# the OECD OBSERVER

WAGES AND LABOUR MOBILITY: A NEW STEP FORWARD IN INCOMES POLICY. THE OECD DEVELOPMENT CENTRE: POINT OF CONTACT WITH THE DEVELOPING WORLD. SOME OECD DEFINITIONS OF RESTRICTIVE BUSINESS PRACTICES. CHANGES IN OCEAN SHIPPING



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# WAGES AND LABOUR MOBILITY:

## *a new step forward in incomes policy*

*Many industrialised countries are faced with the dual task of promoting growth and at the same time preventing inflation. OECD, through its Economic and Development Review Committee, has often recommended that, as part of their stabilisation programmes, Member countries adopt an incomes policy. At the same time working parties and expert groups of OECD's Economic Policy Committee have contributed in an important way to solving some of the technical difficulties involved in formulating an incomes policy.*

*The first step in this direction was the publication in 1962 of* Policies for Price Stability, *which traced the development of official attitudes and government practices with regard to income settlements. As a result of this study it became evident that if sound guidelines for an incomes policy were to be worked out, further information was needed, particularly in two areas : first, the complex and politically charged subject of non-wage incomes and, second, the role of wages in allocating labour.*

*To fill some of the gaps in existing knowledge about these two subjects, OECD undertook two special studies. The first,* Problems of Prices, Profits and other Non-Wage Incomes, *appeared in 1964; the second project has just been completed, and the results will shortly be published under the title* Wages and Labour Mobility.

As experience with incomes policy accumulates, progress is being made towards overcoming some of the obstacles to the formulation of practical and equitable guidelines. On the political side, several countries have been successful in bringing the national interest to bear on incomes settlements by private parties; and as to the technical difficulties, they too are gradually being resolved.

One of the most perplexing technical problems that has beset governments in working out an incomes policy is that of uniformity versus diversity in wage settlements. There is general agreement on the guiding principle behind an incomes policy : that wages should increase in step with productivity growth. On the other hand it is generally recognised that changing wage relationships play a role in allocating labour : higher than average increases serve to attract workers to expanding industries, occupations and regions, while lower than average increases induce them to leave declining activities. This would seem to indicate the need for exceptions to the general rule.

The question is how numerous such exceptions should be and by how much the increases should differ from the average. The Working Party of OECD's Economic Policy Committee which is concerned with these problems found that there was no comprehensive evidence to give policy makers any practical guidance on this matter ; a group of experts was therefore appointed to undertake a systematic investigation of the role that wages have actually played in the redeployment of labour (1).

In the course of the study, which took a year and a half, statistics were collected from all OECD Member countries (the chief sources being Belgium, Canada, France, FR Germany, the Netherlands, Norway, Sweden, the United Kingdom and the United States). A computer was used for analysis of the data (without it, the thousands of mathematical operations would have required some 100 man-years of work), and an extensive survey of the available literature on this and related topics was carried out.

The expert group's main findings were that, over the last ten or fifteen years, changes in earnings differentials have not in practice been a factor of major importance in the big shifts that have taken place in employment between industries, occupations and regions. This suggests that, from a purely economic point of view, and without taking social considerations into account, there are relatively few circumstances in which departure from a standard wage increase is likely to be necessary.

These conclusions are based on study of a great many different kinds of evidence, including the relation between wage changes and changes in other variables, and statistics concerning the size and characteristics of labour mobility. Interpretation of the data called for great care : the experts were aware of the limitations of both the available statistics and the analysis, and discuss them fully in their report.

## *Wage stability, labour mobility*

The main fact that emerges from the study is that earnings in each of the countries concerned have tended to rise at approximately the same rate in different industries, occupations and regions, with the result that wage structures have remained remarkably stable.

Despite this relative stability of wage relationships, there have been enormous changes — more than is generally realised — in employment patterns. The contrast can be illustrated by concrete examples : in Arizona and Michigan during the years 1953-1960, wages increased at very similar rates (4.1 and 4 per cent a year respectively); yet employment rose by 77 per cent in Arizona and fell by 18 per cent in Michigan. Another example : employment rose by 12 per cent in the UK radio industry, fell by 20 per cent in textiles, over a seven-year period. But wages rose at almost the same rate (5.7 and 5.8 per cent a year) in the two industries.

This means that within broad limits it has been possible for industries, occupations and regions to increase employment without increasing wages by more than the average (2).

How can this be explained if, as is commonly assumed, individual workers move towards the highest paying jobs available ?

## *Why people take jobs*

The study shows that financial incentives, although very important in job decisions, may be less so than is generally thought. Some people are forced to look for work because they lose their jobs; and those who find themselves in this position show a strong tendency to take the first employment offered, even at lower pay. (One US study shows that 23 per cent of workers taking new jobs after a period of unemployment earned less on the new job than they had on the old one.) But even among those who change jobs voluntarily, there is strong evidence that financial considerations, while very important, are not the only ones, nor are they always dominant.

This is indicated by a series of surveys which are summarised in the experts' report. For example, among a group of workers in Norrköping, Sweden, dissatisfaction with working conditions was the reason most often given by young people who changed jobs voluntarily (economic rewards seemed to have more weight among older people), and as many as 40 per cent of the youngest manual workers could give no other reason for taking the job they did than " chance " or " no other choice ".

In Dagenham, England, 53 per cent of the workers under 45 years old who quit their jobs said they did so solely for financial reasons; in Battersea the figure was 46 per cent. (For older workers the percentage was much lower.) Job improvement was given as the main reason for change by 55 per cent of the workers in a study of six US cities.

These and other studies clearly show that considerations of a non-financial nature play an important role in the decision to take a particular job. These include better working conditions, the desire for a job nearer home, and " family reasons ". Moreover, there is evidence that knowledge of job alternatives is often limited and that even those who leave a job to better their situation often have no very clear idea of where they wish to go.

Similar considerations appear to apply to new recruits into the labour force. A survey of 800 US manual workers shows that most of them obtained their first jobs in a very informal way and that 80 to 90 per cent of them took the first job they found after

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(*1*) Chairman of the Expert Group was Prof. P. de Wolff (Netherlands). The other members were M. A. Liorzou (France), Prof. H. Phelps-Brown (UK), Mr. G. Saunders (Canada), Prof. L. Ulman (US), Mr. C.-E. Odhner (Sweden), Mr. R. Deroo (Belgium), Frau Prof. S. Münke (FR Germany) and Dr. Prof. C. Vannutelli (Italy).

(*2*) There are indications that, at least in certain sectors, the Canadian labour market may have been more responsive to changes in wage differentials than that of other countries studied.

leaving school. Interest in their work was the most frequent reason given for taking a job by 1350 boys in Glasgow; good wages followed well behind in the list of motivations. However, a great many young workers change jobs after a short time, and financial considerations seem to be more important in their subsequent choice of job.

Thus financial motivation appears on actual examination to be weaker than one might expect. Moreover, to the extent that this incentive involves a long-term calculation — e.g. better opportunity for advancement — it need not be reflected in higher immediate earnings.

## *Individual changes in a stable structure*

Even so there remains an important group of workers whose prime motivation is a financial one. How can the need to attract these people be reconciled with the stability of wage structures observed by the OECD expert group?

The answer is that such workers have been able to improve their situation within the framework of the existing wage structure — either by taking a similar job in a higher paying industry, occupation or region, or by moving into a higher grade in the same or another activity.

Seen from the point of view of the employer, the high rate of labour turnover in the economies examined has been an important factor in this process. An average firm in the US has to hire from fifty to sixty people a year in order to keep 100 on the payroll, and in Europe the average appears to be between thirty and forty. By holding on to just a slightly higher percentage of the people who pass through or by attracting just a few more, an employer can effect quite an important and rapid change in his work force.

Thus expanding industries have been able to get the workers they needed — whether from the stream of new recruits, from the ranks of the unemployed or from those already holding jobs — without raising their wage level vis-à-vis the rest of the economy.

For an individual employer to be able to expand his work force in this way, three conditions must be met, concludes the expert group : first, he must have extensive recourse to promotion from within, with hiring taking place mainly at the bottom of the occupational ladder; second, the wages he is already paying must be fairly high; and third, if the period is one of full employment, there must be contraction in other lines of work.

Promotion from within — the first condition — means that the employer can for the most part hire untrained and inexperienced labour to whom relative pay as between industries and occupations is a secondary consideration. The second condition — a relatively high *level* of wages — makes it probable that the expanding activity will attract experienced wage earners, but is not in itself a sufficient condition. The third requirement is that other industries be contracting. In this connection the expert group notes that the tendency towards uniform wage increases has itself helped expanding industries to hire at existing rates by forcing less prosperous industries to shed labour more quickly than they would have done otherwise.

## *Exceptions to the rule*

The analysis revealed that despite the general uniformity of wage changes, in certain of the countries and periods studied, rapidly increasing employment has tended to be associated with somewhat greater than average rates of wage increase. But the expert group concluded that such changes in wage structure might often be ascribed to reasons other than the employers' need to attract labour. They found, for example, that wage changes were closely related to profits (and changes in profits), to the degree of concentration of the industry and to other variables. This led them to suggest that when expanding industries have implemented higher than average wage increases, it has often been due to a favourable profits situation which strengthened union bargaining positions and enhanced employers' ability — and willingness — to pay.

The experts were also able to identify certain situations in which it may well be necessary for an employer to raise wages by more than the average to secure an adequate increase in employment.

- Expanding industries located in remote regions to which workers are reluctant to move.
- Expanding industries whose wage *levels* are low to begin with, when there is a general shortage of labour.
- Occupations such as teaching or nursing which have fallen outside the mainstream of collective bargaining and which call for relatively long periods of training. Earnings for these workers have sometimes fallen behind over the years owing to community attitudes (e.g. the notion that some people should work for "love") or to the fact that, at least temporarily, higher status compensated for lower wages. The evidence suggests, however, that there may be a critical point at which substantial and sudden labour shortages emerge in these occupations.
- Newly emerging professional activities which require specialised educational qualifications. There is some evidence that university students are influenced in choosing their field of specialisation by probable future earnings. When demand is increasing rapidly, it may therefore be necessary to offer unusually attractive salaries to secure adequate recruitment.

In the process of considering the problem in hand, the experts carried out a broad survey of employment patterns, wage structures and labour mobility in a number of countries. Thus *Wages and Labour Mobility* is a compendium of information and statistics on these complex subjects as well as being a systematic assessment of the role wage mechanisms have played in allocating labour.

# Restrictive business prac

*One of the important legal developments of the post-war period in Europe is the appearance of a substantial body of legislation dealing with restrictive business practices. These laws, like the older anti-trust acts of the United States and Canada, have one common feature : whether intended to control certain private agreements considered to be restrictive in nature or to prohibit them, the laws aim at preserving the mechanism of free competition which is considered in our economic system as the most efficient one for allocating capital, labour and resources* □□□ *The rebirth of free trade in post-war Europe, creating more open markets, provided incentive for passage of laws intended to eliminate the harmful effects of restrictive business practices. The European countries hoped, through the enactment of these laws, to prevent the destruction by private restraints of competition of all or part of the benefits that producers and consumers have the right to expect from the liberalisation of world trade* □□□ *A Committee of Experts on restrictive business practices has been created within OECD to examine the problems arising from these practices within and among Member countries. The Committee's mandate is broad and the subjects treated are varied. Material of interest to the general public is published* □□□ *The* Guide to Legislation on Restrictive Business Practices, *which was reissued in 1963, is the Committee's most important publication. It includes at the present time five volumes and is kept up to date regularly through the publication of supplements. The Guide sets forth legislation relating to restrictive business practices in Member countries, the European Coal and Steel Community (ECSC) and the European Economic Community (EEC), commentaries written by specialised officials, and numerous court decisions as well as bibliographic information* □□□ *In 1964, OECD also published a " Comparative Summary of Legislation on Restrictive Business Practices " which provides in synoptic form concise information*

## 1 CARTEL or ENTENTE

**Any agreement between enterprises, decisions of associations of enterprises or concerted practices between enterprises which have the purpose or effect of preventing, restraining or distorting competition.**

### *Commentary*

While the word cartel (or *entente*) is often used in the restricted sense of a horizontal agreement, it is also frequently used to designate any agreement between enterprises to restrict competition, even those situated at different stages of production or marketing. Accordingly, the definition here is a generic one which covers the broad range of restrictive agreements between enterprises. The word *combine* is sometimes used as synonymous with *cartel* or *entente.*

*Kartell* in German law denotes an agreement made by enterprises or by an association of enterprises for a common purpose, or a decision of an association of enterprises which is apt to influence by restraint of competition the production or market conditions with respect to goods or services. Generally, under the prevailing situation in Germany, only horizontal restraints of competition by agreement are termed *Kartell.* Howevever, the term *Kartellrecht* (cartel law) is used in a broad sense to denote the entire law of restrictive business practices. The terms *Kartellbehörde* (cartel authority) and *Bundeskartellamt* (Federal Cartel Office) are to be understood in this sense.

Each of the following agreements becomes a cartel when it has the purpose or effect of preventing, restraining or distorting competition. The cases mentioned below are examples which illustrate the definition but these do not constitute a complete or exhaustive list of the kinds or types of cartels.

• **A price cartel** is one in which the participants agree on certain prices, certain price levels, or certain methods of determining prices.

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*on legislative attitudes adopted in Member countries, ECSC and EEC, with regard to seventeen main aspects of restrictive business practices* □□□ *OECD has just published, in the form of a* Glossary of Terms Relating to Restrictive Business Practices, *the result of the Committee of Experts' first efforts to standardise the terminology in use in the field of restrictive business practices. This bilingual glossary in French and English is a first attempt to create a common international language in a domain where concepts and definitions are sometimes divergent and where misunderstandings often arise over the exact meaning of certain terms. It is primarily intended to contribute to a better understanding of the field covered and, in particular, to facilitate discussions at international level* □□□ *The Glossary contains definitions and commentaries on some sixty important terms relating to restrictive business practices. For each term, the Committee of Experts has sought to establish a definition based as far as possible on the common elements of the different concepts used in the various Member countries, ECSC and EEC* □□□ *The aim of the Committee of Experts was not to provide definitions which would supersede the legal concepts or definitions embodied in national or community law, but to agree on common definitions of certain major and basic terms without which mutual comprehension among international experts and progress in international discussions would be impeded by fruitless controversy over terminology. In this respect, the Glossary provides a valuable working instrument for lawyers, research workers and officials in national administrations and international organisations* □□□ *The following examples show how the Committee of Experts has defined and commented upon six representative restrictive business practices which have been the object of special legislative provisions.*

* * *

- **A quota cartel** is one in which the members agree upon a certain quantity or value of goods or services, or a certain proportion of the market demand, which respective participants shall supply.
- **An allocation cartel** is one in which the participants agree that the business of certain customers, territories, or parts or divisions of the market shall be assigned to certain respective participants.
- **A standardisation agreement** is one in which the participants agree to produce some or all of their products to stated specifications or standards.
- **A specialisation agreement** is one in which the participants agree that each of them will produce or sell only certain commodities or services. This is one of the types of agreement also sometimes called a *rationalisation agreement*.
- **A costing agreement** is one with respect to the uniform calculation of business costs. Such an agreement may establish certain approved accounting or cost procedures for business generally. On the other hand, it may consist of an arrangement among competitors such as the exchange of cost information, the standardisation of costing methods or an agreement to fix arbitrary figures for certain items of cost.
- **A rebate agreement** is one in which the participants agree on the amount, margin or basis of rebates to be granted under similar circumstances.
- **A compulsory cartel** is one in which membership is required by governmental authority.

## 2 CONSCIOUS PARALLEL ACTION

**A partial or total uniformity or harmonisation of the market behaviour of enterprises, which is not the result of any explicit or implicit agreement, but of individual actions of these enterprises, each of which is aware of and confidently expects the corresponding acts of the others and might act otherwise but for these acts.**

(continued on page 8)

# Restrictive business prac

## *Commentary*

Concerted action or practice involves some kind of agreement by the enterprises involved whereas conscious parallel action (or conscious parallelism) denotes purely individual actions of enterprises to adapt themselves to the known or anticipated market conduct of particular competitors. Conscious parallelism occurs primarily among well-informed enterprises in oligopolistic markets. It usually has the same economic effects as restraint of competition by agreement.

## 3 RESTRICTION

**A limitation upon production, products, services, sales, purchases, suppliers, customers, territories, markets, research, technology, or any other part of trade, resulting from an agreement by two or more enterprises or unilateral action or a course of conduct by one enterprise.**

## *Commentary*

Some examples of restriction which illustrate the definition but which do not constitute a complete or exhaustive list of cases or types are the following :

• **A restriction of entry to the market** is one which makes it impossible or difficult for a newcomer to enter the market because of agreement or concerted action by a number of enterprises in a trade or industry or the unilateral action or course of conduct by one enterprise in a trade or industry. Among the most significant restrictions of entry to the market are allocations, boycotts, exclusive dealing, and refusal to sell. (See discussion of those terms herein).

• **A restriction of inventory** is a limitation of the amount that will be held in inventory pursuant to an agreement limiting inventories to an absolute amount or to a designated percentage of sales or shipments.

