recorded with a slight time lag.

A substantial part of total OECD debits under this item is accounted for by overseas military expenditures by the United States and the United Kingdom—some 62 per cent at the beginning of the decade and 67 per cent at the end. Such expenditure by the United Kingdom reached a peak in 1966 and then tailed off, reduced by devaluation and the deliberate policy of gradual withdrawal “East of Suez”. The considerably larger expenditure by the United States fell slightly in the first half of the decade, then increased rapidly after 1965 as the conflict in South East Asia intensified.

In the early years of the decade, French government expenditure was also substantial, amounting to over 20 per cent of the total. The bulk of it was in Algeria and other countries of the franc area; a significant proportion was probably of a military character.

Among OECD countries, easily the largest recipients of US military expenditure have been Germany and Japan, followed by the United Kingdom and, until 1966, France. A large proportion of the expenditure—almost one-half at the end of the period—was in non-OECD countries²². The United States also has a large credit entry, as its receipts from transfers under military sales contracts are recorded as government services.

Apart from military transactions, government services consist largely of administrative and diplomatic expenditures or receipts. For most countries there has been a steady rise on both sides of the account, with an overall average increase of about 8 per cent.

• Workers' Earnings and Migrants' Remittances

These items²³ have been an important and growing source of income transfers within continental Europe. Their pattern is naturally determined mainly by the numbers of foreign workers concerned and by the average amounts available for them to transfer. The international movement of workers can be explained by structural factors such as differences between countries of wage levels and employment availabilities, or legislation affecting foreign residents, as well as by relative cyclical developments. Within Europe, Germany, Switzerland and France have been the main users of foreign

21. Chart F shows cumulative movements in total income-earning net assets, regardless of the initial position. Changes in non-interest bearing assets of Central Banks are excluded.

22. For full details, see “United States Defense Expenditures Abroad”, Survey of Current Business, December 1969.

23. Workers earnings and migrants' remittances are often part either of “other services” or of private transfers. The distinction between them is in some cases probably artificial, although in principle workers' earnings are net earnings of foreign workers who are not residents of the country where they work while migrants' remittances are those of individuals who have become residents of that country. Not all countries identify these items but it is perhaps safe to assume that countries doing so are those for which the items are of greatest importance.

CHART F
CUMULATIVE CAPITAL FLOWS
AND NET INVESTMENT INCOME

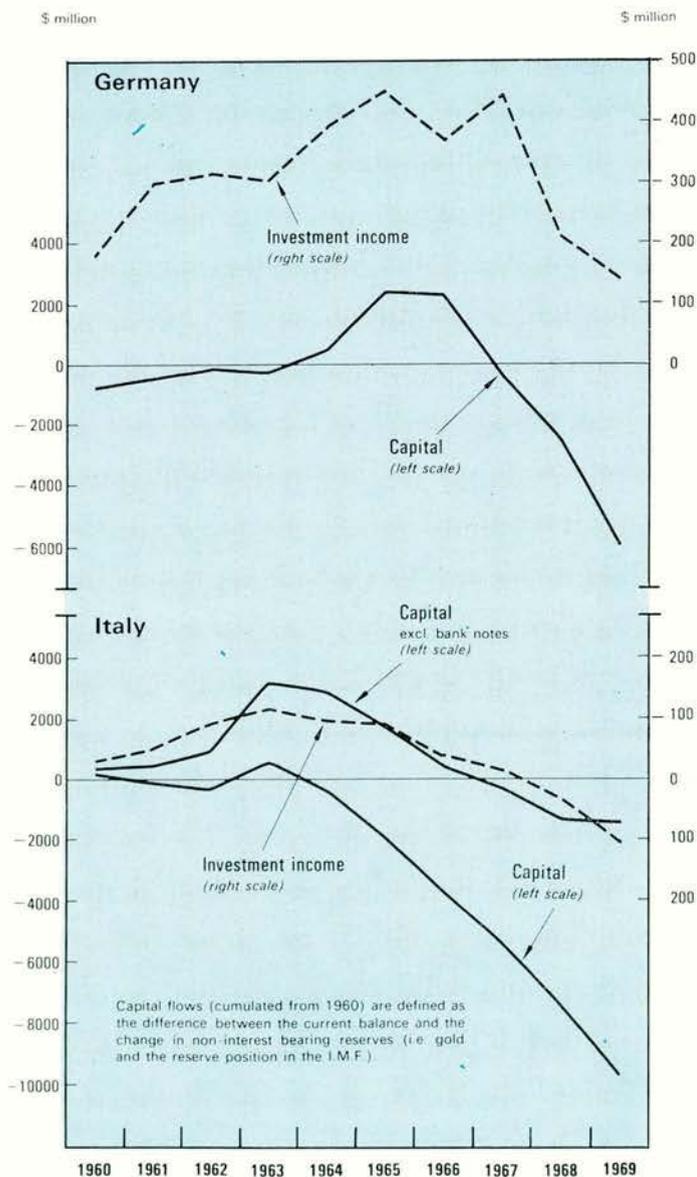


TABLE 9
Numbers of foreign workers

	1960		1968	
	Thousands	Share of labour force ^a	Thousands	Share of labour force ^a
Germany	279	1.4	1 366 ^b	6.2 ^b
France	740 ^c	5.5 ^c	1 006	6.7
Switzerland	355	16.7	588	24.6

a) Previous column as a percentage of total wage and salary earners.

b) 1969. c) 1962.

labour ²⁴ (Table 9), and Italy and other Mediterranean countries the main providers.

The longest-established example of the practice appears to be the employment of Italians in Switzerland : at the beginning of the decade Switzerland had the largest debit and Italy much the largest credit. Swiss payments have grown relatively modestly through the 1960's, largely because legislation was introduced limiting the issue of residence permits. The number of foreign workers did not increase after 1964, but it still amounted to almost 25 per cent of the total of wage and salary earners in 1968. German, and to a lesser extent, French, payments increased dramatically over the decade, with a marked setback in the case of Germany in 1967 and 1968—the employment of foreign workers proving to be highly sensitive to the German recession ²⁵. Swiss payments also fell in 1967 (Chart G).

After Italy, the largest net recipients of workers' remittances have been Spain, Greece, Portugal and Turkey. In each case, growth has been rapid; but there was a check to the increase of receipts in 1967-1968, reflecting those in German and Swiss payments (except in Portugal, for which developments in France are of greater importance).

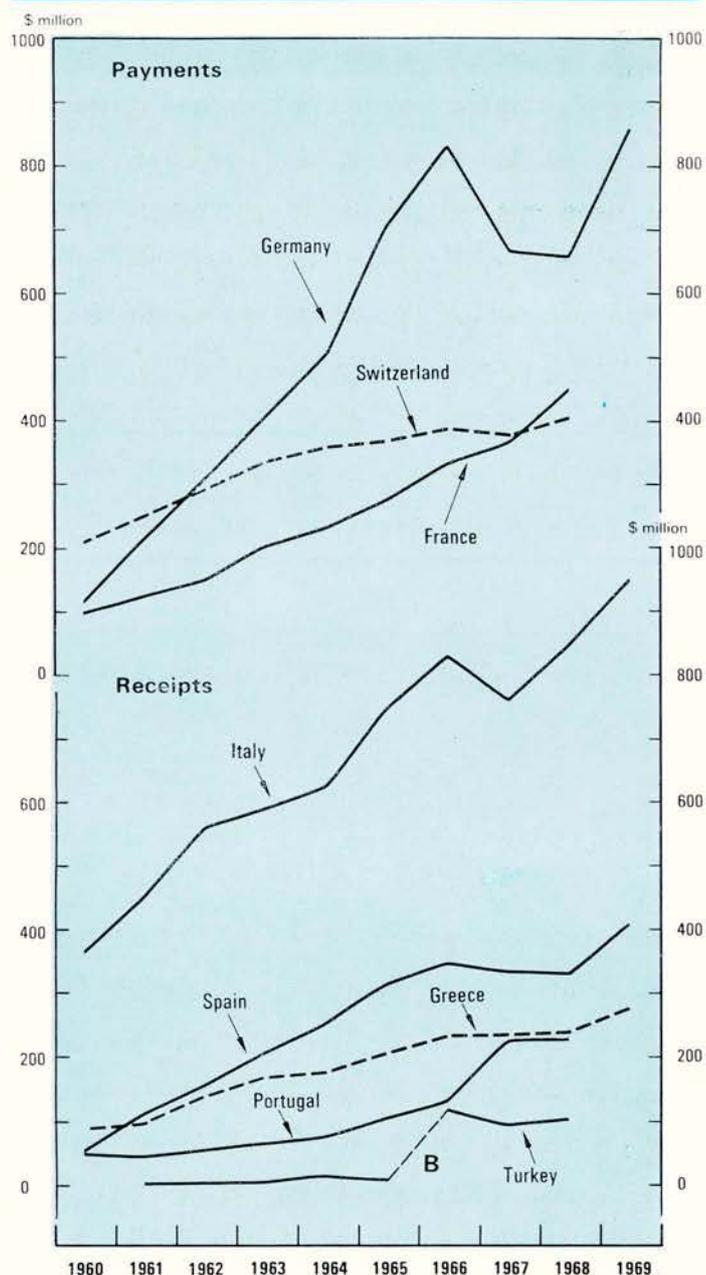
Outside Europe, Canada also reports significant migrants' remittances, which have, remarkably, moved from a deficit of \$ 0.1 billion to a surplus of \$ 0.2 billion over the sixties, presumably implying that the funds brought by immigrants ²⁶ (who have been more numerous in the latter part of the decade) have been progressively more important than outward remittances by those already there.