• **A restriction of production, supply, shipment or sale** is a limitation of the amount of a commodity to be produced, supplied, shipped, or sold by the parties to an agreement as a whole or by any individual party. This usually results from an agreement among competitors which may directly fix maximum quantities or allocate a portion of the total to each participant, or may determine both quantities and quotas indirectly by such devices as limiting the length of time that productive equipment may be operated. Enterprises may also restrict production capacity by agreeing to reduce plant facilities or not to increase such facilities.

• **A restriction of purchase** is a limitation of the total amount that will be bought. An agreement to this effect may include provision for the division of the right to purchase among the participants.

• **A restriction of product lines** is a limitation that binds one or more enterprises not to produce or sell designated products or classes of products, or to limit the quantities of products sold. Likewise, a **restriction of product characteristics** is a limitation imposed by an agreement not to incorporate specified characteristics in products or not to make known the existence of such characteristics when they are actually present. An example would be an agreement not to use stainless steel or aluminium in a particular product.

• **A restriction on exportation or importation** is a limitation on the exportation or importation of certain products to or from one or more foreign countries. Such a restriction may be included in a cartel agreement or it may be imposed by sellers upon buyers or by grantors or licensors of patent or other rights upon grantees or licensees. The purpose may be to ensure the functioning of an allocation of markets brought about by a cartel agreement.

• **A restriction of research** is a limitation that curtails or prevents the conduct of research, such as an agreement confining research facilities to limited areas of research or forcing such facilities to rely solely upon designated research sources.

• **A restriction of technology or industrial property rights** is a limitation that curtails or prevents the use of designated inventions, patents, processes of production, machinery or materials, including an agreement to use only specified ones.

## 4 BOYCOTT

**An agreement or concerted action by enterprises not to do business with, or to withhold supplies or purchases from, a designated enterprise or class of enterprises.**

## *Commentary*

A primary boycott is one undertaken in order to exert economic pressure or influence upon the enterprise against which the boycott is directed. For example, collective resale price maintenance may be attempted by an arrangement among suppliers to refuse to sell to dealers who do not observe prescribed resale prices. The term may also be applied to an arrangement among dealers to take common action against suppliers who do not prescribe resale prices or who do not enforce prescribed resale prices. In either

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case the arrangement is a primary boycott.

A secondary boycott is such action taken where the enterprises engaging in the boycott direct a boycott action at another enterprise, or group of enterprises, in order to coerce action by a third party. An example of a secondary boycott is the refusal by a group of suppliers to sell goods to retail stores which purchase products from some other supplier which has been " blacklisted " by the enterprises engaging in the boycott.

The term *Boykott* is used in German law to denote action by a single enterprise or a group of enterprises to induce another enterprise or group of enterprises to refuse to deal with some third party (either a single enterprise or group of enterprises) with the intention of unfairly harming competitors.

## 5 EXCLUSIVE DEALING AGREEMENT

**An agreement between two or more enterprises that one or both will deal exclusively with the other and refuse to deal with third parties in respect to a commodity or class of commodities, a specified service or class of services, or specified technology or class of technology.**

### *Commentary*

An exclusive dealing agreement is usually of a vertical nature although it also embraces such agreements as exclusive patent licences which may be between competitors.

Exclusive dealing may denote an agreement between a manufacturer and a distributor that the latter will refrain from handling lines of goods competing with those of the manufacturer in consideration of being supplied with the manufacturer's goods; or an agreement that a manufacturer will refrain from selling his goods to competitors of his distributor in a particular territory, in consideration of the distributor handling such goods; or a combination of both such agreements. Exclusive dealing relationships of a similar character may exist between wholesalers and retailers, and between enterprises on other vertical levels, or may involve agreements to limit sales to particular customers. There may also be exclusive agreements between a group of manufacturers and a group of wholesalers or retailers.

A sole or exclusive agency is an agreement under which an agent is granted certain exclusive rights, e.g., exclusive territorial rights, in his representation of the principal. Perhaps the most usual example is that of a dealer who is given the exclusive right to distribute the products of a manufacturer in a particular geographical area. An exclusive agency agreement may, but does not necessarily, include an agreement by the distributor not to sell such products outside the area of his agency or to certain customers or classes of customers, an agreement by the manufacturer to bind other distributors not to sell in the area, or an agreement that the agent will handle only the manufacturer's products. The so-called *agent* (in a sole or exclusive agency agreement) is not necessarily an agent in the legal sense of the term but may be an independent distributor.

## 6 RESALE PRICE MAINTENANCE, INDIVIDUAL

**The practice by a supplier of prescribing, and taking action to enforce, retail or wholesale prices for the resale of his goods.**

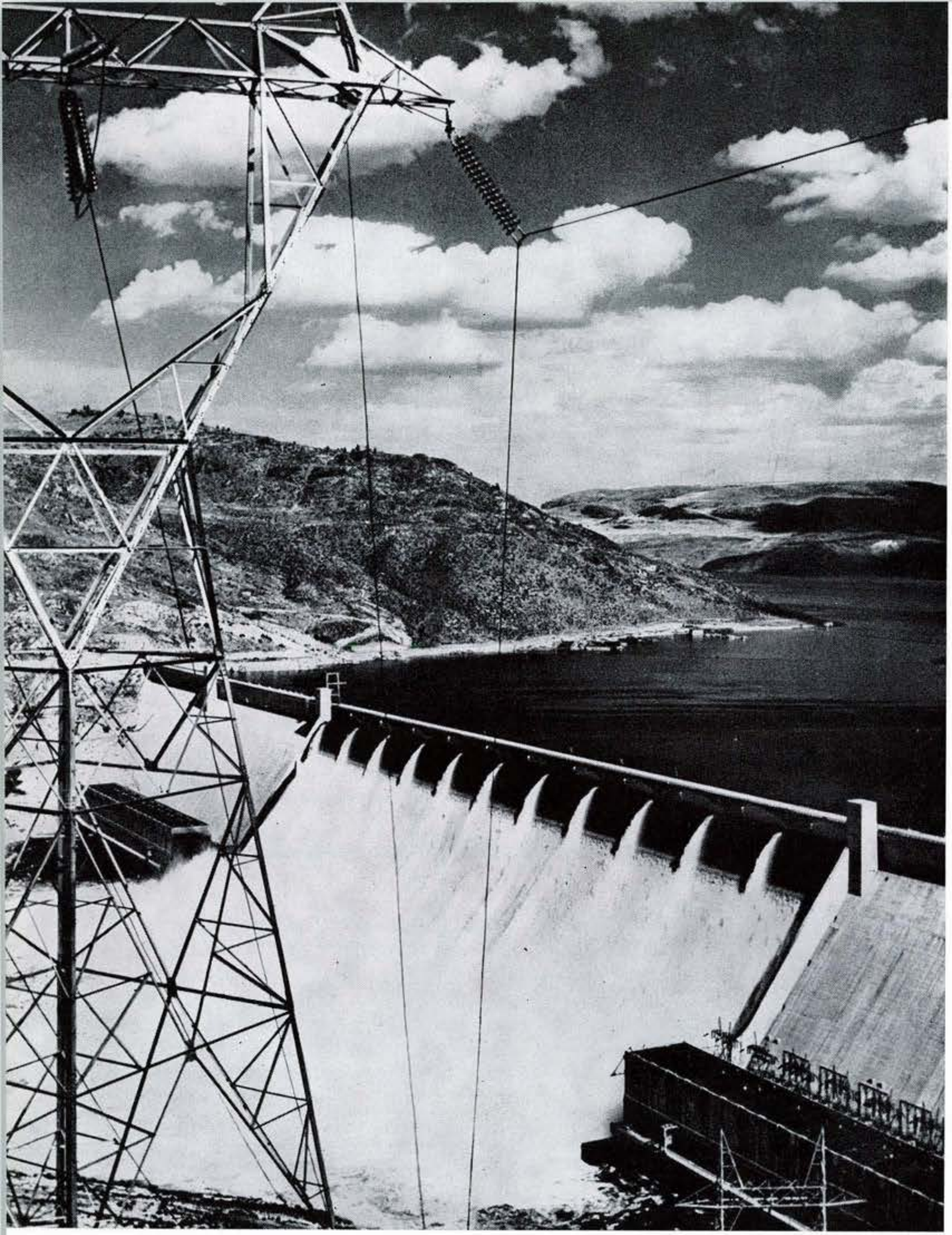
### *Commentary*

The term *supplier* means anyone supplying goods to a customer for resale, including a producer, manufacturer, wholesaler, importer or distributor.

In some countries a supplier may legally prescribe, usually within defined limits, the prices at which his products, particularly trademarked products, shall be resold. In such countries he may take legal action to compel adherence to prescribed prices, under the specific conditions defined by applicable law. Some jurisdictions permitting resale price maintenance allow a supplier to prescribe resale prices only in situations where the reseller agrees to observe the prescribed prices, while other jurisdictions allow a supplier to enforce the observance of prescribed prices, under specified conditions, regardless of whether or not the reseller has agreed to observe the prices or has any contractual relationship with the supplier.

Where prescribed resale prices are prohibited by law or are allowed only under certain conditions, they are sometimes replaced by prices represented as recommended or suggested resale prices. The definition includes both the situation where resale prices may be enforced by court action, and that where ostensibly recommended or suggested prices are enforced by economic or social sanctions, for example, by a refusal to supply. Many countries which by law prohibit prescribed resale prices, or allow them only under certain conditions, also prohibit the use of economic or social sanctions to maintain resale prices.

A resale price may be notified only to the enterprises reselling the goods. It may also be indicated to the consumer by advertising or appearing on the product or its wrapper. Where a resale price is fixed it may sometimes be a maximum price, sometimes a minimum price, sometimes a specified price, and sometimes a range of prices with both a minimum and maximum price. It may also happen in some industries that the producer or distributor in fixing the retail price of goods also sets the retail price of services related to the goods.



◀ *The Grand Coulee Dam on the Columbia River in the State of Washington, U.S.*

# THE BUILD-UP OF ELECTRICITY SUPPLIES IN NORTH AMERICA AND JAPAN

*A recent survey by the OECD Special Committee for Electricity stresses the continued expansion of the industry in all Member countries, including the non-European Members: the United States, Canada and Japan (1).*

(1) An article entitled "Towards a European Market in Electricity" appeared in the OECD Observer No 1.

Total energy consumption throughout the OECD area has registered a steady expansion since 1950, with an average annual rise of over 3.5 per cent, taking the twenty-one Member countries as a whole. To this total consumption, electric power has made an important contribution.

In Japan, where part of this growth is attributable to rapid post-war reconstruction, annual production of electric power by public utilities and auto producers has, since 1950, increased at an annual average of 13.2 per cent; and it is anticipated that a rate of increase only slightly reduced will be achieved throughout the remainder of the sixties. In Western Europe and North America power industry expansion, while not quite so vigorous as in Japan, has been remarkable nevertheless. Total consumption in Europe in 1963 was some 7.8 per cent above the 1962 figure and in the United States 7.2 per cent. The rise in consumption in Canada remained steady at 4.5 per cent over the same years.

## United States

In 1963, the consumption of electrical energy in the US surpassed, for the first time, 1,000 TWh, reaching 1,008 TWh. This high increase in consumption was coupled to a marked rise in economic activity and to a particularly strong rise in industrial production. However, non-industrial consumption expanded more rapidly than industry use, the former rising by 8.5 per cent to 448 TWh and the latter by 4.7 per cent to 469 TWh. By 1969, it is expected that electricity consumption will be divided almost equally be-

Electrical terms

| | | |
|---|---|---|
| kV | = | kilovolt |
| kW | = | kilowatt |
| GW | = | Gigawatt (1 million kW) |
| TWh | = | Terawatt-hour (1000 million kWh) |

tween industrial and non-industrial uses. Growing at a projected rate of 6.7 per cent per annum between 1963 and 1969, total consumption should reach 1,490 TWh by the latter date.

Between 1950 and 1963 US production capacity increased at an annual rate of 8.2 per cent, while in Europe, during the same period, total installed capacity grew at slightly over 7.4 per cent per annum. In terms of production, however, the annual European increase over these years was 8.0 per cent, while in the United States it was 7.6 per cent. As a result, utilisation of generating equipment in Europe tended to improve while in the American case a slight decline was experienced. The US industry is now engaged, however, in an extensive programme of network interconnection which, by reducing reserve capacity requirements, should reverse this trend in the very near future.

Total investment in the US electricity industry for the year 1963 amounted to $ 4,500 million. By 1966 the annual expenditure level should have risen to $ 5,300 million and by 1969 to nearly $ 6,500 million.

A comparison of the pattern of capital expenditures in the US industry with that of Western Europe reveals that in the latter area investment in transmission and distribution accounts for about 40 per cent of all capital expended with 60 per cent going to generation plant. In the United States, the reverse situation applies, a fact which may be attributed in part to the greater US emphasis on thermal generation equipment, which is available for considerably less per unit of capacity than are hydro facilities.

Differences also exist with respect to specific investment in transmission and distribution plant. During the 1962-1969 period, while 91 GW are being added to US generation capacity, some $ 21,000 million will be expended on new high voltage lines, transformers and distribution facilities at an average rate of $ 230 for each kW of additional production capacity. In Western Europe, on the other hand, new transmission and distribution investment will represent some $ 19,000 million or $ 175 per kW of new generation capacity installed.

Variations in labour and material costs can account for some of this difference between the two regions, but it would seem that the primary reasons for the higher figure in North America are the lower consumer density, requiring more in the way of distribution investment, and the greater expanses of territory over which bulk power must be transmitted. The major interconnection programme inder way in the US will also tend to elevate the level of transmission investment over the next several years.

## *Canada*

Total electric energy production in 1963 was 121 TWh including a component of " secondary " production which is dependent on water conditions throughout the country. The consumption of this " secondary " energy depends on the extent to which hydraulic production cannot be used by industry on a firm basis. When " secondary " production is not available, the required energy is produced by the direct conversion of alternative fuels. For a true measure of electric energy consumption, however, one must consider firm consumption, which was 118 TWh in 1963, 5.6 per cent above 1962 firm consumption.

In 1963 hydroelectric production accounted for 85 per cent of the Canadian total. At present, large hydroelectric developments are under construction in a number of areas in Canada, but it is expected that, owing to the fact that in one area accounting for 35 per cent of the firm electrical energy demands almost all the available hydroelectric sites have been developed, hydroelectric production will have a declining share of total supply in future years, although it will increase in absolute terms. Growth is currently being taken up, in large measure, by thermal production, and a significant increase in this type of supply can be counted on.

Because of the long distances between Canada's markets and the remote location of a number of economic hydroelectric sites, Canada is a leader in the development of extra high voltage power transmission. Two provincial utilities, Ontario and British Columbia, are constructing 750-1000 kilometres transmission systems at 500 kV and Quebec is building a 735 kV system to connect large hydraulic power sites in the lower St. Lawrence area with its major load centre at Montreal, 600 kilometres away.

Capital expenditures in the electric power supply industry totalled $ 631 million in 1963, an increase of 6 per cent over 1962; during 1964, a somewhat larger percentage increase was expected.

## *Japan*

During the period 1950-1963 annual electricity production by public utilities and auto producers increased nearly fivefold to over 150 TWh, and it is anticipated that with only a modest decrease in the rate of growth of production, the total should approach 280 TWh per year by 1969.

By 1963 Japanese production capacity stood at 33 GW, of which a little more than 18 GW were in conventional thermal installations. Thermal units, which have been predominant in Japan's generation system only since 1961, will play an even larger role in the future : by 1969, 65 per cent of the planned installed capacity of 59 GW will be conventional thermal plant, with perhaps 1 per cent nuclear and the remainder hydroelectric.

The investment plans of Japan's power industry call for annual expenditures totalling $ 1,000-1,100 million until 1966, when heavy outlay on thermal power plants will push the level to near $ 1,250 million for 1967 and 1968. In Japan, as in OECD Europe, investment in transmission and distribution each year annually accounts for about 40 per cent of total investment, with generation taking about 60 per cent of the funds expended.

# HOW GREECE TRAINS TEACHERS FOR TECHNICAL SCHOOLS

The economic development of Greece largely depends, among other factors, on a skilled and semi-skilled labour force, and the education of the teachers to train it calls for long-term planning in four directions : agriculture, commerce, industry and domestic economy.

In 1958, the Greek Productivity Centre asked the European Productivity Agency (EPA) of OEEC for the assistance of a consultant who could submit proposals for a programme on technical teacher education.

Before the Organisation intervened, technical instruction was given in Greece by teachers who had not themselves been specially trained for this work. Some were secondary school teachers with very little knowledge of technology and no industrial experience, others were foremen or engineers with no teacher training whatsoever. For both categories, technical training was not their principal occupation but only a side-line.

The technical assistance given by EPA was chiefly directed to vocational teacher training. The EPA consultants negotiated an agreement with the United States Operations Mission (USOM), and as a result the two organisations merged their efforts into a single programme. USOM lent some of its experts for courses managed by EPA consultants and also provided the Greek authorities with financial aid. The technical assistance given by USOM and that provided by EPA were thus complementary.

In 1959, the Greek Ministry of Education launched a professional training programme for technical teachers by setting up the vocational Teacher Education Institute of Athens. In that same year, the Institute (more commonly known from its Greek initials as SELETE) began to give courses with makeshift equipment in temporary premises.

The resources available in those days being inadequate, a technical survey was conducted, after which EPA, in joint agreement with its own consultants and the Greek authorities, drafted an application for assistance from the United Nations Special Fund. The aid granted by the UNSF is intended to supply the Institute with technical equipment, enable it to engage foreign experts and give scholarships to Greek trainees.

The three principal curricula of the Institute are designed for the following :

- Teachers with at least two years' professional experience
- Candidates with less than two years' teaching experience
- English language teachers.

Experienced teachers do a twelve months' course embracing subjects which range from Greek language to the principles of vocational education and which include safety and accident prevention, job analysis, course construction, English technical terms, etc. The curriculum for candidates with no previous teaching experience extends over two years. Apart from the training in mechanical, electrical or building technology, and practical exercises in the corresponding laboratories or workshops, the subjects include audio-visual aids, psychology, economics, teaching methods and practice, civics training, practical teaching exercises, etc.

At the end of the academic year 1963-1964, over 600 teachers had taken one or the other of the Institute's

*Skilled workers and foremen are essential for the economic development of a country, and they must not only be trained to meet current needs but also be able to adapt themselves quickly to technical change. Technical education can achieve this provided there are enough teachers who have themselves received the right vocational training. Technical education is thus an important factor in any effort to develop the economy. The way in which the Greek Government has tackled this problem, with the assistance of OECD, is interesting in several respects.*

principal courses and a Greek teaching staff to carry on the work was already being formed.

SELETE has so far awarded some 200 diplomas, but at least as many more candidates have successfully passed the final examination and have only to carry out various formalities before receiving their diplomas.

The value of this diploma is increasingly recognised and the Government encourages, as far as possible, the appointment of holders of this diploma to teaching posts in State Technical schools. Education is far from being a State monopoly in Greece, however, and in the field of technical education private schools operating on a commercial basis are even in a majority. Their attitude to the SELETE diploma is not yet entirely clear.

## A NUCLEUS OF GREEK TEACHERS

The purpose of the action taken by OECD was to help launch the training of technical teachers. Two OECD consultants, both of them professors in technical training schools, Dr. G. O. Cannon and Dr. K. E. Harris, after having helped the Greek authorities to draw up rules of organisation and curricula, were asked to take over some of the SELETE courses themselves and to advise on the planning of curricula. Their duties also consisted in training Greek instructors to replace them in expounding modern teaching theory and techniques by theoretical and practical courses on specific subjects.

OECD also gave assistance in the following ways : two senior members of the SELETE staff went on a study mission to Germany, Denmark, France, the Netherlands and the United Kingdom. They were able to see how these countries dealt with the training of technical teachers and how their most successful achievements might be adapted to Greek educational requirements. In addition, two Greek " assistants " (who are in fact technical teachers) were instructed by OECD to handle practical problems relating to workshop training.

The work has been hampered by various factors : for instance, student teachers attend the courses after a full day's work in industry or commerce and this makes them less receptive; the consultants' lectures are delivered in English and have to be translated into Greek sentence by sentence, and although experience has shown that this hardly slows down the course, it does hamper communication between teachers and students; SELETE's present cramped premises have been a considerable hindrance; lastly, some students have complained about their inability to apply the techniques they have been taught because of opposition from their immediate superiors.

Despite these obstacles, the task which OECD had set itself is very nearly complete. An institution which was lacking has been brought into being and the required nucleus of Greek technical teachers now exists. The two consultants, having carried out their assignment, will now hand on the torch to the Greek teachers whom they themselves have trained. Should it be necessary to train other technical teachers or give further instruction to existing staff, this task will be taken over by UNESCO.

## THE NEXT STAGE

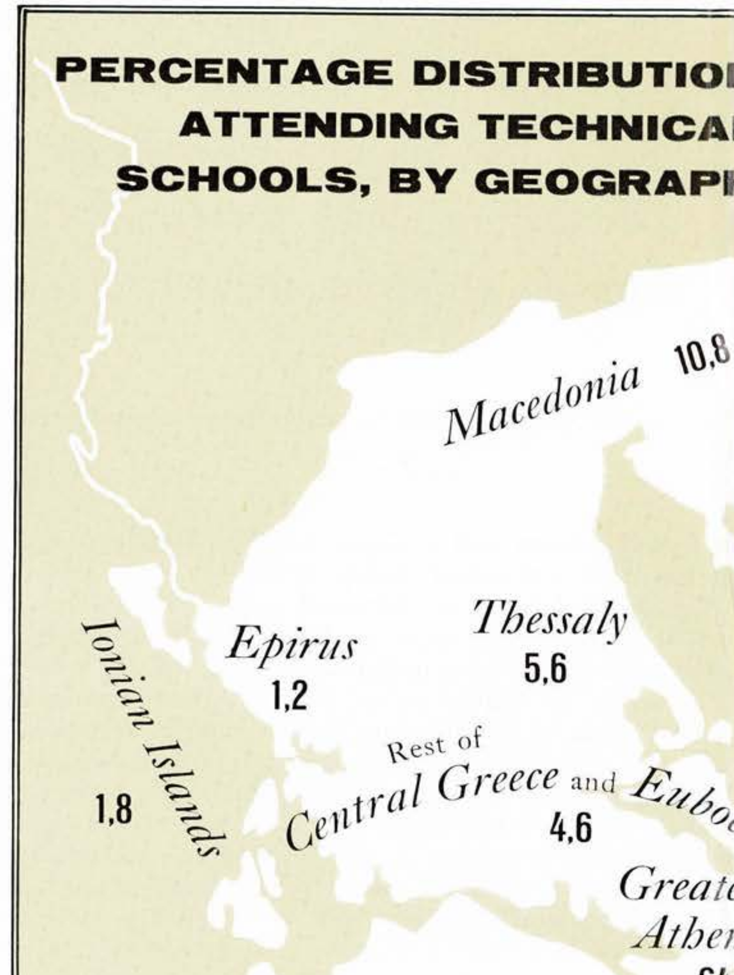
However, a new activity is to be undertaken by OECD, namely the training of teachers for commercial subjects. A consultant, M. René Dubreuil, has already been engaged for this purpose. He has been instructed to build up, as in the case of technical education, a nucleus of Greek teachers, specialising in commercial training. For the time being, he is investigating ways and means on the spot.

The widening of SELETE's field of action, in respect of curricula and enrolments alike, depends on accommodation. This problem will soon be solved by reorganising and rehousing SELETE in five new buildings specially planned for it on a 20-hectare site at Amaroussi, near Athens. These buildings should be ready by about 1967.

The capacity of the Institute will then be far greater and it is estimated that the number of trainees should be between 1,000 and 1,700. Building costs will amount to about $ 2.5 million. When the Institute is settled in its new premises, the curricula will most probably be amended, mainly with a view to full-time training. Having regard to the growing number of candidates with widely different previous training and practical experience, a selective admission policy will probably be required.

Stress will be laid on the need for collaboration with industry. This could be facilitated by the existence of a National Vocational and Technical Advisory Committee comprising representatives of industry, business circles, trade unions and consumers. A committee of this kind could give useful advice on the aims and programmes of SELETE in their relation to social and economic trends in Greece. Agreements could be made with certain firms : for instance, after attending the courses for six months, a trainee could work in the appropriate industrial sector for another six months and then return to SELETE; another possible arrangement would be to have a given industrial post alternately filled by two trainees. In any event, whatever the type of full-time training adopted, trainees will be given thorough practical training in SELETE workshops or laboratories.

Now that the process is inder way, the Greek Government intends to make a considerable effort to promote technical and vocational training during the coming years. Current expenditure on this item is expected to rise from 3.7 per cent of total government expen-

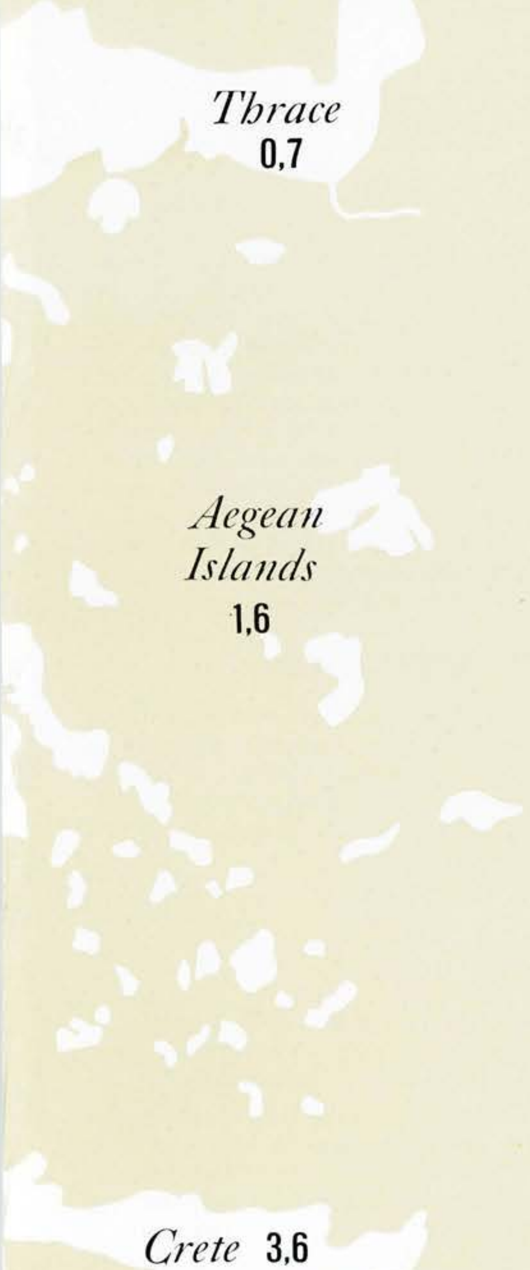



Source : Division of Economic Planning, Ministry of Co-ordination, Greece, and Statistical Year Book of Greece, 1962.

diture on education in 1961 to 11 per cent in 1974; 3,000 classrooms and laboratories (including 1,600 for State schools) will have to be built during that time for this type of teaching alone, and the number of full-time teachers will have to rise from 300 in 1961 to 4,850 in 1974.

No fewer than 1,850 teachers are required in the "middle-grade" alone and this — allowing for replacements — implies the training of 2,000 candidates between 1962 and 1974. These figures give some idea of the scale of the effort that the Government has decided to make, and of the high priority it gives to technical and vocational training in its economic development drive.

**OF PUPILS**
**AND VOCATIONAL**
**AL REGION, 1961**




## ENROLMENTS FOR THE THREE PRINCIPAL SELETE CURRICULA

| School year | Candidates with at least two years' teaching experience | Candidates with less than two years' teaching experience | English language teachers | TOTAL |
|---|---|---|---|---|
| 58-59 | 67 | — | — | 67 |
| 59-60 | 69 | 13 | — | 82 |
| 60-61 | 52 | 23 | — | 75 |
| 61-62 | 38 | 46 | 30 | 114 |
| 62-63 | 41 | 60 | 30 | 131 |
| 63-64 | 40 | 85 | 21 | 146 |
| 64-65 | (40) | (85) | (25) | (150) |
| TOTAL | (347) | (312) | (106) | (765) |

# *International Co*

# *on* ROA

**Over 44,000 persons killed, 450,000 in-ured and over 8,000 million dollars vorth of material damage : those are he United States road accident statis-ics for 1963. Yet all Member countries re devoting substantial sums to the nprovement and extension of their road etworks.**

**Thus the scientific research involved ı the development of transport and ommunications has become most im-ortant. The main purpose of such esearch is to provide the competent ational authorities with the scientific ata needed for rational development f their road network, the improvement f the durability and quality of roads nd the promotion of road safety. As ıe problems encountered are common ɔ many countries, the OECD Committee ɔr Scientific Research (CSR) decided s from 1960 to co-ordinate national esearch at international level and pro-ıote international co-operation in road esearch.**

The co-ordination of national programmes and the organisation of co-operation in the field of road transport have proceeded to date according to the method usually followed by the Committee for Scientific Research and implemented by the Central OECD Service for International Co-operation in Scientific Research : selection by a group of laboratory directors of co-operative programmes to be carried out, formal adoption by the Committee for Scientific Research, and decentralised execution of the programmes by the laboratories participating in restricted research groups set up for this purpose. The cost of the actual research work is borne by the participating countries or laboratories, OECD covering only the cost of organising international co-ordination and co-operation.

## *CURRENT CO-OPERATION*

Action by the CSR in the field of road transport is focussed at present on two main sectors : research on road building and research on road safety. A scheme for international co-ordination of road research documentation has been instituted to meet the needs of research workers.

## *Road Building*

International co-operation in road-building is organised under the general supervision of a working party consisting of directors of research laboratories.

A group has been set up for co-operative research on methods of protecting roadworks against the effects of water. A general survey has been made of the research in progress in the laboratories of Member countries and international co-ordination of research on this subject is planned for 1965 and 1966. At the same time a co-operative research programme has been prepared on a specific subject : prediction and control of water content of roadworks.

# -operative RESEARCH
# D BUILDING and
# ROAD SAFETY

Some ten research topics proposed by Member countries for international co-operation are to be examined during the year by the group of laboratory directors. In 1965 and 1966 preparatory work will be undertaken by the Central Service on topics chosen by the group.

## *Road Safety*

In the field of road safety a group of laboratory directors has selected six subjects that mights lend themselves to co-operative action. A co-operative research group has already been set up for one of them, with a mandate to study the effectiveness of crash barriers in reducing the number and severity of accidents. The problem is being closely studied at national level : the United States alone will devote $ 400,000 this year to surveys on this question.

Close liaison has been established with the European Conference of Ministers of Transport, which is kept informed of the research envisaged and has recommended two subjects for study : the effectiveness of speed limits and the effects of alcohol and drugs on the behaviour of drivers. Preparatory work is now proceeding for co-operation in these subjects.

The work envisaged includes accident studies, full-scale tests, theoretical and model investigations, study of the effects of the installation of crash barriers on the behaviour of road users and possible collaboration with vehicle designers. There is already some international co-ordination of research through exchanges of information among research workers on studies completed or in progress.

## *International Road Research Documentation (IRRD)*

At the end of 1964, directors of road research laboratories adopted a scheme for the international co-ordination and exchange of road research documentation. Under this scheme, the scientific information of all countries is made available to the member laboratories in order to assist research; the scheme is designed to meet the needs of research workers and not those of practising engineers and road-builders.

It covers two fields : the road sector proper, namely road-building (materials, equipment, methods, foundations, signs and signals, civil engineering), road safety, traffic and economics of transport; and the scientific sector (chemistry, physics, mathematics, etc.) insofar as their findings are applicable to the research done by the laboratories.

The scheme, which is known as " International Road Research Documentation " (IRRD), came into force in January 1965 among nine countries : Canada, Denmark, France, the Federal Republic of Germany, Norway, Portugal, Spain, Sweden and the United Kingdom. Austria has since decided to participate on a trial basis, and other Member countries will probably join shortly. Close working contacts are to be established with the United States Highway Research Board which has set up a similar system.

The IRRD started its work on road-building documentation at the beginning of the year. An alphabetical list (thesaurus) was first prepared in each of the three official languages adopted : English, French and German. This list at present includes about 1,500 keywords and 2,000 synonyms, grouped around some thirty basic concepts. This has made it possible to unify methods of identifying, recording and retrieving information.

Each laboratory prepares bibliographical notices (" information sheets "), based on a standard model, of the literature it analyses. For the road sector proper these notices include in principle an abstract. They are typed so that they can be reproduced by photogravure.

A co-ordinating laboratory is responsible for the circulation of information sheets for each of the official languages : for English the Road Research Laboratory, Harmondsworth, for French the Laboratoire Central des Ponts et Chaussées, Paris, and for German the Bundesanstalt für Strassenbau, Cologne.

*(Continued on page 18)*

*An experiment with a single-wheel trailer passing through a water-trough at high speed (Road Research Laboratory, Harmondsworth, U.K.)*

Each national laboratory that is a member of the IRRD, other than the three above-mentioned institutes, transmits the information sheets it produces to the centralising member for the language used. Each centralising member circulates all the information sheets in its own language to all the other members. Limiting the responsibility for circulation to three institutes facilitates general co-ordination.

Each IRRD member therefore receives from each of the centralising laboratories a batch of information sheets produced by each of the three linguistic groups and thus has a complete collection in the form of directly reproducible (translucent) documents. The first exchanges have taken place and the system will be in full operation for road-building research documentation towards the middle of the year, thus constituting an appreciable facility for research workers in the different countries. Preparatory work is now proceeding to extend the IRRD to road safety research documentation, and this service should be available in the autumn.