• Other Services

This heading contains a heterogeneous collection of items. For some countries, *workers' earnings* are separately distinguished : these have been discussed in the previous section. Workers' earnings apart, other services appear largely to be made up of :

- i) Expenses connected with the selling of imports and exports, such as commissions and agency fees.

CHART G
WORKERS' EARNINGS
AND MIGRANTS' REMITTANCES, NET



- ii) Payments for films, television programmes, telecommunications and postal services.
- iii) Construction work.
- iv) Financial services—banking, insurance, etc.
- v) Payments for managerial and technological know-how—royalties, management fees, etc.

Given the diversity of transactions included, and the absence, for most countries, of a detailed break-down,

24. The United Kingdom also employs a large number of immigrant workers; to a great extent they are accompanied by their families, so that remittances to countries of origin are probably relatively small.

25. Nearly 30 per cent of the drop in employment between 1966 and 1967 fell on foreign workers : their employment fell 18 1/2 per cent while employment of German nationals fell just over 2 per cent.

26. Including returning Canadians.

it is difficult to formulate variables that give a meaningful explanation of the development of this heading. A large proportion of the total is probably associated with developments in world merchandise trade (and particularly that of the country concerned) and in the activities of multinational corporations. There is also a strong trend element.

Most countries probably have entries on each side of the account under item *i*) broadly in accordance with their importance in international trade. The United States and the United Kingdom, as both traditional providers of international financial services and the most important direct investors, have a dominant creditor position under items *iv*) and *v*)²⁷. These two countries, indeed, account for 40 per cent of total receipts from the item "other services" as a whole²⁸.

One component that can be separated is the payment for royalties and technical know-how: Table 10 assembles data for the major countries for a recent year. Care should be taken in interpreting the Table, as concepts certainly differ markedly between countries. There are alternative policies for a company wishing to exploit technological advantages—exports, direct investment or licensing a foreign company—and the choice of one or other of these will have different effects on the various items in the balance of payments. While the figures in the Table reflect to some extent the effect of such choices, the relation of credits to debits for individual countries probably gives a fair idea of relative positions in the international market for know-how. The United States has a very large credit entry; its coverage is probably wider than purely technical fees, but the figure excludes payments from unrelated companies. The United Kingdom has rather higher receipts than payments; only about one-third of receipts are from related companies, suggesting that (perhaps because of controls on capital exports) licensing has been used to a

TABLE 10
Payments for royalties and technical know-how, 1968
\$ million

Description of figures		Credit	Debit
United States	Fees and royalties from direct investment	1 279	..
United Kingdom	Royalties and similar transactions	250	209
France ^a	Patents	61	142
Germany	Licences and patents	105	251
Italy	Patents	65	219
Japan	Royalties	29	296
<i>Memorandum item:</i>			
Canada	Fees and royalties from direct as reported by United States investment,	..	268

a) Figures relate to 1967.

TABLE 11
Selected balances on other services
\$ million

	1960	1964	1968	1969
	to	to		
	1963	1967	Annual averages	
United States	1 015	1 768	2 207	2 413
United Kingdom	504	636	900	1 008
Switzerland ^a	131	172	264	(300)
Italy ^a	18	-50	-158	-198
Sweden	-84	-130	-201	212
Canada	-185	-253	-354	-362
Japan	-272	-497	-694	-758
Germany ^a	-641	-936	-1 121	-1 339
OECD BALANCE WITH REST OF WORLD	1 000	1 250	1 200	..

a) Excluding workers' earnings.

considerable extent as an alternative to direct investment. France, Germany and Italy each have a deficit, with debits in each case at least twice the amount of credits. And Japan's payments are ten times as large as receipts.

Altogether, the United States and the United Kingdom have large and growing surpluses on other services, and Japan and Germany large and growing deficits (Table 11). How far trends might be altered by the emergence of the two latter countries as important foreign investors remains to be seen. The OECD area as a whole has had a persistent surplus with the rest of the world on this item, averaging rather over \$ 1 billion.

• Other Private Transfers

Apart from migrants' remittances, private transfers cover cash gifts and the counterpart of goods transferred or services rendered without a quid pro quo. For countries identifying them separately, migrants' remittances form the greater part of this item; the only other countries reporting sizeable private transfers are the United States and the United Kingdom. The bulk of these go to non-OECD countries.

• Official Transfers

The most important component of official transfers is the grant element of official development assistance.

(continued on page 36)

27. Though a large part of US earnings from financial-services is included in investment income.

28. Excluding workers' earnings.

Also included are subscriptions and contributions to international organisations, pension payments, reparations and indemnification payments ²⁹.

Official transfer payments have grown only modestly—at an annual rate of about 5 per cent. This mainly reflects the fact that official aid programmes have grown rather slowly in total and that the proportion of assistance given as grants—as distinct from loans—has fallen ³⁰. Thus, economic grants given by the two reserve currency countries were of the same order of magnitude in 1960 and in 1968, though they had been higher in intervening years. Other factors also accounted for the relatively slow growth of total official transfers : Japanese reparation payments fell; and German indemnifications decreased quite markedly from \$ 0.7 billion in early years of the decade to \$ 0.4 billion latterly.

A new factor emerging from 1966 onwards, and one likely to be of rapidly growing importance in the near future, is the FEOGA—the EEC fund for agricultural financing and stabilisation. This consists of three independent sections :

- i) The Guarantee Section, designed to finance internal agricultural stabilisation measures and to subsidise exports of EEC agricultural goods to third countries.
- ii) The Guidance Section, to contribute towards improving the structure of production and marketing of EEC agriculture.
- iii) The Special Section, providing financing to Germany, Italy and Luxembourg for a transitional period as compensation for the reduction of cereals prices in those countries following the fixing of a common price level.

The Guarantee Section is the most important; Table 12 gives the development, by crop years, of countries' net positions towards it. Under the Guidance Section, small net payments have been channelled to Italy from each of the other Member countries. The Special Section was of some significance in 1968-1969, but will cease to operate after 1970. Actual settlements under all sections have in general followed after subs-

TABLE 12
Credit (+) or debit (—) positions towards
guarantee section of FEOGA
\$ million

Crop year	France	Netherlands	Belgium- Luxembourg	Italy	Germany
1962-63	16	-1	-2	-7	-6
1963-64	32	-3	-4	-13	-12
1964-65	85	9	-12	-43	-40
1965-66	61	39	-6	-38	-57
1966-67	46	39	-12	15	-87
1967-68	218	60	7	-102	-182
1968-69	288	80	-20	-177	-172

tantial timelags : until 1968, individual countries' settlements were small, but in 1969 France may have received about \$ 200 million; Germany paid almost \$ 300 million, and Italy paid about \$ 150 million at the beginning of 1970. Rapid growth of the FEOGA—primarily the Guarantee Section—is expected if existing arrangements remain unchanged. The gross volume of transactions may be over \$ 3 billion in 1971 compared with \$ $\frac{3}{4}$ billion in 1968.

OECD INVISIBLE BALANCE WITH THE REST OF THE WORLD

Despite the size and growth of government payments (both services and transfers) to non-OECD countries, the consolidated OECD invisibles account with the rest of the world has been within \$ $\frac{3}{4}$ billion of balance throughout the decade (Table 13). A small deficit at the beginning gave way to a small surplus in the middle of the 1960's; the account was roughly in balance in 1966 and 1967, and in small surplus again in 1968. The most important change was the doubling of net receipts of investment income from \$ 3 billion at the beginning of the period to \$ 6 billion at the end, which outweighed increased government payments of \$ $1\frac{1}{4}$ billion and the rise of about \$ $\frac{1}{2}$ billion in private transfer payments. The small surplus on transportation remained steady throughout the period; and the movement into deficit on travel was offset by an increasing surplus on other services.

TABLE 13

OECD Balance with the Rest of the World

\$ million

	1960 to 1963	1964 to 1967	1967 Annual averages	1968
Travel	0	- 150	- 250	- 250
Transportation	700	500	550	700
Investment income	3,850	5,200	5,400	6,000
Government services	-2,250	-2,100	-2,450	-2,450
Other services	1,000	1,250	1,450	1,200
Private transfers	- 250	- 700	- 950	- 800
Official transfers	-3,300	-3,750	-3,900	-3,800
Total invisibles	- 300	250	- 150	600

Note. These balances are not the differences between total OECD credits and debits for each item : they are based on figures for transactions with the non-OECD area provided in countries' regional balance of payments submissions to the OECD. Detail may not add to the total, due to rounding.

29. United States military grants of goods and services, which are quite important, are commonly omitted both from exports and from official transfers. This procedure is followed here.

30. See OECD, Development Assistance : 1969 Review.

GUIDELINES FOR EDUCATIONAL POLICY IN THE SEVENTIES

The targets for growth in student enrolment and for resources devoted to education, presented in 1961 to OECD's Washington Conference on Economic Growth and Investment in Education, have been met - and for higher education surpassed - in the educational explosion of the 1960's.

Last month OECD held a second such conference in Paris with the participation of Ministers of Education and senior officials (1) to take stock of what has happened in the interim and to discuss policy objectives for the 1970's.

Material prepared for this Conference on Policies for Educational Growth included a series of background studies prepared by OECD's Secretariat analysing the pattern of past educational growth in its various facets - enrolments, expenditures, teachers, structural change, equality of opportunity, educational technology, planning and forecasting techniques - as well as national replies to a questionnaire circulated to each Member country.

(1) Chairman : Mr Pierre Billecocq, French Secretary of State for Education ; Vice-Chairmen : Mr I. Carlsson, Swedish Minister of Education and Mr I. Amagi, Vice-Minister of Education for Japan. For the opening address of OECD's Secretary General, Emile van Lennep, see the OECD OBSERVER, N° 46, June 1970.

The unprecedented expansion of enrolments in the recent past — from 100 to 150 million in all levels of education between 1950 and 1965—has made universal education a reality up to at least age 13 or 14 and in many cases to 16 or 17 in the developed countries of OECD.

This generalisation of secondary education will give rise in the 1970's to an increasing demand for higher education, already the most rapidly growing sector; and one of the major problems of policy will be how to respond to this and to an expected demand for expansion of adult education.

In the developing Member countries where, for the area as a whole, only a little more than half of the age group 5-19 is enrolled (as against 82 per cent for the developed countries) the growth of secondary education will continue to demand sizeable resources, while at the same time, it will be necessary, because of these countries' economic requirements, to expand higher education. Hence the quantitative problem will continue to be intense.

This analysis of developments in the 1960's and their implications for the 1970's were among the salient points made in the documentation presented to OECD's Conference on Policies for Educational Growth by the

Organisation's Scientific Affairs Directorate. The analysis also showed that :

- To accommodate the enormous increase in demand, educational expenditures in many OECD countries have been rising twice as fast as national income; they now account for as much as 7 1/2 per cent of GNP (in Canada and the Netherlands) and 36 1/2 per cent of total government spending on goods and services (Japan) having replaced defence as the major claimant on public resources in most OECD countries. If present trends were to continue, educational spending would reach 10 per cent of national income by 1980 in eight OECD countries and 5-10 per cent in another seven. With such a high proportion of total national resources devoted to education, the problem of resource allocation and efficiency will become crucial in the next decade.

- The quantitative expansion only partially succeeded in increasing the equality of educational opportunity in OECD countries. Great disparities in opportunity between different social and economic classes—and between regions—persist, particularly in upper secondary and higher education. Studies presented to the Conference show that, in terms of achievement, the disparities are even greater, and there is little evidence that increasing enrolments automatically mean greater

opportunity for income advancement or upward occupational mobility on the part of the less advantaged social and economic classes. It follows from this analysis that if real equality of opportunity is to be achieved, specific measures directed to that end will have to be taken.

Six Guiding Principles for Future Policies

Taking into account the factual background, and its policy implications as presented by OECD's Secretariat, the participants at the Conference agreed on the following guidelines for future policies :

● Integration with overall societal goals

In the coming decade, the objectives of educational growth should be examined in their inter-relationship with the more general goals of society and the economy.

● Goals and indicators

Goals for educational growth and change in the 1970's should be made more explicit, and, where possible, indicators should be established which would measure the performance of the educational system in relation to educational goals as such and also in terms of the contribution of education to the wider social and economic objectives.

● Allocation of resources

Establishment of such goals and indicators will facilitate the effective allocation of resources both to and within the educational sector, and will assist Member countries to make the choices between the alternative paths now open for the continued growth and change of the educational system.

● Management of resources

It will also help to make possible the more effective use of the real and financial resources which is now becoming an over-riding necessity in the educational sector because of the large proportion of total national resources now engaged in the educational sector of the OECD Member countries.

● Qualitative changes

Establishment of goals and indicators will also provide an indispensable starting point for the development of necessary qualitative changes, which must have priority in the coming decade; this means more effective learning processes in schools and universities and establishment of priorities in research and development work of a sort that will improve such processes.

● Organisation of planning and innovation

Such qualitative changes can be greatly facilitated by the efficient organisation of the planning and innovation

process, for which governments must accept a clear responsibility, according to their national circumstances, but which must also involve the full participation of all parties concerned.

On the basis of these guidelines, the Conference formulated more specific conclusions on the goals of education, on educational resources and structures, on the relationship of educational planning to policy and on the administration of educational change. The special problems of the developing OECD countries were dealt with in a separate set of conclusions.

Goals and Targets of Educational Policy

The expansion of education in the Sixties was to some extent a "runaway" process, as was pointed out to the Conference in the Secretariat analysis, and one of the main tasks for the 1970's therefore will be to harness this growth more effectively to meeting society's goals. This will require a more explicit formulation than has so far been made of what education is expected to accomplish. The goals must not only be more clearly defined and assigned a priority, but they must be "operationalised"—that is translated into specific educational strategies, resource requirements and finally into action at the level of the schools.

This task, the Secretariat noted, will be complicated by the growing realisation that educational goals are bound up with value judgements on which there may be a lack of consensus. Thus the question of "whose goals" will become as important as "what goals".

The participants in OECD's conference recognised that the setting of goals at national level must reflect the variety of values, aspirations and objectives existing in the community and stressed the importance of public discussion in setting up educational goals. Yet, they agreed, there are certain common fundamental aims :

"To afford to every boy and girl, to every man and woman, the best possible opportunity to *discover* and to achieve, no matter at what stage of his development or career, his or her full potentialities for self-fulfilment, not as an individual over and against society, not as a social or economic unit subordinated to society, but as a "person-in-the-community" with all that this implies for rationality and human sympathy; to do this in such a way as to offset so far as possible cultural and environmental handicaps to equality of achievement; to do this in such a way as to make the most equitable and productive use of limited resources, by reference to a clear scale of priorities; and to make the best possible match between the aspirations of each person and the manpower needs of the community; and, last but not least, to do it in such a way as to give, through the social organisms adopted, the greatest possible scope to the participants in the educational process—the teachers, the students, the parents, the administrators, the public at large and those who represent them — to contribute their energy, their wisdom, their ideals and their skills to

collaboration with the main participants and with the support of research and development together with evaluation.

Recognising that changes in each country's educational system will need to command public support and that they should be directed towards releasing the skills and energies of teachers and taking account of the students' concerns to the fullest possible extent, the participants predicted that many Member countries would focus on six areas of concern in future policy decisions :

- The development of pre-school education: the main educational consideration in this connection was judged to be the importance of professionally assisted growth in these initial years of child development.
- The development, within a common school system, of educational approaches relevant to the individual's interests, abilities and maturity.
- The need for a policy of providing supplementary human and material resources to meet the needs of socially disadvantaged children.
- The need for an integrated, inter-related and multi-purpose system to expand, diversify and individualise the provision for upper secondary education and for higher and other post-secondary education.
- The resulting need to bring about changes in structure that will make it easier, for those students who wish to do so, to obtain the education they want in recurrent periods throughout life rather than following immediately after completion of their secondary education.
- The need to prepare, support and re-educate teachers for the changes in their role that structural reforms make necessary.

New Challenges for Educational Planning

During the 1960's, there was a great development of forecasting activities and of systematic thinking about educational policy and decision-making, and one result is that today there is a new body of information and knowledge about educational development which was previously lacking. But the emphasis was almost exclusively on quantitative factors—enrolment rates, number of graduates, new entrants and global expenditures—and although important qualitative changes were made during this period, there was little relationship between these policy actions and the “plans”.

OECD's Secretariat submitted to the Conference a detailed analysis of this planning experience and outlined a number of more sophisticated possible approaches to planning which are now emerging.

The participants confirmed that the importance of planning in guiding and directing the development of education is now fully recognised but noted that the efforts made by Member countries, over the past decade, remarkable as they have been, “do not seem to be sufficient in light of the complexity of the problems which will be encountered”. “Now, more than ever”, they noted, “educational planning must be *long-term, com-*

prehensive, integrated with general economic and social policy, and *overall* in the sense that it must embrace all educational activities both formal and informal”. More specifically, the Conference concluded that planning during the past decade has too often been limited to the *quantification* of a *single* set of long-term growth for the educational system and recommended that “planning should now pay attention to the *qualitative* as well as to the quantitative aspects of education. Planners should present an analysis of alternative policies for education based on explicit goal formulation, with short and long-term *consequences* for the individual, the educational system, the economy and society as a whole. The process of choice among these alternatives should be the occasion for the widest possible participation and discussion”.

“There is often a gap between the activities of setting the goals of education and formulating educational policy. The process of educational planning should pay more attention to the relationship between the planning mechanisms and the formulation of educational policy... Planning evaluation procedures should be established at all levels of the educational system to promote innovation and development, and to feed the results of these activities back into the policy-planning process”.

“Incentives must be developed so that traditional structures of educational systems are encouraged to take advantage of and implement ideas and practices emerging from the policy-planning process.”

Administration of Educational Change

One of the main issues discussed by the Conference was how to encourage the changes in structure, curriculum, methods—in the total teaching situation—that will be necessary if educational growth is to be complemented by systematic qualitative change.

Background material presented to the participants stressed the fact that although some of the changes can be brought about by legislative action, new teaching situations cannot be legislated into existence; nor can new educational technology be imposed; it must become part of a total system in which there is an interaction between teacher, student and learning materials. Teachers and students must be encouraged to take part in a creative process of development.