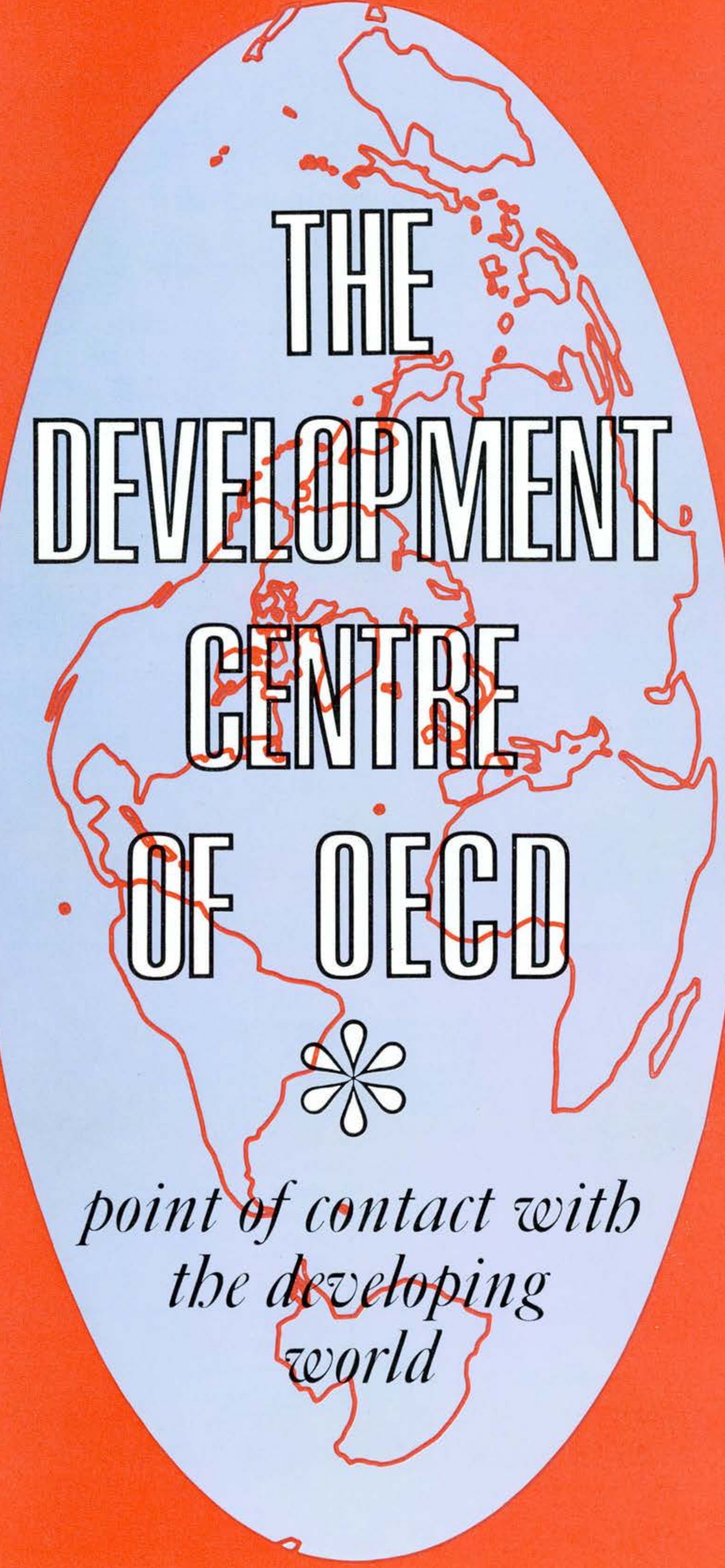
## THE DEVELOPMENT OF INTERNATIONAL CO-OPERATION

The work on road-building and road safety research projects up to 1965 shows that international co-operation in this field can be achieved, at least partially, by the creation of co-operative research groups working under the auspices of the Committee for Scientific Research.

In 1966 the Committee plans to develop co-operation more extensively in the field of road transport in an institutional form, enabling laboratory directors to co-operate while giving them greater scientific autonomy. It is important to take into account the permanent character of co-operation, the scope of the problem and the need for sharing the cost of the construction or operation of testing equipment. For all these reasons the setting up of a " Joint Scientific Undertaking for Road Research " is envisaged. This Undertaking would have greater autonomy vis-à-vis the Committee for Scientific Research and would operate by means of a special budget financed by contributions from participating countries only.

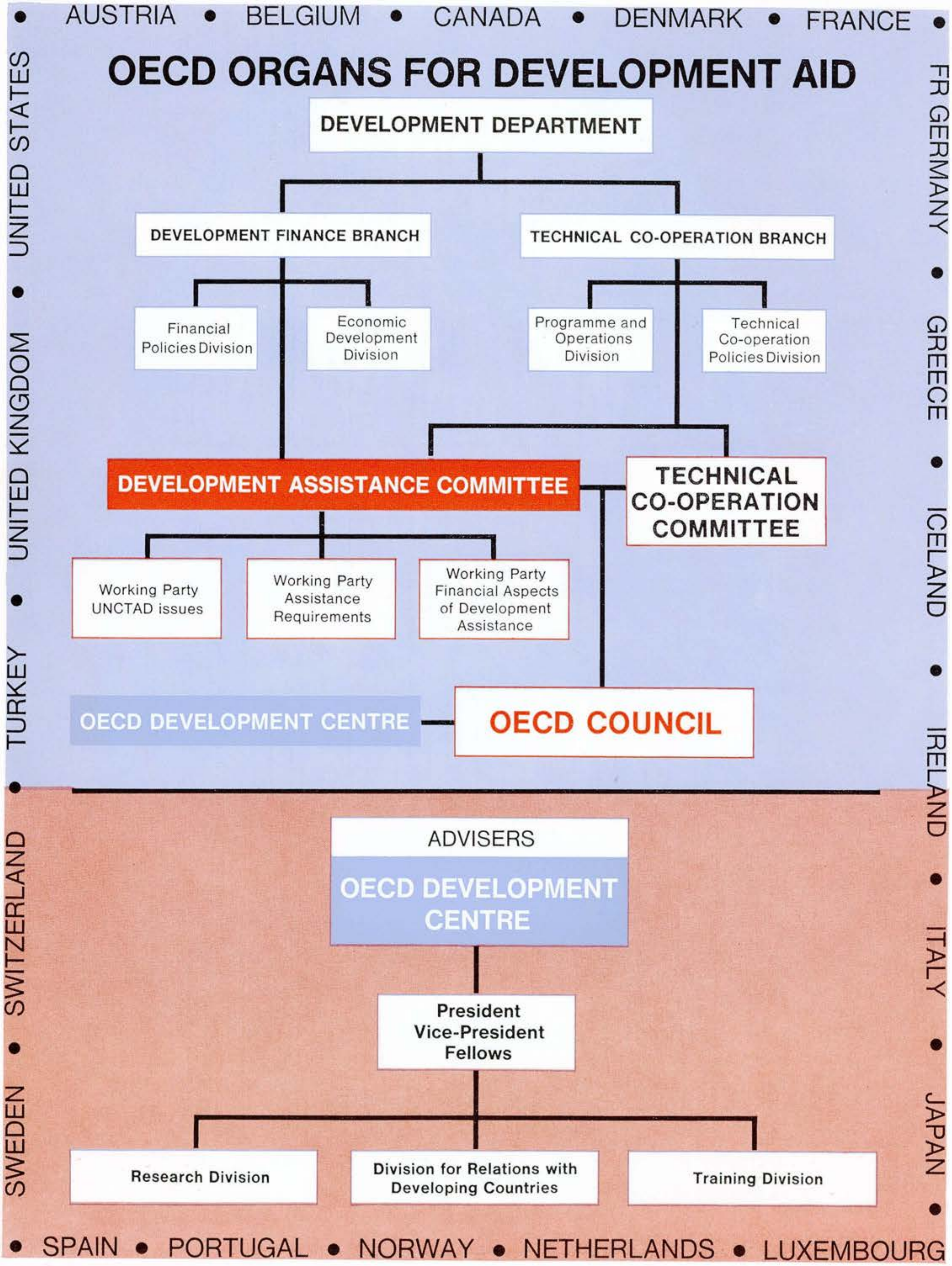
More generally, the formula of the Joint Scientific Undertaking would have the advantage of reducing expenses to a minimum and ensuring very flexibleoperation, as the project would depend on the research resources of the countries wishing to participate. Lastly, the findings of research would not just be circulated to participating countries but would be available to all OECD Member countries.

It is also envisaged that in 1966 the Committee for Scientific Research will complete its road research activities by co-operative research on traffic problems, both from the point of view of building new roads and of improving the flow of traffic on existing roads. This kind of research calls for numerous observations and statistics and lends itself particularly well to international co-operation. Thus the action of the Committee for Scientific Research will concern three inter-related areas of road transport : road-building, road safety and road traffic.



# THE DEVELOPMENT CENTRE OF OECD

*point of contact with the developing world*


AUSTRIA • BELGIUM • CANADA • DENMARK • FRANCE •
OECD ORGANS FOR DEVELOPMENT AID
DEVELOPMENT DEPARTMENT
DEVELOPMENT FINANCE BRANCH
TECHNICAL CO-OPERATION BRANCH
Financial Policies Division
Economic Development Division
Programme and Operations Division
Technical Co-operation Policies Division
DEVELOPMENT ASSISTANCE COMMITTEE
TECHNICAL CO-OPERATION COMMITTEE
Working Party UNCTAD issues
Working Party Assistance Requirements
Working Party Financial Aspects of Development Assistance
OECD DEVELOPMENT CENTRE
OECD COUNCIL
ADVISERS
OECD DEVELOPMENT CENTRE
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Vice-President
Fellows
Research Division
Division for Relations with Developing Countries
Training Division
FR GERMANY • GREECE • ICELAND • IRELAND • ITALY • JAPAN •
• SPAIN • PORTUGAL • NORWAY • NETHERLANDS • LUXEMBOURG
UNITED STATES • UNITED KINGDOM • TURKEY • SWITZERLAND • SWEDEN

# THE DEVELOPMENT CENTRE OF OECD

The OECD Development Centre was set up a little over two years ago in response to a widespread feeling among Member nations that development is the most important pre-occupation of our century. It is intended to serve as OECD's permanent point of contact with non-member developing countries : to study their problems; to transmit whatever knowledge about development and general economic policy matters industrialised countries have been able to acquire through experience and research; and finally to make the industrialised countries more aware of the problems that arise in the course of the development process.

These objectives are to be attained by means of a broad and flexible programme which includes research, training, transmission of experience, provision of documentary information, exchange of experts and co-operation with other organisms concerned with development. The Centre has a semi-autonomous position within the framework of OECD designed to give it freedom of action in its relations with the developing countries. Its organisation is adapted to the multiplicity of its activities with a president, vice president and five Fellows who as a group combine scholarly achievement with the highest administrative experience and who represent a wide variety of national backgrounds.

President of the Centre is Robert Buron, who has had a distinguished political career in France, having held the posts of Minister of Information, Minister of Finance and Economic Affairs, Minister for Overseas Territories and Minister of Public Works and Transport.

Raymond Goldsmith, on leave from his post as Professor of Economics at Yale University, is the Centre's Vice-President, while five senior economists from Belgium, Germany, Italy, Sweden and the United Kingdom have been appointed as the Fellows of the Centre, helping to guide its activities. The Centre also benefits from the counsel of a twenty-six-man advisory board composed of outstanding development experts noted for their academic achievements or policy experience.

THE DEVELOPMENT CENTRE OF OECD

## THE STUDY OF DEVELOPMENT

One of the main activities of the Centre is to encourage research on problems which are of particular interest to the developing nations and have not as yet been sufficiently explored. The areas to be studied are not rigidly fixed in advance but are to evolve in response to needs revealed by the Centre's experience. There is flexibility too as to the manner in which the research is undertaken. Much of it will be done by the Fellows of the Centre, all of whom have been chosen with an eye to their qualifications as scholars, or by the Centre's research division. In other cases the Centre will request an outside expert to carry out the study or will simply act as a catalyst for research conducted by other development institutes in both developed and developing countries.

An example of the latter is a current study being carried out on the problems of African industrialisation. Four research institutes located in different parts of Africa — the East African Institute of Social Research in Makerere, Uganda, the Senegalese Institute of Applied Economics, and the Institutes of Economic and Social Research in Leopoldville and Ibadan — will study the past experience and future potential of their own and surrounding areas.

The first fruits of the Centre's research work have just been published. Volume number one (in the series *Development Centre Studies*) is entitled " Reappraisals of Foreign Aid Policies ". Written by Göran Ohlin, Fellow of the Centre, it attempts to clarify some of the issues in development assistance : what is the historical context in which aid has emerged and what are the present motives that impel countries to grant it? What is the real burden of development aid? The subject of financial aid and its impact on balance of payments will be further pursued in other studies of the Centre.

A second line of research — on the financial institutions of developing countries — is represented by an introductory volume written by Professor Goldsmith about financial structure and its relation to real wealth. In future, countries at various stages of development will be examined and an attempt made to find meaningful relationships between the volume and structure of the money supply and the degree of development. Other studies will concentrate on specific financial institutions of developing nations, in particular development banks. These banks, of which there are more than 350 in developing nations, channel funds from many sources, public as well as private, domestic as well as foreign. If well run, they can be extremely effective in promoting development. After a preliminary study of these institutions, which will result in a published catalogue, several particularly well-administered banks will be chosen for further study.

The third volume, by Angus Maddison, also a Fellow of the Centre, examines systematically the ways in which foreign skills and training can be used in developing countries to accelerate the process of growth. In addition to the general analysis, there will be individual studies on Greece, Mexico, Pakistan, Brazil and Guinea, prepared in co-operation with local research and planning groups.

Other research projects presently under way include :

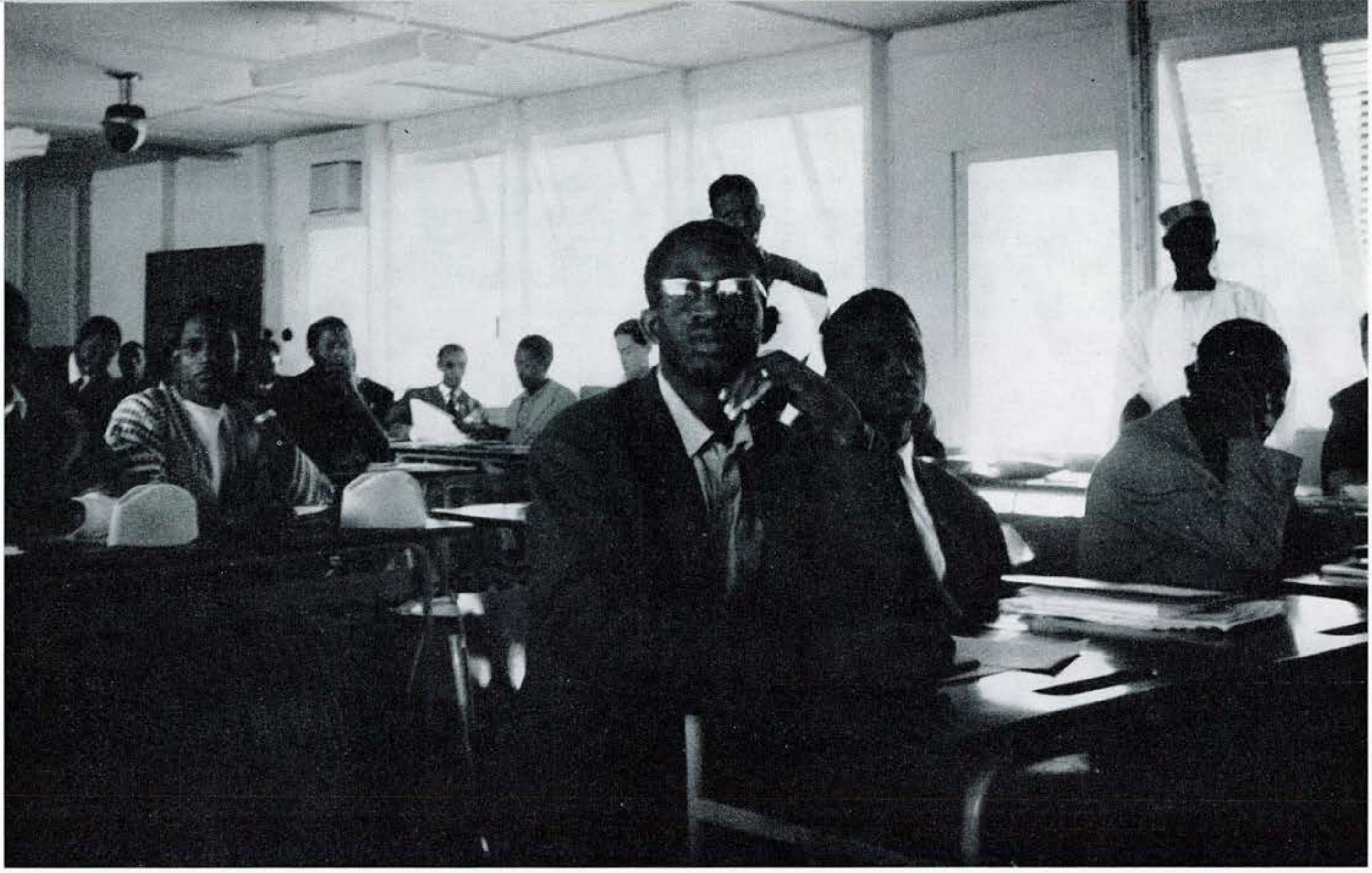
- The problem faced by developing countries of how to achieve geographic balance in their development programmes. Concentrating on one or two foci — a port, for example, or the capital city — may produce faster growth but may benefit only a limited portion of the population. Some countries have adopted policies intended to promote a development pattern which is balanced as between regions. In its first stage, this study will concentrate on the experience of the Ivory Coast, Senegal and Guinea.
- An analysis of the efficacy of foreign investment in developing countries. India's steel industry has been chosen as the first case because of the unusual opportunity it presents for comparative study : three countries — FR Germany, the United Kingdom and the USSR — have all been active in this sector. The latter project is being carried out by Development Centre Fellow Herbert Giersch.
- The role of transport in industrialisation with special reference to certain areas in Africa and Asia.
- An international comparison of real income and purchasing power in the developing countries.

THE DEVELOPMENT CENTRE OF OECD

## TRAINING AND THE DEVELOPMENT CENTRE

The Development Centre is primarily an action-oriented body, and this finds expression in the training it offers to high-level officials of developing countries. So far the Centre has concentrated its training activities on seminars held in the developing countries themselves so as to be able to reach key economic policy-making officials who cannot ordinarily be spared from their posts long enough to attend a programme given outside of the country. Three such seminars have been held, the first in Yaoundé (Cameroun) during the month of July, 1964, the second in Abidjan (Ivory Coast) the following month, and the third in Conakry, Guinea, in January of this year. Two more will be held shortly in Peru and Ecuador.

In each case a team of expert economists, under the personal leadership of the Development Centre's pres-



*Participants in the Development Centre seminar at Conakry, Guinea, last January.*

ident, spent roughly a month in the developing country, discussing with its officials new developments in economic thinking and practical policy-making problems. The group that went to the Ivory Coast, for example, included experts from France, Israel, Italy, the Netherlands and the United States, representing the special fields of national accounting, fiscal and monetary policy, public administration, industrial development, economic planning, regional development, and agriculture.

Sessions are held daily for three to four hours, part of the time being devoted to lectures (of which résumés are printed and distributed), another part to informal give and take between members of the OECD team and the officials of the host country. Topics covered by the discussions may be fairly specific and technical — national accounting methods, for example — or they may be more general in scope. The choice of subjects in turn influences the choice of experts, but in each case at least one and sometimes more of the Centre's Fellows attend and are thus able to gather, at first hand, information to supplement their research. For example, Nino Novacco, Fellow of the Centre, who attended both the Abidjan and Conakry seminars will be able to use the Ivory Coast and Guinea as case studies for his research on regional development. Information gathered by another Fellow, Edmond Janssens, during the Guinea seminar will be utilised in his study of development banks.

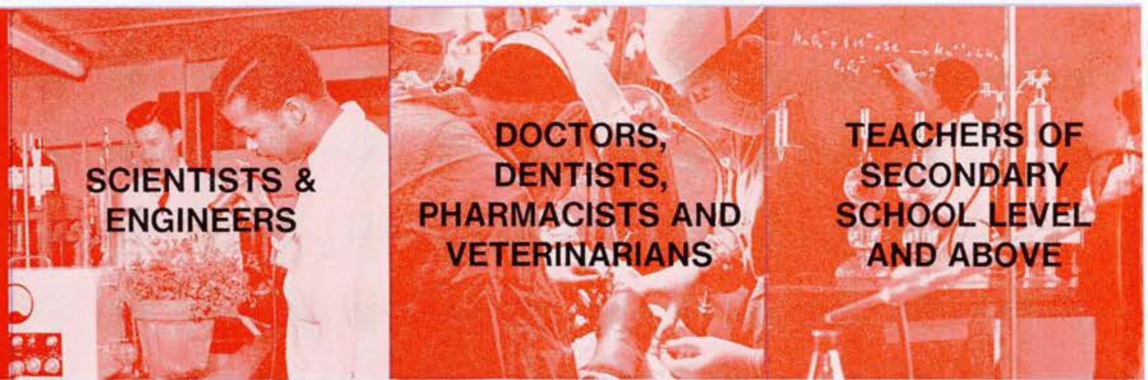
The most recent seminar was held in Conakry from 9th to 28th January this year. Long before the meeting, discussions between the directors of the Centre and the highest Guinean officials fixed the broad outlines of the programme : development strategy, development administration and relations with industrialised countries in foreign trade, financial and technical assistance. The Centre's team — which included in addition to the president and vice-president four of the five Fellows and a French expert on agricultural problems and rural organisation — went to Conakry a week before the seminar began to make detailed arrangements, taking with them a 200-volume library on economic development to be left with the Guinean authorities. The sessions were held in a room at the university every working day from noon till 3 pm or so (normal working hours in Guinea are from 7 am till 3 in the afternoon). Four ministers — the Secretary of State for Finance and Planning, the Ministers of Transport, of the Rural Economy and of Labour — attended regularly, as did sixty other high-level officials from these ministries, from the national bank and from the ministries of development and foreign commerce, directors of national enterprises and trade-union leaders, Interest was such that at a special Sunday session almost eighty people attended, and a daily half-hour résumé of the discussions was presented over the Guinean radio.

Members of the OECD team had many opportunities to learn about the economy of a country little known through first-hand experience to Western observers. They visited several enterprises and development projects in various parts of the country and were able to discuss development policy with most of the ministers and with the President of the Republic, Mr Sekou Touré.

*(continued on page 24)*

# AVAILABILITY OF SELECTED TYPES OF SKILLS

(number per 100,000 members of labour force)



| | | SCIENTISTS & ENGINEERS | DOCTORS, DENTISTS, PHARMACISTS AND VETERINARIANS | TEACHERS OF SECONDARY SCHOOL LEVEL AND ABOVE |
|---|---|---|---|---|
| DEVELOPED COUNTRIES | France | 800 | 400 | 600 |
| | Italy | 900 | 600 | 1,000 |
| | United Kingdom | 1,000 | 300 | 700 |
| | United States | 1,700 | 700 | 1,000 |
| | Canada | 1,300 | 500 | 900 |
| | USSR | 1,200 | 400 | — |
| DEVELOPING COUNTRIES IN EUROPE | Greece | 400 | 500 | 400 |
| | Spain | 300 | 600 | 300 |
| | Turkey | 200 | 100 | 200 |
| | Yugoslavia | 500 | 200 | 300 |
| AFRICA | Guinea | 2 (a) | 7 | 16 |
| | Nigeria | 10 | 10 | 50 |
| ASIA | India | 50 | 100 | 300 |
| | Indonesia | — | 50 | 200 |
| | Iran | 160 | 100 | 200 |
| | Pakistan | — | 30 | 200 |
| | Taiwan | 100 | 200 | 600 |
| | Thailand | 10 | 30 | 100 |
| LATIN AMERICA | Argentina | 200 (a) | 400 (b) | — |
| | Brazil | 100 (a) | 200 | 400 |
| | Colombia | — | 100 | 500 |
| | Peru | — | 200 | 600 |
| | Mexico | — | 200 | 400 |

These tables are taken from one of the Development Centre's first publications in which Angus Maddison attempts to quantify some of the elements of technical assistance, the need for it, its volume and impact.

— not available (a) engineers only (b) doctors and dentists only

Source: A. Maddison *The Contribution of Foreign Skills, Training and Technical Assistance to Economic Development*, OECD Development Centre, 1965.

## FLOW OF EXPERTS AND THEIR TOTAL COST IN 1962

| | MAN/YEAR UNIT COST | | MAN/YEARS | | TOTAL COST | |
|---|---|---|---|---|---|---|
| | North America and Multilateral | Europe and Other | North America and Multilateral | Europe and Other | North America and Multilateral | Europe and Other |
| | $ | | | | In million $ | |
| TECHNICAL ASSISTANCE | 25,000 | 7,500 | 9,700 | (a) 82,300 | 242 | 617 |
| VOLUNTARY WORKERS | 9,000 | 3,000 | 7,500 | 7,500 | 68 | 23 |
| PEACE CORPS | 9,000 | 3,000 | 3,000 | 500 | 27 | 2 |
| CAPITAL AID EXPERTS | 30,000 | 12,000 | 4,375 | 4,375 | 131 | 53 |
| PRIVATE INVESTMENT | 30,000 | 12,000 | 35,000 | 65,000 | 1,050 | 780 |
| SALES OF CONSULTANT SERVICES | 30,000 | 12,000 | 20,000 | 20,000 | 600 | 240 |
| TOTAL | | | 79,575 | 179,675 | 2,118 | 1,715 |

(a) Includes 8,500 Sino-Soviet Technicians

The value of this type of seminar lies not only in the fact that it permits attendance by hard-pressed high-level officials but also that it encourages the formation of close and continuing relationships between these officials and members of the OECD team. Experience with this type of seminar has already shown how the presentation can be improved and the subject matter integrated.

As time goes on there will be experimentation with other kinds of training programmes. In the autumn, for example, a series of sessions will be held in Paris on the problem of training development-programme administrators.

THE DEVELOPMENT CENTRE OF OECD

## CENTRAL OFFICE FOR REFERENCE AND INFORMATION

As another part of its programme, the Development Centre provides rapid answers to the very specific questions that may arise in the course of formulating a policy or carrying out a project in the developing countries. More than a hundred queries, very diverse in content, have been received so far from Africa, Asia, Latin America and the Middle East. The Sudanese Government, wishing to set up a series of mortgage banks, wrote to ask how other countries organised such institutions. A request was received from Mexico for full details of accounting systems used to assist management in controlling large industrial enterprises in the public sector. The Centre has also been asked for the statutes of the French Cour des Comptes, for regulations governing a sports park, for details about the application of linear and non-linear programming techniques to economic planning and for information on the organisation of fishery co-operatives.

Some of the questions can be answered by reference to the library which has been organised to provide source material for the Centre's research and training activities. It presently comprises nearly 360 periodicals, more than 4,000 specialised works on economic development and a growing number of unpublished documents. As a rule, however, the Question and Answer Service draws on outside sources as well.

To ensure access to experience and studies accumulated in all parts of the world, the Development Centre has established an international network for the exchange of information for which it acts as the central clearing house. National bodies and international organisations such as the United Nations, and its specialised agencies, the Organisation of American States, the World Bank, the International Monetary Fund and the International Committee for Documentation in the Social Sciences, have agreed to keep the Centre informed of their current research and to select and compile suitable information in reply to questions submitted to them through the Centre. In addition a master list is being set up of the various organisations and individuals specialising in development problems, with detailed information as to their experience and current projects.

## COORDINATION AND CO-OPERATION

In all its activities the Development Centre is concerned with strengthening the bonds between organisations interested in economic development. Annual meetings attended by the directors of institutes which carry out research and training in this field are held under the Centre's auspices. A Catalogue of Social and Economic Development Training Institutes and Programmes has just been published which describes postgraduate training offered (primarily to students from developing countries) by institutes in 15 countries and nine international organisations. It will be followed by a similar survey of research institutes and programmes. To keep each informed about what the others are doing, the Centre publishes a quarterly called the *Research, Training and Development Liaison Bulletin*, which describes the activities being planned or carried out by these organisations. A few random examples taken from a recent issue of the bulletin show the impressive amount and variety of activity in the field of development research. More than 700 professional economists are engaged in this kind of work in various parts of the world. Norwegian scholars are studying the economic development of Pakistan and Nigeria, while an Indian group is concerned with regional planning in France and other European countries. The birth and developmental processes of growing points in the developing countries are being investigated by a research group at the University of Louvain, using Upper Katanga as an example. The French Institut de Recherches des Techniques Économiques Modernes is looking into the convergence between theoretical growth models and mathematical formulae used in the planning of developing countries. A study of the anthropological approach to research in economic development is under way at Norway's Chr. Michelsen Institute; and Professor Neil Chamberlain of Yale University's Economic Growth Center is making a survey of national economic plans.

In addition to describing current research activities, the *Liaison Bulletin* notes courses being given, forthcoming conferences and missions, personnel available for research or training projects and institutes' personnel needs; it also lists new publications and bibliographies.

Although the main role of the Development Centre vis-à-vis the research and training institutes is that of co-ordinator, it also helps the developing countries' institutions build up their programmes by contributing to student exchange programmes and to working visits by experts from more developed countries. One way in which this is to be done is through " pairing agreements " between two institutes, one in a less developed, the other in a more highly developed nation. Two of the organisations which are in the process of forming this kind of relationship under the Centre's sponsorship are the Institute of Social Studies at the Hague (which was created jointly by all the Netherlands' universities) and the Economic Development Institute at Enugu, Nigeria. An expert from the former spent two months at Enugu at the beginning of 1965, both teaching and helping the institute work out a programme. The Agricultural High School of Rennes, France, is working out a similar agreement with the Institute of Economic and Social Research in Leopoldville.

## THE TRANSFER OF TECHNIQUES

Through the Development Centre some projects specifically associated with OECD will be applied to non-Member developing countries. The first experiment along these lines concerns OECD's Mediterranean Regional Project (MRP), a programme of long-range educational planning based on a detailed forecast of future manpower needs. In co-operation with OECD's Scientific Affairs Directorate, the Development Centre is making the methods used in this programme available to Latin American countries, in the first instance Peru and Argentina. A seminar held in Lima in March brought the Latin American manpower and educational planners into contact with those who worked on the MRP. In subsequent stages of the programme, experts will be sent to Latin America and their trainees received in the Mediterranean lands.

In these ways — and in others yet to be determined — the Development Centre will serve as the channel through which developing countries can benefit from the experience of OECD Member nations.

# Structural changes affecting ocean shipping

**The 'fifties and 'sixties of the present century have witnessed a revolution in shipping brought about by an enormous increase in ships' sizes, and progress in the sciences of rationalisation and automation. But while, owing to modern technical developments, the cost of ocean transportation is likely to go on decreasing relatively, other problems — notably the need for improvement and modernisation of ports — still remain to challenge all those engaged in the shipment of goods and raw materials by sea.**

**The following article is based on a special chapter of the Annual Report of the OECD Maritime Transport Committee, to be published this month.**

## DEVELOPMENT OF THE BULK CARRIER

A new unit, the "bulk carrier", has come into being — huge ships over 80,000 tons deadweight in the case of dry cargo ships and over 130,000 tons in the case of tankers. In dry cargo the volume of the bulk carrier fleet, which at the beginning of the shipping revolution of recent years could be counted in hundreds of thousands of tons deadweight, had at the end of 1964 exceeded 22 million tons; and in addition nearly 9 1/2 million tons of new ships were on order. The average size of ships of the existing fleet exceeded 22,000 tons deadweight, whilst that of the new-building was 33,000 tons. Bulk carriers of 80,000 tons are already a practical proposition.

In the case of tankers, whereas the average size of the world tanker fleet at the end of 1962 was just over 23,000 tons deadweight, the average size of the new-building a year later was nearly 56,000 tons. Vessels of over 130,000 tons are already in operation.

The cost per ton, not only of construction but also of operation, is very considerably less for the huge new carriers than for their small predecessors. The cost varies according to operators' trades and sizes, and it would not be practical to attempt any precise evaluation; but the decrease is considerable.

The revolution in dry cargo trades has been much more marked than in oil. For many years the major oil companies have followed a policy of "spreading" their requirements. In addition to the tanker fleets owned by themselves, they charter other tankers (frequently for long periods) from other shipowners. To-day about 40 per cent of the tanker fleet is owned by the oil companies and between 50 per cent and 60 per cent by other shipowners (known as the "independents"). Some 13 per cent of the world oil trade is carried on in tankers chartered on a voyage basis. Thus the revolution in the oil trade applies to the increased sizes rather than to any changes in the structure or operation of the trade.

In dry cargo trades, the structure of the trade as well as the size of the ships has changed. Previous to the size revolution, practically all the bulk cargoes, such as iron ore, coal, grain, sugar, timber, fertilisers, etc., were chartered on the open market in tramps. Not only through the size revolution, but also because the merchant concerns who control these bulk commodities have started opérating their own fleets, the pattern of the dry cargo bulk markets is today growing similar to that of oil.

The bulk dry cargo market today involves a fleet of 22 million tons deadweight of bulk carriers, nearly 8 million tons consisting of ore carriers — ships specially designed for the carriage of iron and other ores. The annual seaborne carriage of this one commodity now exceeds 140 million tons — or one-fifth of the total dry cargo movement by sea; and over 70 per cent of it is now covered by bulk carriers. Less than 30 per cent, therefore, is subject to the fluctuations of open market chartering.

Others of the fleet of specialised bulk carriers are designed for full cargoes of other bulk commodities, such as grain, bauxite, coals, sugar, cement, etc. A large proportion of these, however, are "general purpose" bulk carriers fitted for the transport of various kinds of bulk commodities and not restricted to one or a few such commodities. As all, or almost all, of the cargoes which they carry are those which were previously chartered on the open market in traditional tramps, the volume of open market dry cargo chartering is steadily contracting although quite a substantial number of bulk carriers are chartered on voyage basis on the open market.

In addition to the merchants, big shipowning companies, realising the potential of the bulk carrier, both individually and in combination, are acquiring fleets of these huge vessels.

## RATIONALISATION AND AUTOMATION

Quite apart from the relatively cheaper cost *intrinsically* both of building and operating big bulk carriers, further savings in operation are resulting from the development and increased application of rationalisation and automation techniques; and still greater savings are likely as they become more fully employed. The advantages of rationalisation and automation are not confined to large ships, and their potential contribution to lower transportation costs is general. But the application of these new techniques requires higher capital investment.