In some countries the schools have been given an explicit mandate to experiment. Thus a School Experimentation Act of 1954 enacted in Norway provides the Ministry of Education with the authority to exempt schools from current educational legislation on terms to be approved by a Board of School Experiments and Innovation. OECD's background analysis discussed this and a number of other possible directions for organisational innovation including an educational information and diffusion network akin to a field advisory service in agriculture which would help to promote development programmes in the schools themselves.

The Conference participants concluded that new

sity system : in the Instituts Universitaires de Technologie (IUT) in France, the Norwegian District colleges (six will have been set up by 1971), junior colleges in the US, new polytechnic colleges in the United Kingdom and, also in the UK, an Open University which uses radio and television in conjunction with local counselling and short residential courses to provide degrees up to full university standard for people over 21.

Another major structural development of the 1960's was the rapid growth of pre-school education and a further dramatic growth is expected during the 1970's. The increased number of working mothers has certainly played a role in this growth, but the potential of pre-school education as an instrument for eliminating social and economic differences is increasingly becoming an important operative factor for the development of education at this level.

The participants in the Paris Conference concluded

that for the 70's there will be an increasing period of common educational experience "as a necessary foundation both for academic courses and for vocational training". Thus the need for separation into different institutions or courses will tend to be postponed. When such differentiation does take place, it will need to be accompanied by a properly organised process of educational and vocational guidance and by arrangements for ready transfer from one educational route to another. Educational structures should be designed, the participants agreed, so as to ensure maximum flexibility in the system and avoid the discontinuities resulting from premature selection. It follows that the various parts of the educational system should be planned in relation to one another and that any fundamental reform of structure should be seen as a part of the more general process of educational change. Structural reforms must, therefore, be evolved over a period of time, in

2. TRENDS FOR PUBLIC EXPENDITURE ON EDUCATION OVER THE PAST 10 OR 15 YEARS IN OECD COUNTRIES

Country	Period	(1) Annual growth rate for expenditure on education	(2) Annual growth rate for GDP (1955- 1967)	Public Expenditure on Education as a % of				Current public expenditure on education as a % of public expenditure on goods and services	
				GNP		National Income		1955	1965
				1955	1965	1955	1965		
		%	%	1955	1965	1955	1965	1955	1965
Germany*	1950-66	9.3	5.1	2.17	2.93	2.80	3.84	12.1	12.5
Austria	1957-66	9.3	4.4	3.11	3.68	3.98	4.79	22.9	21.3
Belgium*	1958-67	8.6	3.9	3.25	5.17	3.99	6.48	25.4	34.9
Canada	1954-65	13.5	4.3	2.67	5.66	3.50	7.63	16.8	34.6
Denmark	1955-66	11.4	4.8	3.27	5.49	4.00	6.98	19.0	27.4
Spain	1950-66	10.4	7.0	1.08	1.96	1.24	2.27	9.6	15.3
United States*	1955-67	8.2	3.8	3.35	5.10	4.07	6.28	15.1	22.4
France*	1952-67	11.0	4.9	2.83	4.55	3.73	6.05	17.5	28.0
Greece	1950-66	12.2	6.3	1.50	2.10	1.78	2.55	11.2	—
Ireland	1950-65	5.7	2.9	2.86	4.16	3.45	5.20	21.1	26.0
Italy	1957-65	13.7	5.3	2.98	5.19	3.79	6.48	—	29.5
Japan*	1950-65	9.8	9.6	4.56	4.55	5.70	5.64	34.0	36.5
Norway*	1950-67	7.4	4.4	3.37	5.38	4.27	6.98	19.1	24.3
Netherlands*	1950-67	11.4	4.4	3.57	6.19	4.41	7.53	20.5	33.2
Portugal	1950-65	6.5	5.4	1.58	1.44	1.81	1.66	11.3	10.0
United Kingdom*	1953-65	7.8	3.0	2.67	4.17	3.32	5.21	13.5	20.7
Sweden	1957-65	10.0	4.3	4.14	6.41	—	—	20.2	26.0
Switzerland*	1955-64	7.9	4.4	3.07	3.61	3.58	4.31	23.6	25.2
Turkey*	1950-67	9.5	4.6	2.17	3.76	2.50	4.37	—	—
Yugoslavia*	1952-67	17.5	8.5	2.22	4.33	2.47	4.68	—	—
Iceland			4.5						
Luxembourg			2.7**	2.73	4.34	3.44	5.6		

(1) Average annual growth rate for public expenditure on education at 1957 prices. Current expenditure has been deflated by the cost of living index, and capital expenditure wholesale price index for building material. Rates have been adjusted by the least square method. The figures used are Secretariat estimates.

* These figures have been revised by the National Statistical Services.

(2) Average annual growth rate for GDP (constant prices) calculated by OECD using the first and last years of the period. For Yugoslavia Gross Material Product between 1956 and 1967 has been used.

Austria, Ireland and Sweden : percentages calculated for 1954.

Spain : percentages calculated for 1954 and 1966.

Switzerland : percentages calculated for 1956 and 1964.

Yugoslavia : concerns both Gross Material Product and Net Material Product.

** Luxembourg : Secretariat estimates.

1. ENROLMENT RATIOS IN 1950, 1965, 1980 (as a percentage of the age group)

	Secondary			Primary & Secondary			Higher			Total		
	1950	1965	1980	1950	1965	1980	1950	1965	1980	1950	1955	1980
GERMANY	33	47	56	76	77	83	4	9	24	59	59	69
AUSTRIA	18	30	41	72	75	88	4	9	22	56	58	73
BELGIUM	31	45	65	77	95	110	5	15	28	57	79	88
CANADA	17	32	52	72	85	96	7	24	56	56	74	86
DENMARK	34	35	..	65	74	78	7	14	23	52	59	66
SPAIN	7	21	40	43	57	70	3	7	13	32	46	56
UNITED STATES	30	36	46	85	88	94	20	41	58	69	79	86
FINLAND	19	37	49	60	66	70	4	12	15	46	55	56
FRANCE	19	39	59	74	87	92	6	17	31	55	73	77
GREECE	..	..	50	..	..	79	2	11	48	..	..	71
IRELAND	29	44	50	79	92	92	..	10	14	..	78	76
ITALY	14	37	70	56	71	93	6	11	24	43	58	78
JAPAN	42	55	54	70	79	72	5	12	23	55	62	61
LUXEMBOURG	24	26	32	73	78	82	..	..	..	..	..	..
NORWAY	22	40	53	60	71	75	..	11	24	..	58	63
HOLLAND	34	48	67	82	86	101	6	14	17	64	71	83
PORTUGAL	6	20	35	31	49	61	2	5	6	24	40	49
UNITED KINGDOM	32	43	59	68	72	82	5	12	20	52	58	69
SWEDEN	19	24	32	56	69	94	5	13	26	43	54	79
TURKEY	3	11	21	24	41	61	1	4	4	19	35	49
YUGOSLAVIA	8	17	33	42	66	92	3	14	40	33	55	79

ily reduce educational costs per student or improve the quality of education. Research is needed into the costs (including the development costs) and benefits of specific proposals for changing the mix between teachers and other inputs. Nor should it be assumed that an educational technology that is efficient for some countries is efficient for all; the existence of differences among countries in relative prices of teachers and capital makes it efficient for different instructional techniques to be used.

One approach suggested for dealing with the problem of comparing output with costs is programme evaluation (also called PPBS for Programme Planning and Budgeting System, Output Budgeting, and Benefit/Cost analysis) which can contribute to improved resource allocation by inducing more rigorous formulation of goals, closer examination of unit costs, and a comparison of costs and benefits of different programmes.

This technique could, it was felt, be particularly useful in connection with proposals for "recurrent" or continuing education in adult life.

Educational Structures for the Seventies

If education is to contribute more completely to the fulfilment of individuals and if educational objectives are to be reconciled with social and economic needs, the participants noted, strategic changes in educational structures will be increasingly used as major instruments of policy; such changes, however, if they are to be successful, are likely to call for accompanying changes in teaching/learning procedures and content.

During the 1960's the majority of countries carried out important changes in their educational structures. At the primary and lower secondary level, the dominant trend has been towards eliminating the traditional division into academic schools (Gymnasias, lycées and grammar schools), general education (Hauptschule, CEG in France and secondary modern in England) and vocational schools and to replace these divergent paths with common or comprehensive schooling. Thus in Norway and Sweden measures have been taken to make all schooling comprehensive through age 16, and some schools have been combined at higher levels as well. In 1965 the Department of Education and Science of the United Kingdom instructed local authorities to submit plans for reorganisation into a comprehensive system such as already exists in some parts of the country, and there have been comprehensive reorganisations of lower secondary schools in France (CEG), and Italy (scuola media). In some cases there has been a parallel movement towards a common curriculum.

The purpose of this change has been to prevent young people from making irreversible choices too early in life, finding themselves later on in educational blind alleys, and to provide a basic common educational experience for everyone.

In upper secondary and post-secondary education, trends have been quite different. Instead of a move towards consolidation there has been a proliferation of institutions of the most varied sorts, both spontaneous and planned. Universities have grown rapidly, new ones have been created and their courses divided into more easily digestible units; but the largest growth in post-compulsory education has been outside of the univer-

the success of this complex social and political enterprise.”

The Conference noted the progress that has been made towards reaching these goals but also the widespread existence of the following problems :

- Equality of educational opportunity between social classes has not yet been reached. If this problem is to be solved, the concept of educational opportunity will have to be broadened so as to include educational achievement.
- There is an increasing need to relate schools and colleges more effectively to the surrounding local, national and international community, and to the institutions in the wider society which are playing an ever growing role in the education of children and adults.
- Adjustments in methods of teaching and curricula have frequently been too slow to permit education to play its proper role in relation to fundamental social, economic and cultural changes.
- The growing demand of individuals to participate more fully in the educational activities in which they are involved has not yet been adequately reflected in changes of teaching methods and school organisation.

Most participants were in agreement that if rapid progress is to be made during the 1970's towards solving these problems, new directions for educational policy are indicated :

First, fundamental changes are needed in curricula to help promote the new and emerging attitudes and understanding necessary if the child and young adult are to be active and effective members of the rapidly changing modern society.

Second, there must be individualisation of teaching methods wherever this will promote both learning and greater equality of educational opportunity, whilst at the same time avoiding the social isolation of pupils.

Finally, there may have to be more emphasis on “recurrent education” in the post-compulsory stages of the educational system. The objective would be to make it easier, for students who so wish, to obtain the education they want in recurrent periods throughout life rather than immediately after completion of secondary education. This would help to make the needs and wishes of the individual the determinant factor in decisions about continuing education rather than the educational and social system itself.

The participants agreed on the necessity of making educational goals explicit and noted that this was particularly important during a period in which there are shifts of emphasis in national goals. As to how this goal-seeking process might best be undertaken, it was noted that long-term future goals in education can only be formulated in relation to alternative views of the way in which society and its values would develop. Hence, there is a fundamental need for the broadest possible participation in the process of goal definition.

It was also stressed that educational policy is governed by a wide variety of social goals and that analysis

related to only one goal may easily become more misleading than helpful in the search for the best policies.

If effectiveness in achieving goals is to be measured, criteria of judgment which are directly linked to the goals must be developed. These would include not only readily quantifiable variables, but also qualitative aspects which would form part of a broad set of social indicators.

Resources for Education

In view of the rapid growth of education expenditures in recent years (more than 7 per cent a year at constant prices between 1950 and 1965 in seven OECD countries for which figures are available) problems involved in the allocation and use of resources—both financial and real—were accorded a high priority in the discussions. These problems will be aggravated because of increasing pressure for resources from other social sectors such as health, and the environment, and also because future expansion will be in the higher, and therefore more costly, levels of education. The question of how educational resources are managed for most effective use will, therefore, acquire a new urgency.

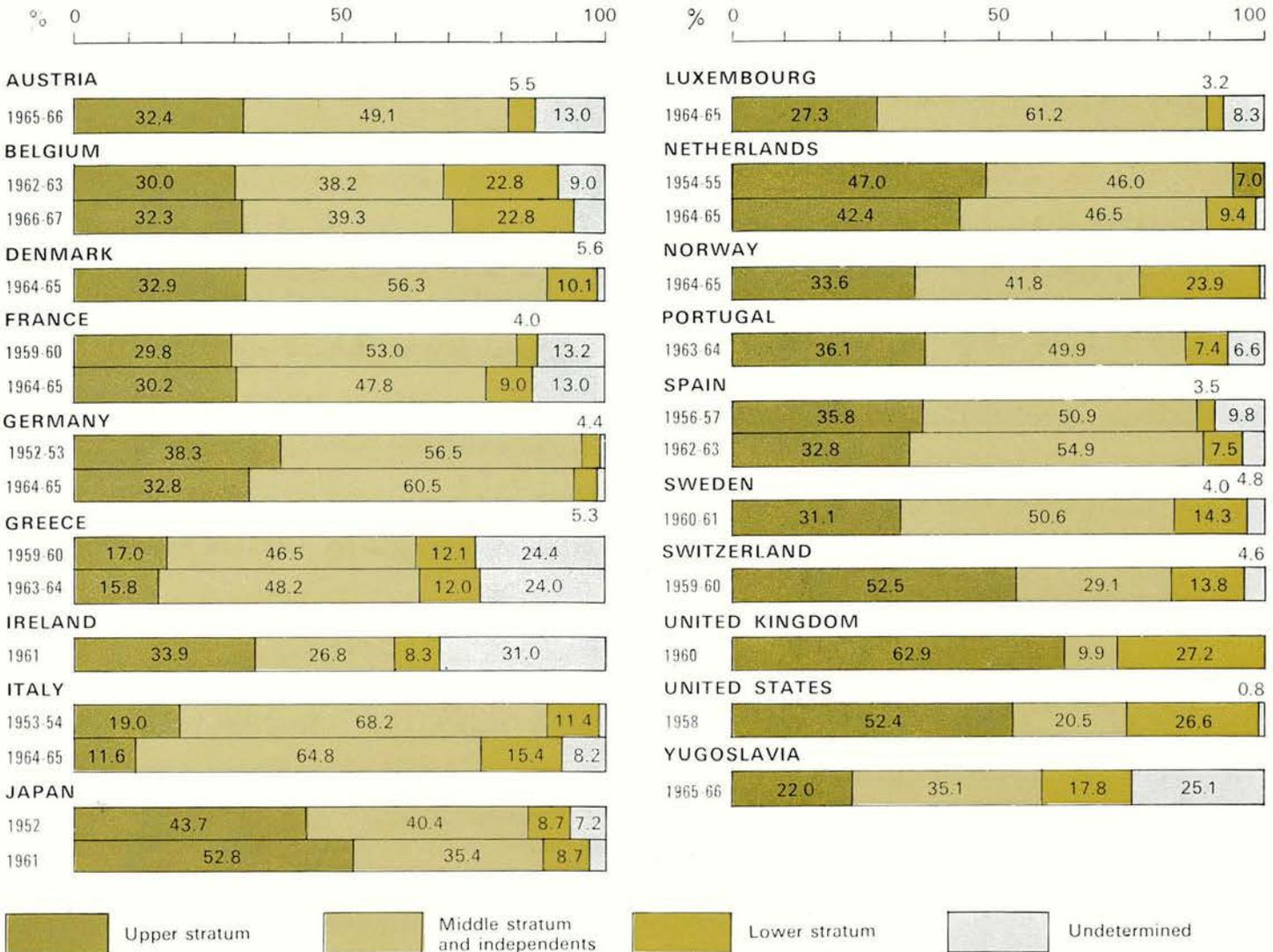
The Conference recognised that in a fully employed economy additional resources for education imply a reduction in the resources available to other public or private activities and concluded that “educational systems must, therefore, justify their use of resources in terms of clearly defined objectives and use these resources in ways which will yield the best value for the money”.

The discussion then centred on the question of how this could be achieved. Some of the shortcomings of present educational accounting systems were discussed—for example their failure to take into account such costs to the individual and the society as the number of drop-outs, low-achievement graduates or long years spent acquiring a degree. Another problem posed was that, at present, educational efficiency is rarely judged in the context of whether or not it meets the objectives set for it by society.

In its deliberations, the Conference considered the question of efficiency in a broad sense, including both reduction of unit costs and general economic efficiency. “A problem in either case”, they noted “is that ‘quality’ and outputs are rarely clearly defined. Research should, therefore, be undertaken in an attempt to identify the outputs of education and to assess ‘quality’ in terms of output and not only in terms of input as is usual at present”.

Human resources must be taken into account as well as purely financial costs, and in this context it is important that the implementation of any educational policy should seek to make the best possible use of students’ time, especially in view of the fact that in many countries the dependent population is increasing in relation to those who are economically active. As to labour costs, although they represent a very high proportion of total educational expenditure, the adoption of the most advanced labour-saving technology would not necessar-

DISTRIBUTION OF STUDENTS IN HIGHER EDUCATION BY SOCIO-ECONOMIC CATEGORIES



structures and decision-making processes need to take account of the aspirations of different social groups and the views of those participating in the educational process. Curriculum, contents, methods and organisation throughout the educational system should be kept under continuous review in order to match the rapidity of the scientific growth and social change now taking place.

The Conference expressed the opinion that the required changes demand new and better methods of management, entailing in some cases reform of existing administrative structures. Since change comes about in a great variety of ways (it may be prompted by a combination of analytical approaches, results of research and development, and/or by the interaction of local views and experience) research and development and general information systems must be strengthened, and stronger provision made for local initiative and involvement to help stimulate and achieve change.

Provision should be made—by formal machinery or otherwise, as may be appropriate in each case—to develop an adequate system for the stimulation and co-ordination of the change process at all levels.

The process of change should be guided by continuous evaluation which takes into account the views of the various groups concerned within and outside the educational system.

For the effective consideration of alternative educational courses of action, the participants concluded that “an understanding of the process of educational change is necessary. Such an understanding can be greatly enhanced by international co-operation and exchange of experience, and OECD can assist individual Member countries in their efforts, as has already been demonstrated. But the ability of nations to profit from international experience will increase as their own internal arrangements for advancing educational change grow in strength”.