Whilst these savings, both in the costs of building and operation through size increases, and in the cost of operation through rationalisation and automation, are very considerable, the question may be asked whether these will be passed on to the cargo shippers or to the shipowners. The shipowners will naturally expect to retain a small proportion of these savings because they cannot be expected to operate without a reasonable margin of profit and they have now had a long series of lean years — but the greater portion of the savings will undoubtedly accrue to the shippers. Operating ships is an international business of the most intensively competitive nature in which excessive profits are earned only on rare and abnormal occasions of war or sudden emergency due to crises of nature when freight markets are inflated.

This is, however, only one side of the picture. On

the other side, whilst these improvements are being achieved in the construction and operation of ships, the resultant savings are being largely counteracted in many parts of the world through the inefficiency both of the ports themselves and of the supporting infrastructure, resulting in heavy expenses. Although many Port Authorities are alive to the need for conti-

nual improvement and modernisation of their ports to meet the ever-growing trade of the world, others are doing little about it; and, as trade increases, delays become ever worse. In many cases about 50 per cent of a ship's operating expenses are incurred in port, and unless port improvements go hand in hand with technical improvements in ships, the cost of sea transport cannot materially fall — and indeed may rise in some trades. Further, costs of operation are inevitably increasing owing to the inflationary developments in most countries.

Moreover, the scope of the big bulk carrier is limited, primarily by the physical capacity of ports to receive them. For example, in the United Kingdom there is apparently only one port at present capable of receiving dry cargo bulk carriers of 35,000 tons. Improvements in port capacity, inland transport and storage facilities will enable the big ships to expand their scope for some while yet, and the advantages of using bulk carriers, at least for coal and grain, are so great that the expansion of ports to receive them is likely to continue at a rapid rate for some time. There are, however, other reasons why there must always remain a considerable volume of traffic which cannot be handled by big bulk carriers, e.g., depth of water.

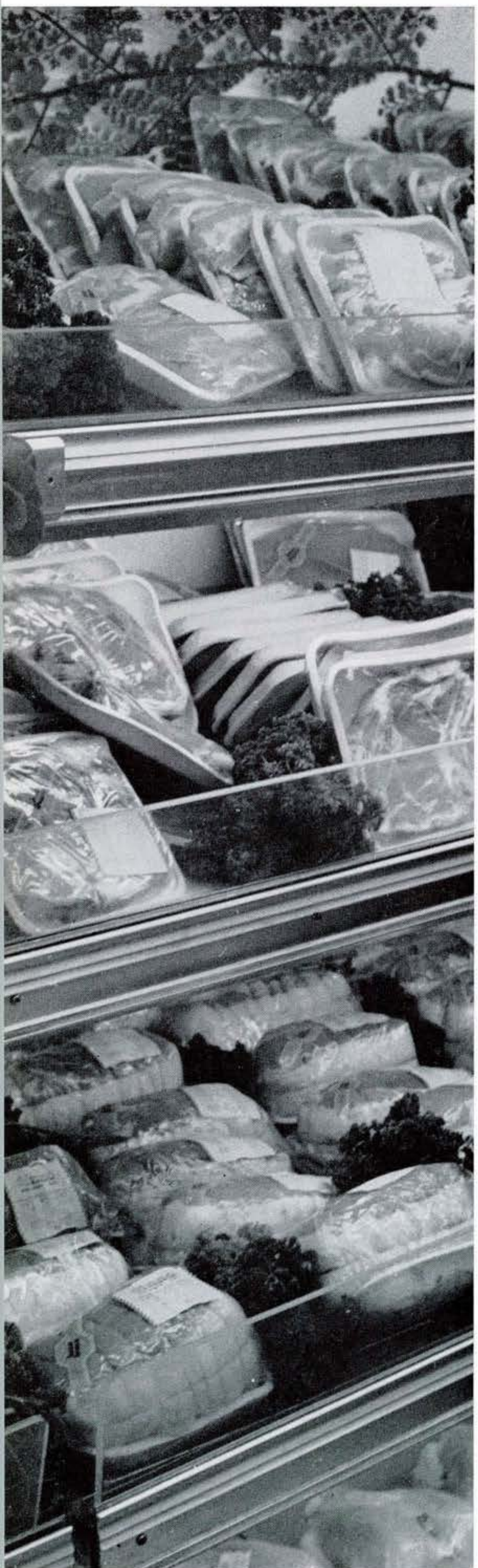
## THE ROLE OF THE " HANDY " SHIP

The nature of some bulk commodities necessitates their either being transported or stored (or both) in limited quantities. In other cases the nature of the particular trade prevents its being conducted in huge masses. Apart from the scrap trades from North America, which have for some time been almost a monopoly of the Liberty ships, vessels of these and similar " handy " sizes (9-11,000 tons deadweight) operate continuously in trades from North Europe to the Mediterranean and Black Sea, and occasionnaly in trades with the River Plate and the Persian Gulf. Moreover, such markets as cereals, sugar and timber are generally not predictable over long periods, and substantial quantities of these commodities are likely to remain available for smaller ships.

Finally, the liner trades, dealing in thousands of commodities of the parcel variety, are not adaptable to big mass transportation; and the liner companies find it convenient to charter considerable numbers of handy-sized tramps from time to time, to supplement their own vessels operating on their regular services.

As the Liberty ships eventually die out and are replaced by new vessels of handy size — with high overhead charges for depreciation and replacement — it is not unreasonable to assume that a differential freight level for bulk cargo carriers will develop, representing a premium for the handy-sized vessels. This was normal in pre-war days, when the handy-sized vessels, then 5,000 to 7,500 tons deadweight, commanded a premium. Already today in the tanker trades, the handy-sized vessels of 16-18,000 tons are often able to command a premium.

Whilst the process must be gradual and whilst there are many obstacles, the cost of ocean transportation, thanks to modern technical developments, is likely to decrease relatively — at least in respect of the commodities carried in bulk carriers; and, further, a double structure of freight levels for bulk movements may eventually become established.



# *The economic effects of* FRESH MEAT PREPACKING

***Following the United States example, prepackaging of meat is now spreading rapidly in Europe, largely through the growing number of self-service stores.***
***Self-service sales of meat can bring down distribution costs and lead to greater economic efficiency in OECD Member countries. D.L. Anderson of the Agricultural Marketing Service of the United States Department of Agriculture was asked by OECD to carry out a study on this subject. His report has now been published under the title of " The Economic Effects of Fresh Meat Prepackaging in Member Countries of OECD ".***

In the United States, self-service stores handle at least 50 per cent of retail sales of fresh meat. In Europe, the pace of change is so fast that self-service sales are expected to constitute 50 per cent of retail meat sales within ten to fifteen years.

## Higher Quality Sought

Most of the emphasis in European self-service supermarkets is on providing good-quality meat attractively presented and conveniently available to the customer. So that this can be economic, the first problem is to ensure sufficient sales. To do this the supermarkets prefer to maintain prices at a constant level while improving quality. Supermarket managers can attract customers by offering a greater variety of meat cuts, suitably presented. The effect of this can be to improve sales not only of meat but of other items as well.

Meat sold by this method is not exactly comparable with that sold across the counter. The interest of the dealer is to sell good-quality meat. In the absence of sales employees the customer has to rely on the appearance of the product. Moreover, the price of the same piece of meat sold across the counter and by self-service is not necessarily the same. In the latter case, a different cutting technique is involved, with greater emphasis on display and trim, which is increasingly demanded by the consumer.

Competition in regard to self-service meat seems to be far rarer between supermarkets themselves than between supermarkets and independent butchers. So far, moreover, it has related to quality as much as to price.

## Effect on costs

In the United States, retailing accounts for about 50 per cent of the total cost of meat marketing. The same figure seems to hold true of Europe when the meat is processed in the store. Plant processing changes this picture, by cutting down the retail percentage while increasing the wholesale or plant percentages.

It seems that self-service marketing of meat also effects cost savings to the distributor. Recent store surveys show that gross retail margins for meat were less than 20 per cent. However, the contribution made by sales of meat to total gross profit was notably higher.

Where and why do the savings achieved by self-service occur? The size of the store is an important factor, but sales productivity per employee is apparently higher with self-service (see table). The volume of sales, management and control seems to have a strong influence on costs.

There are other ways of reducing costs. A number of voluntary and co-operative groups have centralised purchases without actually handling the product, by collecting orders from a group of stores and placing them as one order. These groups claim savings of as much as 3 per cent on the cost of the product to the stores.

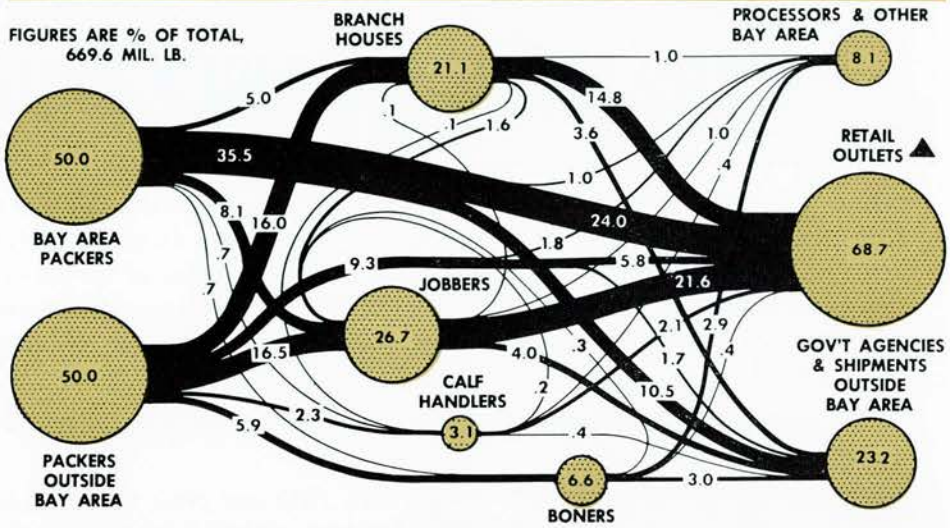
Central facilities for cutting and packaging meat for retailing offer several cost advantages, the main one being the saving of labour. For example, a United States firm selling $ 250,000 worth of fresh meat a week in 40 stores can save over $ 750,000 a year in labour costs. With constant wage rates, this amounts to reducing such costs by about one-half.

Other savings in equipment and in store space are considerable. By-products, such as fat and bone, can be utilised by a central plant, and quantity purchase advantages can be considerable where large-scale supplies are available.

Centralised preparation of meat offers other advantages : better distribution of meat cuts according to the requirements of individual stores, more uniform cutting and packaging, better control of inventories and orders, better cost control, less risk of running out of stock at the store, and better control of sales and promotion.

Total supply in San Francisco Bay area

## MEAT DISTRIBUTION CHANNELS*




* Includes all fresh meat and cured pork but excludes all processed meats other than cured pork.

▲ Includes retail food chains and quantities distributed by these chains to retail units outside the bay area, independent markets and grocery stores, purveyors and institutions.

### *A rapidly changing market*

Prepackaging and the selling of meat by self-service are actually only a small part of the total changes occurring in meat distribution. To consider these changes only from the standpoint of the retailing of meat would be too limiting an analysis, and all aspects of the marketing process are involved.

Wholesale markets can be expected to adjust to changing times. The concentration of wholesale business in a market centre into the hands of a few firms is one phenomenon that has occured many times in the United States. In a typical wholesale market centre, there is a change in the nature of the market whenever firms concentrate in this way. A good example of this growth is a public retail market in Portland, Oregon, where one retailer increased his space by taking over one stall after another until the public market became, in effect, a supermarket under one management.

The changes under way are numerous. The consumption of meat is rising, quality seems to be improving, and self-service and central packaging are enhancing this trend. Meat wholesalers, municipal abattoirs, and retail butchers are adapting themselves to the new competition in order to avoid loss of business. Many of them will need to change their methods of management ; others will need to find substitute outlets by supplying institutional buyers or by making specialised foods with a meat base. It seems likely, however, that because of sales competition and increased costs of modernisation the wholesaling and retailing of meat will be carried out by larger though fewer firms.

No one can say at present what the next changes in the meat market will be. Concentration of livestock farming and marketing need not be detrimental to competition nor to producers or consumers. This is assuming, moreover, that no appreciable progress will be made in meat technology — perhaps a valid assumption in the short run, though the excellent technical research being done in Europe and North America may well develop some totally new approaches to meat handling and marketing.

A campaign designed to promote more up-to-date marketing methods and practices and to help firms and organisations adapt themselves to change could lead to a better system of food distribution. It could also help through its stimulating effect to alleviate some resistance to current progress in this sector.

### SELF-SERVICE MEAT SALES PER FULL TIME EMPLOYEE IN 1959. BY TYPE OF MEAT DEPARTMENT (1) in US dollars

| | Size store and type department | Weekly meat sales | Weekly meat sales per full time employee |
|---|---|---|---|
| AMONG SUPERS | 100 % self-service | 5,258 | 1,314 |
| | Partial self-service | 3,451 | 1,147 |
| | Service | 3,631 | 1,037 |
| AMONG SUPERETTES (2) | 100 % self-service | 1,070 | 973 |
| | Partial self-service | 1,172 | 830 |
| | Service | 986 | 900 |

(1) "Facts in Grocery Distribution", 1959 Progressive Grocer (2) Self-service stores having at least four main food sections : dry supplies and canned goods, meat, fruit and vegetables, milk products ; annual sales range from $ 75,000 to $ 375,000.

# AGRICULTURAL EDUCATION AND OCCUPATIONAL MOBILITY IN A RAPIDLY GROWING ECONOMY

Education, basic, secondary and vocational, will be one of the decisive factors in achieving the agricultural targets that OECD countries have set for themselves: to improve efficiency in farming, increase the earnings of farmers and release surplus agricultural labour for work in other sectors of the economy. The sooner Member countries bring their educational facilities up to date, especially in rural areas, the sooner these objectives will be achieved. This fact has been emphasised at seminars on Vocational Training in Agriculture and on Rural Areas Development held by OECD [1]

(1) " Regional Rural Development Programmes " OECD Documentation in Agriculture and Food N° 66

*Between 1950 and 1960, the agricultural population fell rapidly in the industrialised countries of OECD but less rapidly in Member countries in process of development. The acceleration of this trend in all Member countries is considered essential if a satisfactory rate of economic growth is to be maintained.*

*As agricultural income is bound to represent a diminishing proportion of the national income, a reduction in the number of persons remaining in agriculture would help to raise the individual incomes of farmers to more adequate levels. This reduction would, moreover, help to satisfy the growing demand for labour in other economic sectors.*

*Definite trends are apparent in the structure of agricultural employment. There is a steady decline in the number of small and mixed farms, and an increase in the number of specialised farmers. There is greater demand for technical and management personnel; and jobs are becoming more numerous in the industries related to agriculture. However, despite the development of these industries, the number of people employed in agriculture and allied fields must necessarily continue to represent a shrinking proportion of the total manpower employed or required for the economy as a whole.*

## ENOUGH BUT NOT TOO MANY FARMERS MUST BE TRAINED

*Education in rural areas must be designed in the light of these developments. In each category of education and training provided in rural areas, and at each stage, the total optimum capacity of the schools and classes and the optimum intake of trainees will always depend on the demand for labour from agriculture and the allied industries, as well as the possibilities of employment outside this sector. Enough people must be trained for agriculture, but care should be taken that this number is not excessive.*

*Planners will be well advised to make periodic estimates of the training facilities available, which can then be adapted to supply the numbers, types and qualifications of manpower likely to be required in agriculture and its allied industries. This calls for planning of resources for agricultural training and OECD has now developed a method for this purpose.*

*The more proficient and productive agricultural workers are, the fewer will be required, and this will ensure a quicker rise in individual earnings.*

## TRAINING ADAPTED TO REQUIREMENTS

*To adapt the present structure of both school and post-school courses in rural areas to the foreseeable trends in the employment structure, it will therefore be necessary to :*

- *provide all young rural people with a satisfactory basic education on the primary and secondary levels;*
- *modernise vocational training in agriculture and include new types of education based on specialisation in agriculture and its allied industries;*
- *provide re-education courses for those already employed in agriculture. The ever-widening range of knowledge required makes it necessary to set up a system of " permanent training " enabling young farmers and farm workers to keep abreast of new developments;*
- *provide in rural areas, where at all practicable, for better opportunities for vocational training outside the field of agriculture.*

*In planning the structure, curriculum and methods of rural education, considerable thought will, therefore, have to be given to providing the maximum opportunities for scholastic re-orientation and occupational mobility. To be successful, agricultural training will need to be so organised that future agricultural workers can easily switch from one area of the country to another with the minimum loss of time or, alternatively, if already engaged in agriculture, adapt themselves as rapidly and effectively as possible to some other job where the necessity arises.*

*The important thing is therefore to introduce a basic primary and secondary education which will allow mobility out of agriculture but allow those to be trained in agriculture to be more efficient in management and marketing. In other words, it is a question of providing an education which will give the maximum opportunities not only to those leaving agriculture but also to those who remain on the land.*

*Thus the curriculum should lay considerable stress on general education in order to give young people a solid grounding not only for work on the land but for any other occupation, if they have to change. Vocational training proper, whether for agriculture or other occupations, should therefore be slanted towards the acquisition of basic economic and scientific knowledge and be as broad as possible. The technique should be to train the pupil to exercise his or her judgement by instruction in basic principles and by developinp faculties of observation, judgement and reasoning.*

## SOUND GENERAL BASIC AND SECONDARY EDUCATION

*A preliminary general education, primary and secondary, provided in suitable schools offers the best solution.*

*On the other hand, the scheme if not well operated may have several drawbacks. For example, it may tend to skim off too many of the more gifted members of the rural community for other occupations. Where there are many low-income farms, this will be desirable up to an optimum number.*

## VOCATIONAL TRAINING COUPLED WITH ADVANCED GENERAL EDUCATION

*In some cases, and perhaps as a transition, it may be necessary to provide agricultural training at the same time as a supplementary general education. The crucial point, however, is to ensure that in this case, for which pupils may necessarily be recruited at a lower age, safeguards are introduced for the future of those who may have to change their occupation later on.*

*The supplementary general education provided in agricultural schools should be equal in substance and level to the corresponding cycle in other secondary schools both rural and urban. The curricula and methods used for the vocational aspects should be designed to enable pupils to acquire a basic knowledge and develop their faculties.*

*If these conditions were adhered to, it is possible that present vocational schools in agriculture would combine general education with vocational training within the context of rural areas development. If the pupil can receive the same general education in both rural and urban areas he can choose between two solutions : i.e. to remain in agriculture or to move to other occupations.*

*It is therefore essential to ensure, first, that the basic primary and secondary training is sufficiently thorough ; secondly, that the specifically agricultural part of the training where required is given as late as possible, and thirdly that those who wish to move out of agriculture have access to appropriate vocational training for other occupations as well as satisfactory vocational guidance as to the possibilities offered in industry or the services sector.*

## THE PREREQUISITES FOR OCCUPATIONAL MOBILITY

*To achieve the necessary occupational mobility among rural people, it is not enough — necessary though this may be — to organise agricultural training more efficiently. Comprehensive information must be made available to young people about career openings and such other factors as the risks likely to be incurred by the son of an agricultural worker who himself wishes to work on the land.*

*It is also important that the vocational guidance authorities should be able to channel young people effectively into the occupations for which they are really fitted and which answer to the country's economic needs. Sometimes such authorities tend to consider agriculture as the waste-paper basket of the economic system for workers who cannot find a job elsewhere. If and when such shortcomings can be removed a great stride will have been made towards finding a satisfactory solution to the problems of the agricultural industry.*

*More attention should also be given to the provision of special grants for training within agriculture or outside it, not only for rural youth, but also for persons of more mature age who can still adapt themselves to the demands of general economic growth.*

# MARKET RESEARCH BY

*Under the auspices of the OECD Industry*

*trial and commercial trade associations*

*behalf of their member firms. This guide,*

*Associations», shows from actual cases that*

*research service can easily be overcome if a*

*the advice given to trade associations by*


In the United States it is a common thing for large firms to appropriate one to two per cent of their turnover to market research. This adds up to a large sum, which pays for a great deal of valuable research.

The same percentage of the turnover of a smaller firm would hardly cover the cost of a qualified market research expert. But by pooling the financial contributions of a number of firms — particularly firms of similar size — greater flexibility is attained and a more worthwhile programme of research can be undertaken.

The trade association is the logical body to co-ordinate these finances, and this has been understood by a good many firms all over the world. Their experience affords practical instruction as to the procedure to be followed.

It is suggested that a committee of representatives of the association and of certain member firms should be responsible for liaison between the association and its members. Its duties would be :

- to plan the association's market research programme;
- to decide on the detailed planning of each survey;
- to select the outside organisations whose services are to be enlisted;
- to assess the results insofar as they affect the branch of industry or trade specific to the association;
- to decide what "follow-up" assistance should be given to firms.

There are no hard and fast rules as to the number of persons to be assigned to research work in an association. The number may vary from one to fifty. In the Sveriges Möbelindustriförbund (Stockholm), market research is looked after solely by the Director. In the British Central Chemical Plant Manufacturers' Association (London), the Commercial Officer is responsible for processing secondary data.

In larger associations, such as the British Electrical and Allied Manufacturers' Association or the Fédération Belge des Entreprises de l'Industrie des Fabrications Métalliques, the work is divided among the statistical, overseas and product departments, and co-ordinated by an expert.

Development of the concept of market research can lead from the engagement of a qualified specialist to the establishment of a market research department and even to that of the association's own market research institute. In many instances the establishment of such an institute is the outcome of joint sales promotion efforts by members of an association. This has been the case with the Furniture Development Council (London), and with the Institut der Deutschen Baumwollindustrie (Frankfurt), which has the task of promoting cotton consumption.

## *Obtaining the information*

An association must begin by determining the information needs of its member firms. Its next task is to decide on the market research plan most likely to meet these requirements. Only when this plan has been set up can the technical execution of the market survey begin.

The first step then is to assemble the statistical and non-statistical data already available (secondary data), supplemented, where necessary, by new data (primary). The next step is to process the information thus assembled.

There are many sources of secondary material. In addition to the official statistics published by National Statistics Bureaux and international organisations (1), supplementary statistics are published by some Chambers of Commerce. The Verein Deutscher Maschinenbau-Anstalten (Frankfurt) is one body which publishes data on developments in mechanical engineering. The Institut für Handelsforschung at Cologne University has been carrying out surveys on marketing channels; the Centre de Recherche et de Documentation sur la Consommation (Paris) annually publishes data on the French trading system.

Associations have access to other sources of secondary information, in addition to statistics. The Fédération Belgo-Luxembourgeoise des Industries du Tabac consults specialist periodicals on tobacco from all over the world; the Sveriges Kemiska Industrikontor (Stockholm) subscribes to a daily press service which supplies a report on market trends in Europe. An association may also work in co-operation with the Central Statistics

(1) OECD has itself published a series entitled "Sources of Statistics for Market Research". Six volumes in this series have already appeared.

# TRADE ASSOCIATIONS

*Committee, a valuable guide has recently been compiled, giving indus- practical advice about organising and conducting market research on which has been published under the title «Market Research by Trade the difficulties which are sometimes said to exist in creating a market sound plan of action is adopted. The following article surveys some of the authors of the Guide.*

Offices or with official and semi-official bodies such as foreign trade information centres, embassies, international chambers of commerce and the like.

After exhausting all the sources of secondary information, the association can turn to sources of primary material, statistical or non-statistical. Officials of the Fédération des Fabricants de Tuiles et de Briques de France visit building contractors and architects, and in this way learn the trend of customers' requirements. Sixty-five member firms of the National Fertilizer Association in the United States made a total of 656 employees available to the association to act as interviewers.

The collection of primary material may become a continuous activity. For instance, the Grocery Manufacturers of America Inc. set up a consumer panel in order to observe the marketing of agricultural produce from the farm stage onwards. Lastly, the association can, if need be, call on outside organisations.

## *Processing the information*

In the crude state, the data compiled from various sources can provide useful information, but only up to a point. They usually need to be processed and compared with other data; the factors underlying them must be ascertained. It is only when it knows of these factors, of which the data are merely an expression, that a firm can make use of the data for its own market research. The association is in the best position to process and interpret data, and it must do this in such a way that all member firms can derive equal benefit.

Enquiries among its own member firms will give an association complete data about these firms or even about the entire branch of industry. These figures give the individual firm a picture of the overall development of the branch and of its own position.

A number of associations do the necessary processing. The Syndicat National des Fabricants de Quincaillerie (Paris) even classifies its members according to their production and turnover figures; the Fachverban Heiz- und Kochgeräte Industrie (Frankfurt) goes still further in that it calculates each individual member's share of the market.

Secondary information, mainly in the form of figures supplied by the Central Statistics Offices, also has to be processed by the association. It receives the foreign trade figures in the form of pre-publication reports which are frequently supplied on punched cards. The first step is to decode and classify these. The Furniture Development Council (London) provides its members every year with very detailed statistics of production, demand marketing channels, prices, etc. Eight months later these statistics are followed by an economic review interpreting and commenting upon them.

When an association makes a survey on a specific market, it obtains unprocessed primary data, which must be processed in the same way as information collected from members or secondary information obtained by the association.

Market surveys, whether they relate to certain categories of marketing or to a specific geographical market, must always include both the processing and interpretation of the secondary and primary material utilised. Interpretation does not necessarily call for a written report but may take the form of summaries or discussions with members of the association.

## *Presenting the results*

Unless the results are properly presented, a market survey may lose much of its value. If every member is to make the best use of these results, they must be presented in the form of reports written as intelligibly as possible and in which the essential facts leap to the eye. The Fédération des Syndicats de Producteurs de Papiers et Cartons Français (Paris), for instance, prefaces its Bulletin de Conjoncture with a three-page summary of the salient facts in concise but precise form.

The trend of certain quantities or values can be presented graphically. This practice is followed by the Union Intersyndicale des Industries Françaises de Biscuiterie, Biscotterie, Entremets et Desserts Instantanés (Paris), which presents the data collected from members as " tendance du mois " (monthly trend) in index values and graphs.

Frequency of reporting can vary. Belgelectro-Export, a group of nineteen Belgian exporters of electrical engineering equipment, sends documentation to its members twice a week. There is likewise a wide variety of possible reporting media : single or periodic reports, annual reports, association journals.

Two principles must be borne in mind in passing on to members the results of market research : their interest must be aroused and each member should only receive material which affects him directly.

The money spent on market research can only be justified and can only show an economic return if the members make use of the research results. In this connection, the association can give them guidance on different occasions and by various means. Annual general meetings, conferences, articles in the association's journal can be used for this purpose. The Secretary of the Konfektionsindustriförening (Stockholm), for instance, gave forty-five talks to groups representing retail clothing firms reporting the results of his surveys. The National Confectioners' Association (United States), at the end of a survey report, lists the main findings and makes a number of recommendations for action by firms. Market research by associations has even extended into the sphere of business management.

## *Costs and financing*

The main reason why associations hesitate to undertake market research, even though they may recognise its inherent advantages, is the cost of the operation. But here again there are a number of possibilities. The association should begin by assessing the exact nature and amount of the costs involved, in its own case, in a market survey. Market research is largely intellectual work, being based on knowledge, experience and the ability to think constructively. Staff expenses are therefore the heaviest item of cost.

The example of a British association gives an approximate idea of the cost of a market survey. The British Footwear Manufacturers' Federation (London) conducts surveys of overseas markets at a rate of four to five markets a year. The cost of these surveys, including reporting and printing, amounts to between £ 2,000 and £ 3,000 a year, i.e. about 10 per cent of the association's total revenue. In addition, this association publishes monthly statistical data on production, an " Exporters' Handbook ", and a fortnightly " Overseas Trade Bulletin ". The total annual expenditure on the activities of the Overseas Department amounts to £ 5,000, or about one-fifth of the association's budget.

There are several possible ways of meeting the cost, such as establishing a special fund financed by supplementary contributions from the members or sharing the costs among the members, on the basis of individual contribution levels or turnover figures; payment of part of the costs by the association itself; subscriptions from specifically interested members; sales or reports; financial arrangements with governmental bodies when the survey is of national interest, etc.

Co-operation among industrial associations, among industrial and commercial associations, or again among trade associations at international level, can lead to a reduction in costs. In this case, the results achieved in rationalisation and cost reduction are the same as those obtained by transferring market research operations from member firms to an association.

Not all the information obtained can, in fact, be used, but the principle of co-operation goes beyond one specific research study. Its long-term benefits in all phases of the marketing process are obvious and can be brought about without prejudice to fair competition.

# THE POSITION ON THE E

From 1961 and until late 1963 the European iron and steel industry was confronted with a new situation : demand remained at an abnormally low level, consumers' stocks were declining and prices were falling. Early in 1964, however, the market trend began to improve : there was a rise in exports to the traditional steel importing countries, home demand picked up, stocks started to be rebuilt and for most products there was some hardening of prices.

Although demand for steel rose in 1964, it is still below production capacity. This being so, if demand were to weaken, even slightly, there might be a repetition of the setback experienced over the last few years. The market for steel is a sensitive one. It is often difficult for iron and steel, as a basic industry, to adapt itself sufficiently promptly to abrupt changes in the level of demand, and production is often cut back too late. Difficulties affecting the iron and steel industry in one country can spread very quickly, because of the intercommunication and interpenetration of markets, to neighbouring countries and export markets.

As far as the international scene is concerned, one of the main features of the period reviewed by the report is the growth in trade between major producing countries. Increased deliveries between the ECSC countries and the United Kingdom, the greater degree of interpenetration within the Common Market, and especially the rise in imports from third countries, all reflect this trend.

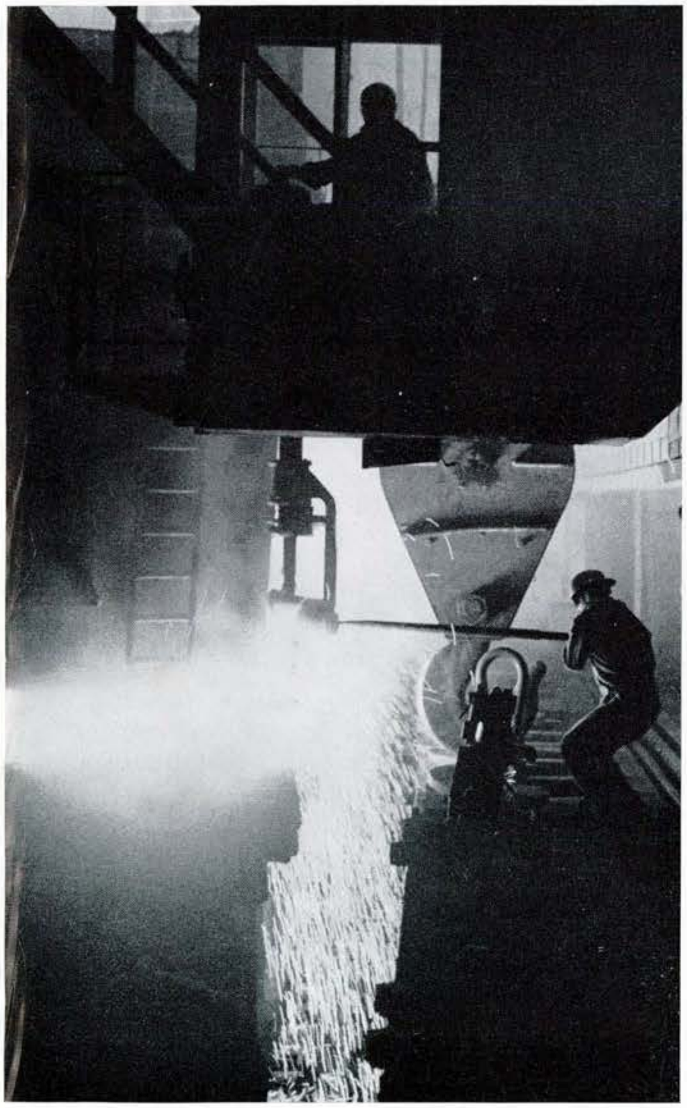
The iron and steel industry as a whole is currently less concerned about the problem of raw materials, especially taking into account world availabilities. Labour issues, on the other hand, are becoming increasingly important. Wages rose in most countries in 1963 and 1964, and agreed working hours were reduced. It is clear that a balanced expansion of production and price stability are of great importance for labour, which is bound to be adversely affected by sudden changes in the level of output and in companies' earnings.

Arrangements must therefore be made or strengthened to safeguard the interests of the workers and to retrain them, both to cope with any cyclical difficulties and to meet the need for rationalisation and technical progress, which necessarily presuppose new and more numerous skills together with redeployment and changes of occupation.

Investment expenditure remained at a very high level in 1963 in spite of the weakness of the steel market. This may be attributed to a number of factors. Some of the programmes drawn up during the years 1959 and 1960, when steel output was high, had yet to be completed and expenditure relating to these programmes was still being recorded in 1963. The continued high level of expenditure may also be traced to the desire of steel companies to keep their investments at a level that would enable them to maintain or improve their competitive position. They continued therefore in 1963 to bear

# ꞮOPEAN STEEL MARKET AND CURRENT TRENDS

*A general improvement in the position on a market which is still however extremely sensitive ; a lag in steel consumption in relation to general economic activity ; a fall in Europe's share of world output ; a rise in trade between the major producing countries ; the growing importance of investment and labour problems — these are some of the developments in Europe's iron steel industry in 1963 and early 1964 which are brought out by a recent study of the OECD Special Committee for Iron and Steel and which has been published under the title " The Iron and Steel Industry in 1963 and Trends in 1964 ".*



heavy investment expenditure, and in view of the fall in earnings the need to rationalise and modernise plant sometimes led to a marked increase in the extent of companies' indebtedness.

As the iron and steel industry is one of the basic economic sectors of an industrialised country, its rate of output was usually found to follow very closely. that of the economy as a whole However, the consumption of iron and steel products has in recent years not kept pace with general economic activity, though this in no way prejudges the future.