A Centre of Excellence for Management Development:

THE INTERNATIONAL INSTITUTE FOR THE MANAGEMENT OF TECHNOLOGY

by
Dr. J. A. Cade,
Consultant in the Scientific Affairs Directorate, OECD

During the past decade there has been a great deal of concern and self-analysis in Europe over the apparent ability of the United States to derive greater economic benefits from its investments in scientific and technological activities than do many other countries which spend large proportions of their national wealth in this way - a phenomenon which has been described as the technological gap.

The wealth created by industries based on science and technology now dominates the economies of the most developed countries⁽¹⁾, and a thorough understanding of the manner in which various countries exploit the potential offered by the scientific and technological activities in which they engage is crucial to an adequate appreciation of their relative economic performances. The Organisation for Economic Co-operation and Development has been a leading contributor to this field of study⁽²⁾. And the results of such studies convey one clear message - that scientific and technical ability alone are insufficient for translating discovery into wealth or a better life, and that the key to improved national performance is improved management in the broadest possible sense.

The Organisation has now been instrumental in setting the stage for the creation in Europe of an international centre of excellence for high level research and training in the management of technological innovation. This centre, which will be known as the International Institute for the Management of Technology, will - subject to support from governments and industry - be set up in Milan later this year, and courses should begin there in the spring of 1971.

(1) Less than 10 per cent of the companies listed in "The Times 500" and the "Fortune Directory", which together with agriculture contribute a major proportion of the national incomes of the United Kingdom and the United States respectively - department stores, shipping lines, financial holding companies - are not directly concerned with science and technology. A similar situation exists in the other most advanced nations, notably Japan, France, Germany, Italy and the Netherlands.

(2) "Gaps in technology between Member countries; General Report", OECD, Paris (1968); Sector Reports, *idem, ibid* (1968, 1969); Analytical Report, *idem, ibid* (1970).

As the result of an international conference called in May 1967, to discuss the so-called technological gap, a study committee under the chairmanship of M. Olivier Giscard d'Estaing, then Chairman of the Committee for Advanced Training at the International School of Business Administration in Fontainebleau, was charged with the task of looking at the possibility of establishing in Europe a high-level international centre for training in science and technology modelled on the lines of the Massachusetts Institute of Technology.

A majority of the committee very soon formed the view that the desirability or practicability (3) of setting up a European MIT was questionable. The strength in depth of most industrialised European countries in the physical sciences indicated that this kind of institution could as well be created in a number of countries if the will existed, and there seemed little justification in setting up such an organisation as an international venture. Furthermore, it is questionable whether the existence of institutions of the calibre of MIT are a cause of America's position vis-a-vis Europe's, or a phenomenon that follows from it.

Instead the committee concluded that if anything on the lines of an international approach to closing the technological gap were needed, it should be concerned with the much more important question of handling science and technology to the better advantage of the society or societies creating it — that is, it should be concerned with the management of science and technology in both the industrial and government sectors, using the term management in the widest possible sense.

Problems and Trends

There are several other important considerations leading to this view. Firstly, there are many indications that in order to compete in commerce with the United States, European countries must achieve a considerably greater degree of genuine integration as regards investment in research and development, in production and in the creation of significant markets, than exists at present. This implies more managers of industry who think in terms of bigger systems than the national economy of which their enterprises are a part. But how can such attitudes and such integration be promoted? One way would be to ensure that those who come to occupy key management positions in both industry and government during the next two decades—positions from where they more than anyone else will most influence the prospects for any such genuine integration—belong to the same supranational intellectual club. Current trends indicate strongly that an increasing proportion of these key people will be, and indeed will need to be, persons with technical training (4).

Secondly, the rate at which human knowledge is

growing accelerates all the time. But the area in which this change of rate is most acute is in the application of scientific study and methodology to other domains of activity—to the understanding of complex phenomena like the process of technological innovation; to information acquisition, processing, storage and retrieval; to policy, planning and decision; to economics and other problems of resource allocation; to behaviour and motivation; and to many other areas which impinge upon the total management function.

Many of the most significant of these developments which collectively constitute 'management science', have been pioneered during the past twenty years by people originally trained as natural scientists or engineers (5), who have subsequently been promoted to management positions, and who have applied the special qualities acquired in their technical training to the problems of their new functions (6). Nowhere has this trend been more evident or recognised for longer than in the United States (7); and the question arises, ought it not to be taken more advantage of through active promotion in Europe in view of the circumstances towards which most industrialised societies are evolving?

Management science is not the same thing as management; and good management scientists are not necessarily good managers. But there are already clear signs that the growth and proper application of management science is going to revolutionise management to an even greater extent than the growth and application of the natural sciences has transformed the material aspects of life. The demands of the times are for middle managers skilled in the realistic application of modern management aids, and top management which understands when and how to use them; and the best middle managers of today's world will be the top executives of the best industries of tomorrow's.

Finally, there is the question of the special problems posed by the management of the scientific or technical component in the total innovation process (8)—namely the management of research and

(3) *There have been previous attempts. For example the "Proposal for an international institute or science and technology", NATO, Paris (1962) produced by a group under the chairmanship of Dr. J. R. Killian of MIT contained detailed recommendations for an international centre of science and engineering operating at the pinnacle of the university system; but these proposals were never implemented.*

(4) *"Company Presidents" by H.C. Bettignies, European Business, 26, 59 (1970).*

(5) *"Scientists" is used here to include econometricians, mathematicians and certain classes of social and behavioural scientists; that is anyone inculcated with "the scientific method".*

(6) *See, for example, the backgrounds of contributors to "The Science of Managing Organised Technology" by M.J. Cetron and J.D. Goldhar, Gordon and Breach, New York (1970).*

(7) *"The impact of feedback control concepts on the management sciences" by J.W. Forrester, Foundation for Instrumentation Education and Research, New York (1960).*

development—for which neither national nor international management schools of the traditional kind seem to make adequate provision (9). This is evidenced by the fact that most technology-intensive industries in both the United States and Europe tend to recruit their managers of research and development from among their best scientists and engineers—a process which is recognised as suffering from serious drawbacks, not the least of which is the way in which it so often leads to the research and development function becoming isolated from the production and marketing components in the total innovation process.

A Solution: the International Institute

All these considerations point to a need which it is hoped will be met through the International Institute for the Management of Technology. The broad lines of the form such an institute should take were set out in a report published by the study committee in 1968 (10), and during the past year an OECD Working Party including representatives of Austria, Germany, France, Italy, the Netherlands, the United Kingdom and seven members of the original study committee has produced detailed proposals for the Institute in a form acceptable to the participating governments and their industrial advisers(11).

The Institute will be an international venture supported by industry and government from many countries, to promote the better management of highly complex technological systems through its training and research programmes. It will differ from existing management education centres in the following important respects:

- it will deliberately bring together representatives of industry, government and the scientific field from a number of countries who will thus participate in joint activities in a thoroughly international and intersectorial atmosphere;
- it will be concerned primarily with the management of technology and technological innovation; and
- it will attempt to bring together in its training programmes all aspects of modern management in a more comprehensive and integrated way than has been achieved hitherto.

The Institute will also be dynamic by continually adapting its programmes to take account of new developments and new needs in the management of technology and by introducing many innovations into the training courses :

- it will have a vigorous research programme strongly oriented towards its training function and the solution of real management problems; and
- it will rely heavily on collaboration with industry, government departments and universities in a number of countries to mutually formulate their management needs, and the ways in which these needs can be met through the Institute's programmes.

Great care will be taken to ensure that there is no unnecessary duplication of the tasks which might better be undertaken by other international or national organisations.

The Size and Scale of the Institute

To maintain excellence, the Institute should not be too large; but to be effective it must serve an appreciable clientele in a reasonably short time. This implies an institution of moderate size, and it has been proposed that, provided sufficient demand is forthcoming from industry, the numbers of faculty, staff and participants at the Institute should grow during the first three years on the lines indicated.

So that by the third year of operation about five hundred persons would be associated with the Institute each year. Of these, some 10 per cent would represent direction, administration and services, including senior staff, international supporting staff and local supporting staff. A further 10-12 per cent would comprise the regular faculty: professorial staff, lecturers and research fellows and the remainder would consist of lecturers and participants on short courses, and participants in the one-year course. As about four or five short courses, each involving approximately 60 people, would be held every year, there would not be more than about three hundred persons at the Institute at any one time.

These figures, which will be open to considerable modification by the governing organs of the Institute, probably represent an optimum operating level.

Collaboration with Industry and Higher Education

The Institute's teaching and research activities will be developed in close collaboration with industry and a central part of the Institute's policy will be to strengthen collaboration between the industrial, government and university sectors. Contributing firms will become members of the Institute and its General Council. Leading representatives of industry will be appointed to the Governing Board and members of the Institute's staff will be able to undertake consultancy contracts in industry. Such arrangements should facilitate the flow of ideas and expertise between industry and the Institute. This collaboration with industry will also serve to make the Institute better known and facilitate the recruitment of the most suitable kind of lecturers and

(8) There are several definitions of technological innovation depending upon various views as to where the total process of translating technical knowledge into economic reality begins and ends.

(9) "Assessing management education in Europe" by H. Dougier, *European Business*, 23, 31 (1969).

(10) Report of the Study Committee on the creation of a European Institute of Science and Technology, by O. Giscard d'Estaing, E. Pestel, A. King, et al., Paris and Hanover (1968).

(11) "Proposal for an International Institute for the Management of Technology" — Report by the Working Party to the OECD Council, C(70)80, Paris (1970).

participants to take part in the training courses. Similar considerations apply to universities and scientific institutions in many countries with which the Institute will seek to establish close liaison. In addition, as a centre of advanced learning the Institute will establish links with leading schools engaged in teaching and research in similar and complementary fields, and will seek to establish a fruitful process of academic exchange.

The Constitution

The Institute is to be established by inter-governmental convention. Governments which are parties to the convention and companies, foundations and individuals from the private sector will constitute a General Council which will lay down the main lines of policy and control the Institute's budget. Both private and government members will subscribe to the funds of the Institute, and have voting rights in the General Council in proportion to their contributions. The General Council will appoint a Governing Board and a Director General. There is provision for the eventual reconstitution of the Institute as an independent non-governmental foundation.

The Location of the Institute

The Institute will be established in Milan, where the city authorities with the help and support of the Italian Government have generously undertaken to provide fully equipped premises free of rent. The Institute will be installed in the Collegio della Stelline, a 16th century convent located near the centre of Milan, which will be converted and completely modernised so as to provide air-conditioned living accommodation for over 350 people, a dining hall, lecture rooms, meeting rooms, a vast library, computer laboratories, work-shops, offices and garages. When the modernisation is complete, including the insertion of two new storeys into the building over 25,000 sq.m. of living and working space will be available.

This integration of an ancient and historic building with a modern technical institution, will be symbolic of the synthesis between technological and sociological goals which the worthiest management of technology in future decades implies. The City of Milan has undertaken to make a substantial contribution from its cultural budget to the expenses of running the Institute, and leading businesses of Lombardy have formed a committee for its support.

Income and Expenditure

The gross costs of operating the Institute are estimated at 1.5 million US dollars in the first twelve months, rising through 2.3 million US dollars during



Collegio della Stelline : interior of the building that will house the Institute.

the second year to approximately 3 million US dollars in the third and subsequent years of its activities. This expenditure will cover material and personnel including travel and accommodation costs. However, the actual rate of growth will need to be strictly related to demand for the Institute's courses and to the financial support received. In the initial stages, governments may need to supply the bulk of support, and government contributions will be shared approximately in proportion to their gross national products. Governments do not expect, however, to bear the whole financial burden. About one-third of the income during the first three years will be sought through direct contributions from industry, probably through named endowments of chairs, visiting lectureships and research fellowships. Fees will be charged for the Institute's courses to provide up to another one-third of the income, but participants in courses who are sponsored by members of the General Council will pay reduced course fees.

Participants in the Project

The intergovernmental convention will be open to the participation of all governments members of OECD and of other governments by invitation. Companies and others which undertake to subscribe

a minimum sum equivalent to \$ 10,000 a year for three years will be eligible to become members of the General Council. Contributors of smaller sums from small enterprises may combine to acquire joint membership.

Whether or not certain countries contribute directly to the finances of the Institute, there will

be no restrictions as to nationality of those who teach, work or learn at the Institute.

However, the financial implications for those countries which do participate directly, will be very moderate. The Institute is to be a centre of excellence, of high quality and relatively moderate size—it is not a “big science” project. Even the largest

COURSES AND RESEARCH AT THE

The successful management of modern technology from invention to the market place requires senior management having the knowledge and understanding of a very wide range of subjects and especially of the interaction between human, technical and socio-economic systems; and middle managers skilled in the application of modern management techniques. The Institute will provide such education and training through its courses. These courses will be of particular value to scientists and engineers transferring from research and development or production to all kinds of management roles in technology-intensive industries. They will also be important for government officials concerned with science, technology and industry; and for management teachers coming from management schools in a number of countries. The courses will be adapted continually to meet an expected evolution in the management needs of all these sectors, but some specific short courses with which the Institute could begin have been planned with the help of experts in appropriate fields.

● *The One-Year Course*

For those entering middle management roles, there will eventually be a one-year course at the Institute intended to provide an appreciation of developments in all the fields—planning, control, operations, information, research and development—affecting the successful management of technological innovation; and training in some of them according to the career needs of different participants. This one-year course will be organised on a modular basis so that some participants can usefully attend only part of it. To create a course that will fully realise the objectives of the Institute and be better than any existing management training

will require careful planning, and this will be a primary task of the faculty during the first year of the Institute's existence, in collaboration with industry and other management training organisations.

● *Short Courses*

There will also be short courses at the Institute of two kinds : appreciation courses for senior management and advanced study courses for middle management. These courses will be conducted mainly by visiting faculty for each course in order to take advantage of the world's best teachers in any subject.

The Director of each course will be an authority in the field, who will be responsible for planning the course in consultation with the lecturers, for the organisation and administration of the course including the selection of participants in collaboration with the Institute's staff, and for supervising the publication of any report or proceedings that might result from the course.

About six to ten lecturers chosen from among leading authorities to cover between them all facets of the subject, will give the main course lectures and be in attendance throughout the course.

There will also be guest lecturers on specific topics closely relevant to the course content, who might be managers from industrial organisations with experience of unique problems, research workers developing new management techniques, or anyone who could make a limited but important contribution to the course.

● *Appreciation Courses*

The short appreciation courses for senior management will be of two kinds : a general one to be held an-

nually on “How to manage technological innovation successfully” and others on special topics according to demand, such as “Multinational operations in technological innovation” and “How to get the most value out of computers”.

● *Advanced Study Courses*

Many of the improvements that have occurred in management techniques in recent times, have been the result of introducing scientific rigour and methodology into planning, operations, information and so forth. The advanced study courses will be designed so as to promote this phenomenon at the same time as providing management training in a specific subject.

The participants will be restricted to about 60 persons including senior engineers and scientists, middle managers from industry and the public service, and a limited number of young and less experienced ‘high-flyers’ and persons from universities.

The advanced study courses will last from one to three months to allow an intensive treatment of the subject, yet enable people of high calibre to attend.

The courses will consist of a number of lecture sessions with extensive discussion periods. Each lecturer will be expected to begin with a basic introduction to his subject, and then to move quickly to the latest developments in the field. There will also be case studies and a high degree of audience participation through the discussion periods and practical work.

Practical work will form an essential part of most of the advanced study courses, although the amount of workshop will vary according to the experience, interests and subsequent career intentions of the participants.

government contributions will not be more than about \$ 300,000 a year even if the legal minimum of only four countries support it. And if about 20 industries in each of as many countries could be found to support the Institute, their individual contributions would need to be of the order of \$ 15,000—less than a year's salary for the sort of people the Institute would hope to train. Obviously, if more countries participate, the unit costs will be less.

But the principal reason for wishing that many more countries will come in is that the broader the basis on which we think and operate in the modern world—which is changing so rapidly all the time—the more likely we are to succeed in improving our individual and collective performance in providing our societies with a better life and reaping the full potential that science and engineering have put at our disposal.

E INTERNATIONAL INSTITUTE

The practical work will range from elementary exercises, through the reworking of more complex problems previously resolved, to full scale studies or feasibility studies using the Institute's computer facilities.

Many of the participants in the advanced courses will be senior people whose work, problems and research activities will be of interest to the other members including the lecturers, and to the Institute. Symposia, consisting of short lectures and discussions given by the participants will therefore form an important part of the advanced study course programmes. These symposia should also provide an opportunity for faculty members of the Institute to describe relevant projects going on there. Groups of participants may also find that they have problems and ideas of common interest, upon which they might wish to work or hold discussions whilst together during the period of the course in small study groups.

Adequate provision would be made in the course programmes for such symposia and study groups. These less formal activities, together with the informal discussions held over meals, during excursions, and sometimes even late into the night, will provide what is probably the most important dimension of this kind of activity, and will distinguish it from the usual kind of conference or teaching course.

• *Specific Advanced Study Courses*

A selection of specific courses that could be included in the first two years of the Institute's teaching programme has been planned by expert authorities in the respective subjects, and in most cases an indication has been received from a selection of lecturers that they would be willing

to participate in giving them. They include courses of varied duration on "The systems approach to management", on "Digital production control", on "Programming for optimisation", and on "Decision making in technological management".

• *Research at the Institute*

Teaching of the highest quality in any field occurs when those engaged in it are also contributing to new knowledge about the subjects which they teach. Research and project work will, therefore, be the other main activity at the Institute in which all the faculty members will be expected to participate and promote. Opportunities to carry out research will also be necessary if teaching staff of the highest qualifications are to be attracted to the Institute.

As the main task of the Institute is to serve the present and future needs of technological management in government and industry, it will be vital to ensure that the research activities at the Institute are directed towards the solution or alleviation of real problems in a practical way. This will also make the research projects of the greatest possible relevance to the training programmes.

There is a very wide range of possibilities open to the Institute that fulfill the requirement of a high degree of orientation towards the solution of practical management problems. But it seems clear from some of the problems mentioned earlier in this article, that two main areas of research at the Institute should be studies of complex phenomena like the process of technological innovation itself, and the further development of techniques and methodologies as practical management aids.

There is a need to understand

more of the properties, characteristics and behaviour of large technical socio-economic systems, and of smaller sub-systems such as companies operating within an international or national economic framework; to know more about the educational, sociological and psychological characteristics of successful innovative management, and of the existing patterns for linking innovation, research and development to corporate objectives. There is at present a great deal of established mythology about these and many other related matters — but it rests on an extraordinarily meagre factual basis.