Among the complex reasons for this lag may be mentioned the fact that, in countries that have already reached an advanced stage of industrialisation, there is naturally a tendency to create or expand highly sophisticated industries that consume little steel. The share of the capital goods industries, the main consumers of steel, in the formation of Gross National Product is tending to decline while that of the consumer goods industries and services is increasing. Finally, technical progress in iron and steel production processes, economies in the use of steel and the part played by substitute products must also be taken into account when this phenomenon is studied and conclusions are drawn for the future.

The industry is facing the situation by making further efforts to produce qualities of steel suitable for new uses and by publicity to promote the use of steel in specific sectors.

In the longer term, there will be an enormous potential demand for steel represented by all the developing countries which will call for new production capacity, both in OECD countries and in others.

In the conclusions to its study the Committee finds that consumption in early 1964 was generally expanding, and that the year as a whole would show a further substantial increase in output and better results in most Member countries. Economic expansion is continuing despite a few temporary difficulties at various points. However, there is still a surplus of steel production capacity, and the additional capacities now being installed in both Member and non-member countries have still to make their impact felt on the market. It is important, therefore, that the industry should remain vigilant, so that, should demand weaken again, there will be no repetition of the chain reaction which took place on the world market during the recession of previous years.

# THE RESIDUAL FACTOR AND ECONOMIC GROWTH

It is now universally accepted that education has a determining influence on the rate of economic growth. But can this influence be measured, like that of capital investment and of the labour force? Can we calculate the contribution made by what is called "investment in human resources", or the "third" or "residual" factor? This was a question that had not been raised until an American economist, Professor Edward F. Denison of the Brookings Institution of Washington, decided to explore it.

The paper which he presented to a meeting of high-level economists and educators held by the Study Group in the Economics of Education, set up by the OECD Committee for Scientific and Technical Personnel, sets out to evaluate the benefit which education represents for the individual and its effect on the United States' national product.

Professor Denison's study is concerned with "measuring the contribution of education (and the residual factor) to economic growth". It is based on a number of initial assumptions and estimates which were necessary in the absence of factual data.

On this basis, Professor Denison examines in detail the sources of economic growth in the past, ways of changing the growth rate in the future, the effect of education on the quality of labour, the relationship of international differences in education to levels of output and growth rates.

The Study Group was far from approving unanimously the conclusions of Professor Denison. Some of them even voiced serious criticism. Robert R. Nield of the National Institute for Economic and Social Research of London noted that "the majority seemed to doubt, on commonsense grounds, whether it was fruitful to try to put a figure to the contribution of education to economic growth. Economic growth is a complex process of social and technical change, entailing the accumulation of capital and skills, the acquisition of know-how and managerial initiative, the evolution of new social attitudes and other changes. How can one, looking back at economic history, say how much education alone has contributed to total progress?" It was, however, generally recognized that Professor Denison had made an important contribution to the study of economic growth by adopting an approach that no one had ventured to adopt before.

Three other papers were presented to the Study Group: a report on economic growth and technical progress by Ingvar Svennilson of the University of Stockholm, another on a planning model for the educational requirements of economic development by Jan Tinbergen and H. C. Bos of the Netherlands Economic Institute of Rotterdam, and lastly a paper on some problems of some aspects of economics in the light of "human resource" concepts by John Vaizey of Worcester College, Oxford.

These studies and the comments made on them by members of the Study Group have now been published by the Organisation in a book entitled "The Residual Factor and Economic Growth". It is the second in a series devoted to the work of the Study Group, following "Economic Aspects of Higher Education". Reports on the Group's investigations into other subjects, such as the financing of education for economic growth, will soon be published.

The Study Group is thus fulfilling its role as "an innovating force and catalytic agent between the theoretical analysts and the policy-makers". The abstract and theoretical nature of the studies may be found disconcerting, but, as John Vaizey points out: "The detailed work on the economics of education which OECD has sponsored has increasingly run into problems because of its theoretical incoherence. It is only by an advance into the theoretical field that these practical problems can be resolved".

# JOB and FAMILY: *measures to help women fulfil a dual role*

*Approximately one-third of all jobs in OECD countries are held by women. Many of the women who work — more than half in France, Sweden, the United Kingdom and the United States — are married; some have small children, others aged parents or other family members to look after. These women are often beset by a conflict between job and family duties which can lead to inadequate fulfilment of either role.*

*At the same time, there are women who have skills which are in short supply, who would like to work or feel the economic pressure to do so, but cannot because of their family responsibilities.*

*As part of its programme for promoting an active manpower policy, OECD's Manpower and Social Affairs Committee asked Dr. Viola Klein, Lecturer in Sociology at the University of Reading, United Kingdom, to find out on the basis of an OECD survey what is being done in Member countries to remove obstacles to the employment of women with family responsibilities and to help solve the problems of those already employed. The survey and recommendations, summarised here, are shortly to be published.*

The average married woman with one child and a full-time job works about 38 1/2 hours a week at home in addition to time spent on the job and travelling to and fro, according to a recent survey made in Zurich, Switzerland; a study of working women in French cities shows results of a similar order of magnitude. While some reservations may be made as to the validity of these statistics, they nevertheless illustrate one of the problems faced by working women with family responsibilities : how to find time to do justice to both job and family.

Some of the other problems that arise are only too familiar : almost every modern language has a word for " latchkey " children — those who are left on their own after school. How to provide care for such children, what to do when a school-age child is suddenly taken sick or when a baby-sitter does not appear — such problems are not necessarily peculiar to women who work, but do affect this group of jobholders with particular force.

For the society, however, the problem is not only a personal one. Inability to arrange a working schedule for women with specialised skills may mean a shortage of much-needed workers; while a long period of inactivity may mean that trained women lose their skills.

## A QUESTION OF HOURS

Faced with a tight labour market, an individual employer or even an entire industry may find it advantageous to make special concessions to encourage women with families to work. In the United Kingdom, for example, women employed full-time consistently worked about seven hours less per week than men at the time of a 1960 survey. The authorities attribute this largely to informal arrangements which allow working wives to start an hour late in the morning or to go home early. The Swiss clock and watch industry permits women to leave for lunch half an hour or an hour early so that they can cook the meal. And the German authorities report similar arrangements where the workplace is near the home. (When the commuting distance is long, women press for shorter lunch hours to the point where it is sometimes difficult to get them to take even the minimum break required by law).

In a very few cases, such arrangements are given formal collective bargaining status or are even included in legislation. For example, in French couture houses, women with small children are permitted by collective agreement to go home five minutes earlier than other employees, and French law gives two extra days of leave a year for each small child to women under the age of 21. (This has been extended by collective bargaining in some industries to include older women as well.)

But as a general rule there is no special legislation governing the working hours or annual leave of women with families aside from maternity-leave provisions, which are included in the laws of almost every OECD country.

Nor have women's associations or trade unions pressed for the formalisation of such concessions which would, it is widely felt, have the effect of creating a privileged class among employees. On the contrary, their interest has been in obtaining equal treatment for the two sexes. " It is widely recognised today ", says Dr. Klein, " that the private commitments and personal loyalties of both men and women must be respected by their employers. "

She recommends wide acceptance of the practice of allowing employees to take a limited number of odd days or half-days off at their own convenience either as part of or in addition to their annual leave. This would enable working men and women to have an occasional weekday free for major purchases, school visiting or family crises. An example of this sort of practice is to be found in the Norwegian Telegraph Authority, where leave-of-absence of up to three weeks a year at one-third pay is granted to men as well as women under certain circumstances of stress.

More generally, the decrease in working hours and the trend evident in many OECD countries towards the five-day week have, among other things, facilitated the employment of women with households to care for. *(Continued on page 40)*

## PART-TIME JOBS

Part-time work is another matter, and Dr. Klein considers that it is in this field that adjustments would seem to promise the most fruitful results. Some jobs are naturally attuned to part-time workers — meeting the peak loads in restaurants and the seasonal surges of retail activity, for example; caring for children after school or enabling stores to remain open late. A few strategically placed part-time workers in jobs like these could, moreover, release a far greater number of women for full-time employment.

Another possibility for part-time work is breaking up a normally full-time job into several shorter shifts. This is often done where there is a shortage of workers : one-quarter of all the nurses employed in National Health Service hospitals in England and Wales and 18 per cent of US nurses are employed on a part-time basis (1960 and 1962 figures respectively). One factory in London, faced with a shortage of single women, successfully reorganised its production schedule to fit in four part-time shifts on which three-quarters of its work force came to be employed.

Such schedules seem, on the whole, to be characteristic of tight labour market conditions. Perhaps one of the reasons why there has been no more general extension of part-time shifts is that employers find the organisation of work schedules difficult and the administrative costs for each employee disproportionately high.

As to part-time employees, they may find their earnings insufficient to compensate for loss of family benefits or tax deductions; they may feel that time and money spent on travel and social security contributions are unduly high (in a number of countries the latter are effectively fixed at a uniform rate regardless of hours worked). Part-time employees are not ordinarily covered by the provisions of collective agreements; often they fall outside the scope of the bargaining unit, and in many countries they do not have the right to all social security benefits.

These difficulties, says Dr. Klein, are not insurmountable. Specifically, she recommends that the status of part-time employees be regularised and that they be covered by collective bargaining agreements so as to assure them of fair rates of pay, pension rights, paid holidays, opportunities for advancement and the same period of notice as full-time workers. This has been achieved for dock labourers, she points out; there seems to be no reason why it should not prove possible for part-time workers.

## SERVICES FOR WORKING WOMEN

There are in any community a number of services whose creation or extension would help remove obstacles to work or would lighten the load of working women, especially if their hours were synchronised with those of employment; Dr. Klein specifically recommends three :

1. *Home aid services* with qualified part-time helpers to take over some of the most urgent domestic duties of working women, especially during periods of stress. A service of this kind should charge only nominal fees and may therefore require a subsidy for its staff to be adequately paid.

Help of this sort, though only on a small scale, is available in Sweden, Switzerland and the US. Experience has shown that the service may be organised in such a way as to give household workers more status than they would enjoy as domestic help. This is the case, for example, in Sweden, where they are given the title of " household assistants ".

2. *Day-care centres*. The number should be increased, their quality improved and their hours better adapted to serve the women's working schedules. Care of pre-school children is not uncommon in OECD countries. Employers in Italy, to give one example, have a statutory obligation to provide day-care facilities in any establishment where the number of women employees of less than 50 years of age exceeds thirty. But there are not enough of these centres, and the Italian authorities report that they are unpopular because of the danger of infection and the long journey by public transport during rush hours required to reach them. (They are normally located at or near work premises). Forty-one per cent of the enterprises employing between 500 and 1,000 women in France have their own child-care services or subsidise centres near the homes of working mothers. There are about 50 day-nurseries in England and Wales, mainly around Lancashire. They are under the supervision of the public authorities, and charge a reasonable fee geared to the means of those who use them. Some local health authorities also keep a list of people (so-called child-minders) authorised to accept a limited number of children for paid day care. Some low-cost housing in the US includes a day-care centre as part of the complex, and private enterprise is experimenting with the construction of flats with such centres built in.

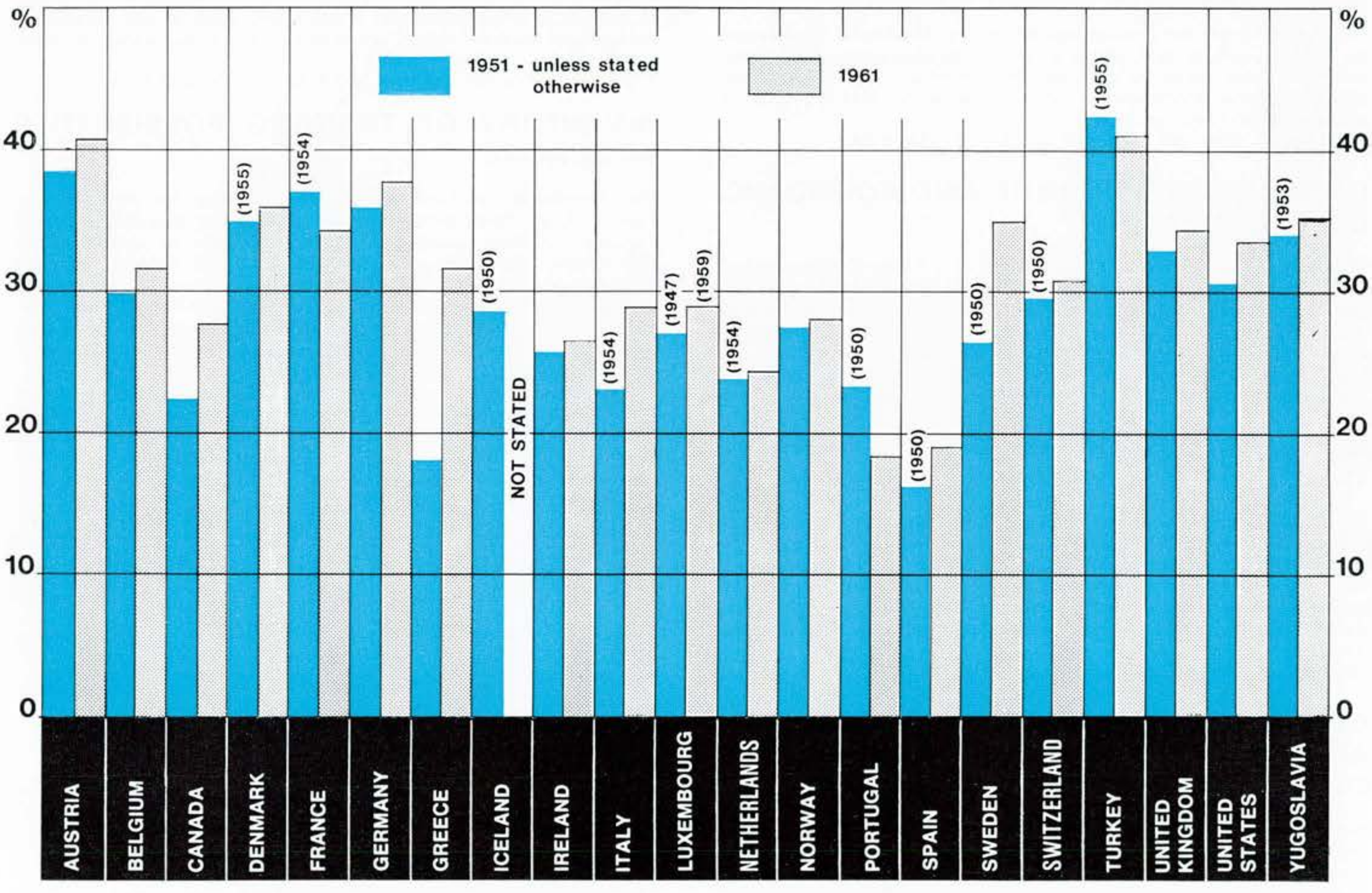
On a national scale, legislation passed in 1962 authorises the grant of federal funds to the states for child day-care.

Older children are usually less well provided for, though efforts to improve the situation are being made. Scandinavian countries have spare-time centres, play centres for after school, family day-nurseries (private homes, approved by a Child Welfare Committee, which accept children).

3. *Adjustment of shopping hours.* Most big cities in such countries as the Netherlands, Sweden, the United Kingdom and the US have at least one night a week on which stores are open till 9 p.m. (Some supermarkets in the US are open that late every night except Sunday.) But there are still many services — banks, local administration, hairdressing shops, post offices, etc., whose hours are those normally worked by people in industry. Dr. Klein suggests the extension of such services to non-working hours, possibly through use of part-time workers.

Society has a need for well-trained female personnel in many skilled and professional occupations, concludes Dr. Klein Greater opportunities for employment are matched by increasing numbers of women seeking work. In doing so women are not merely responding to the current conditions of the labour market but are acting because of personal motivations in which economic, social and psychological elements intermingle. In other words women have become available for employment not only because they are needed but for potent reasons of their own which include the desire to raise their living standards, the wish to use their abilities, to widen their mental horizons and to meet people. Adjustments of the kind recommended are both necessary and practicable and would help remove obstacles to carrying out a dual role. It is in the public interest to enable women to assume activities outside the home without being forced to neglect either their domestic or professional responsibilities or being unduly burdened by them.

## WOMEN AS PERCENTAGE OF PERSONS IN CIVILIAN EMPLOYMENT 1951-1961




*The proportion of women in the work force has grown during the last decade in all OECD Member countries with the exception of France, Portugal and Turkey. Included in the figures of female employment, however, are unpaid family workers who account for a high percentage of the total in Greece and Turkey (the move away from agriculture helps to account for the decline in these countries) and, to a lesser extent, in Portugal, Yugoslavia, Austria and Italy. Married women account for some 60 per cent of the total female working population in the US, 58 per cent in Canada, 53 per cent in France, 52 per cent in the United Kingdom, more than 50 per cent in Sweden, 25 per cent in Norway and Switzerland. (Figures are for 1960 for all countries except Canada and France, for which 1962 is the year used.) Of all married women working in the US in 1960, 20 per cent had children aged five years or less, 33 per cent aged 6-17. Two British sample surveys show that 9 per cent of married women workers had children under five years of age and 32 per cent had children aged 5-15.*

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