When rigorous study adds to empirical knowledge about the complex systems or situations in which technology operates or by which its chances of success are affected, methodologies for using such knowledge to control and exploit these systems or situations become important and relevant. Thus advances in planning, in organisational development, in project selection, in risk analysis, in simulation, in decision making aids, in methods of resource allocation, in managerial control systems, in financial management, in research evaluation, in marketing, and in recognising and exploiting entrepreneurial talent are some promising areas among a very large number of possibilities that seem ripe for further development.

Eventually, the Institute might also carry out project work on a contractual basis to further its collaboration with industrial firms, government departments or university departments; and a stage might even be reached when the Institute could play an active part in resolving problems of international concern through feasibility studies of alternative solutions to large industrial, international or supranational problems.

NEW OECD PUBLICATIONS

OECD FINANCIAL STATISTICS / STATISTIQUES FINANCIÈRES DE L'OCDE, N° 1 - 1970

418 pages £ 9 \$ 26 F 120,00 Sw.fr. 98,00 DM 80,00 (for two volumes a year, plus updating leaflets)

Complete, up-to-date, authoritative information on financial markets in 14 European countries, the United States, Canada and Japan, on a comparable basis, integrated into a single system of co-ordinated tables, within a national accounts framework.

" OECD Economic Surveys " 1969-1970 series :

FINLAND (May 1970), 72 pages
GERMANY (April 1970), 72 pages

Each issue 5s.6d. \$ 0.80 F 3,60 Sw.fr. 3,00 DM 2.80
Subscription to 1969-1970 series:
£ 4.2s. \$ 11.80 F 54,00 Sw.fr. 43,20 DM 35.70

CATALOGUE OF SOCIAL AND ECONOMIC DEVELOPMENT INSTITUTES AND PROGRAMMES - RESEARCH (June 1970)

534 pages £ 1.18s. \$ 5.50 F 25,00 Sw.fr. 21,50 DM 17.00

Lists some 163 institutes located in 50 countries. Among these institutes, 80 are to be found in 35 countries of Asia, the Middle-East, Africa and Latin America. This new edition contains information concerning institutes which have not previously been included, together with up-dated information on institutes included in the previous edition.

REGIONAL CO-OPERATION IN ASIA.

Annual Meeting of Directors of Development Training and Research Institutes, Tokyo, 10th-14th March 1969 (June 1970)

94 pages 15s.6d. \$ 2.25 F 10,00 Sw.fr. 9,00 DM 7.00

The study of experience with, and prospects for, economic co-operation in Asia; a review of prospects for closer

research co-operation and of training problems in Asian institutes.

" Development Centre Studies " series :

AGRICULTURE AND RELATED INDUSTRIES IN PAKISTAN, by F. Kahnert, R. Carmignani, H. Stier and P. Thomopoulos (June 1970)

454 pages £ 1.18s. \$ 5.50 F 25,00 Sw.fr. 21,50 DM 17.00

The methodology and the approach used in this study should be of interest to economists and others concerned with problems of agricultural development. Gives an indication of the significance of purchased inputs, other than fertilisers, in raising agricultural productivity and in complementing the effects of increased use of chemical fertilisers.

" Reviews of Manpower and Social Policies " series :

MANPOWER POLICY IN THE UNITED KINGDOM (May 1970)

232 pages £ 1.6s. \$ 3.75 F 17,00 Sw.fr. 15,00 DM 11.70

Analysis of the efforts undertaken to bring about a better balance on the UK labour market and therefore to encourage the country's economic modernisation and development. Comments and conclusions on policies for regional development, industrial training, prices and productivity, as well as on redundancy payments and other original solutions to current manpower problems.

FISHERY POLICIES AND ECONOMIES 1957-1966 (June 1970)

516 pages £ 3.9s. \$ 10.00 F 45,00 Sw.fr. 37,00 DM 29.80

Most of the report is devoted to recent changes in national fishery policies and stresses the most important conclusions that can be drawn from world statistics on fish catches, exports and imports.

" Road Research " series :

PEDESTRIAN SAFETY, by B.M. Biehl, S.J. Older and D.J. Griep (May 1970)

74 pages 15s.6d. \$ 2.25 F 10,00 Sw.fr. 9,00 DM 7.00

A comprehensive summary of research on pedestrian behaviour. The second part of the report is concerned with recommended future research on an international basis and is divided into three areas: research concerned with training, information and legislation; research concerned with vehicles including the interaction between driver and pedestrian, and research concerned with road conditions.

WHERE TO OBTAIN OECD PUBLICATIONS

ARGENTINA

Editorial Sudamericana S.A.,
Humberto 1° 545, BUENOS AIRES.

AUSTRALIA

B.C.N. Agencies Pty. Ltd.,
178 Collins Street,
MELBOURNE, 3000.

AUSTRIA

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

BELGIUM

Librairie des Sciences,
76-78 Coudenberg, B 1 000 BRUXELLES.
Standaard Wetenschappelijke Uitgeverij,
Belgiëlei, 147
ANVERS.

CANADA

Information Canada,
OTTAWA.

DENMARK

Munksgaard Boghandel, Ltd.,
Nørregade 6, KØBENHAVN K.

FINLAND

Akateeminen Kirjakauppa,
Keskuskatu 2, HELSINKI.

FORMOSA

Books and Scientific Supplies Services,
Ltd., P.O.B. 83, Tapei, TAIWAN.

FRANCE

OECD Publications Office,
2, rue André-Pascal, F 75 PARIS (16^e).
Principaux sous-dépositaires :
PARIS : Presses Universitaires de France,
49, bd Saint-Michel (5^e).
Sciences Politiques (Lib.),
30, rue Saint-Guillaume (7^e).
13-AIX-EN-PROVENCE : Librairie de
l'Université.
38-GRENOBLE : Arthaud.
67-STRASBOURG : Berger-Levrault.

GREECE

Librairie Kauffmann,
28, rue du Stade, ATHENES 132.
Librairie Internationale Jean Mihalopoulos
33, rue Sainte-Sophie, THESSALONIKI.

GERMANY

Deutscher Bundes-Verlag, GmbH.
Postfach 9380, 53 BONN.

Sub-Agents : BERLIN 62 : Elwert & Meurer.
HAMBURG : Reuter-Klößner
und in den massgebenden Buchhandlungen
Deutschlands.

ICELAND

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

INDIA

Oxford Book and Stationery Co. :
Scindia House, NEW DELHI.
17 Park Street, CALCUTTA.

IRELAND

Eason & Son, P.O.B. 42,
40-41 Lower O'Connell Street, DUBLIN 1.

ISRAEL

Emanuel Brown,
35 Allenby Road,
and 48 Nahlat Benjamin St., TEL-AVIV.

ITALY

Rappresentanza esclusiva
Libreria Commissionaria Sansoni,
Via La Marmora 45, 50 121 FIRENZE.
Piazza Montecitorio 00186 ROMA.
Sub-depositari :
Libreria Hoepli
Via HOEPLI 5, 20 121 MILANO.
Libreria Lattes
Via Garibaldi 3, 10 122 TORINO.
La diffusione delle edizioni OECD é
inoltre assicurata dalle migliori librerie
nelle città più importanti.

JAPAN

Maruzen Company Ltd.,
6 Tori-Nichome Nihonbashi. TOKYO 103,
P.O.B. 5050, Tokyo International 100-31.

LEBANON

Redico, Immeuble Edison,
Rue Bliss, B.P. 5641,
BEYROUTH.

LUXEMBOURG

Librairie Paul Bruck, 22, Grand'Rue,
LUXEMBOURG.

MALTA

Labour Book Shop,
Workers' Memorial Building,
Old Bakery Street, VALLETTA.

THE NETHERLANDS

W.P. Van Stockum,
Buitenhof, 36, DEN HAAG.

NEW ZEALAND

WELLINGTON, Government Printing Office,
Mulgrave Street (Private Bag), and
Government Bookshops at
AUCKLAND (P.O.B. 5344).
CHRISTCHURCH (P.O.B. 1721).
HAMILTON (P.O.B. 857).
DUNEDIN (P.O.B. 1104).

NORWAY

A/S Bokhjornet, Akersgt. 41, OSLO 1.

PAKISTAN

Mirza Book Agency,
65, Shahrah Quaid-e-Azam, LAHORE 3.

PORTUGAL

Livraria Portugal,
Rua do Carmo 70, LISBOA.

SPAIN

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

SWEDEN

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

SWITZERLAND

Librairie Payot,
6, rue Grenus, 1211, GENÈVE 11
et à LAUSANNE, NEUCHÂTEL, VEVEY,
MONTREUX, BERNE, BÂLE et ZURICH.

TURKEY

Librairie Hachette,
469 Istiklal Caddesi, Beyoglu, ISTANBUL,
and 12 Zita 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

OECD PUBLICATIONS CENTER,
Suite 1207,
1750 Pennsylvania Ave, N.W.
WASHINGTON, D.C. 20,006.

VENEZUELA

Libreria del Este,
Avda F. Miranda 52, Edificio Galipan,
CARACAS.

YUGOSLAVIA

Jugoslovenska Knjiga, Terazije 27,
P.O.B. 36, BEOGRAD.

Orders and inquiries from countries where sales agents have not yet been appointed should be sent to OECD Publications Office
2, rue André-Pascal, F 75 Paris 16^e.

Organisation for Economic Co-operation and Development

